City of Alhambra
Community Development Department
111 South First Street
Alhambra, CA 91801

DRAFT ENVIRONMENTAL IMPACT REPORT

The Villages at the Alhambra

Case Number: RP-17-1, CU-17-9, V-17-10, V-17-11, & TT-74194
State Clearinghouse No. 2017101025

Project Location: 1000 South Fremont Avenue; 2215 West Mission Road; 629, 635, 701, 825 and 1003 South Date Avenue; Alhambra, CA 91803

Project Description: The proposed Villages at the Alhambra Project (Project) covers portions of a 38.38-acre site bounded by Fremont Avenue (west), Mission Road (south), Date Avenue (east), and Orange Street (north) in the City of Alhambra. The Project would retain 902,001 square feet of existing office space and would repurpose 10,145 square feet of existing office space as Residential Amenity space for the newly proposed South Plan Area, discussed in detail below. Also, the Project would retain a 50,000 square-foot LA Fitness health club, but would replace existing surface parking areas, warehouse/storage/maintenance buildings, and a vacant office building with 516 new, for-sale, residential dwelling units in five-story stacked flat and townhome configurations; 545 new rental apartments in five-story stacked flat configurations; and 4,347 total parking spaces to accommodate all new uses.

The proposed Project divides the site into five plan areas (refer to Figure II-4) consisting of the following specific components:

Office Plan Area

- Retention of an existing 902,001 square feet of office space and 1,800 parking spaces, including the existing five-level parking structure and three-level parking structure.
- 10,145 square feet of existing office space would be repurposed as Residential Amenity space for the South Plan Area.
- No new development would occur within the Office Plan Area, although vehicle and pedestrian circulation areas along its edges would be modified to provide consistent linkages with the adjacent plan areas.

North Plan Area

- Demolition of all existing structures (Buildings A12, B14, B15, and B16 shown on Figure IV.D-2), totaling 20,876 square feet and removal of surface parking lots.
- Construction of 516 new, for-sale, residential dwelling units in five-story stacked flats and townhomes configurations (731,698 square feet) (Buildings N1, N2, N3, and N4 shown on Figure II-4) with accompanying residential amenities.

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- Provision of 1,135 parking spaces for residents and guests in 2.25-level below-grade parking garages for stacked flat units, individual garages for townhomes, and on-street parking within the North Plan area.

East Plan Area

- Demolition of existing warehouse/storage buildings (Buildings B12 and B13 shown on Figure IV.D-2) totaling 21,700 square feet and surface parking lots.
- Construction of a five-story, 490-stall parking garage (Building E1 shown on Figure II-4) to serve the existing office uses in the Office Plan Area.

South Plan Area

- Demolition of all existing structures and surface parking lots, except Building A0 shown on Figure IV.D-2 (10,145 sf) would be retained.
- Construction of 392 rental apartments in stacked flat configurations (449,816 square feet) in two five-story buildings (Buildings S1 and S2 shown on Figure II-4) with accompanying residential amenities.
- Provision of 663 parking spaces for residents and guests.

Corner Plan Area

- Demolition of existing office and maintenance buildings and surface parking lots.
- Construction of 153 rental apartments in stacked flat configurations (176,116 square feet) in a five-story building with accompanying residential amenities (Building C1 shown on Figure II-4).
- Provision of 259 parking spaces for residents and guests.

PREPARED FOR:
City of Alhambra
Development Services Department

PREPARED BY:
CAJA Environmental Services, LLC

APPLICANT:
Elite-TRC Alhambra Community LLC
Elite-TRC North Parcel LLC
The Corner Company LLC

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I. Executive Summary

1. Introduction to the Draft EIR

The subject of this Draft Environmental Impact Report (Draft EIR) is the proposed Villages at the Alhambra Project (Project). A summary of the Project is provided below, with a more detailed description included in **Section II, Project Description**, of the Draft EIR.

Because the Project will require approval of certain discretionary actions by the City of Alhambra (City), the Project is subject to the California Environmental Quality Act (CEQA), for which the City is the designated Lead Agency. The City's Development Services Department administers the process by which environmental documents for projects are prepared and reviewed. On the basis of these procedures, it was determined that the Project may have a significant effect on the environment, and an EIR should be prepared.

As described in Section 15121(a) and 15362 of the CEQA Guidelines[1], an EIR is an informational document that will inform public agency decision makers and the public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to a project. The purpose of this Draft EIR, therefore, is to focus the discussion on those potential effects on the environment of the Project that the Lead Agency has determined could be significant. In addition, feasible mitigation measures are required, when applicable, that could reduce or avoid significant impacts of the Project.

This Draft EIR was prepared in accordance with Section 15151 of the CEQA Guidelines, which defines the standards for EIR adequacy as follows:

> *An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information that enables them to make a decision that intelligently takes account of environmental consequences. An evaluation of the environmental effects of a project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not*

[1] *California Code of Regulations Title 14, Chapter 3, Sections 15000-15387.*

for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

a) Environmental Review Process

(1) Notice of Preparation/Scoping Meeting

In accordance with Section 15128 of the CEQA Guidelines, an EIR shall contain a brief statement indicating reasons that various possible significant effects of a project were determined not to be significant and not discussed in detail in the Draft EIR. In compliance with Section 15082 of the CEQA Guidelines, a Notice of Preparation (NOP) was prepared by the Development Services Department and distributed to the State Clearinghouse, Office of Planning and Research, responsible agencies, and other interested parties on October 10, 2017.

The NOP for the Draft EIR was circulated for 30 days until November 10, 2017. In addition, a public scoping meeting was held on October 19, 2017 at the Project Site to obtain the public's initial views about environmental issues that should be evaluated in the Draft EIR in connection with the Project. **Appendix A** of the Draft EIR contains a copy of the NOP and public comments received by the City in response to the NOP and scoping meeting.

The following agencies, organizations, and individuals provided written comments during the NOP comment period or at the scoping meeting:

Agencies, Businesses, and Organizations

- California Department of Transportation (Caltrans)
- California Native American Heritage Commission
- Gabrieleño Band of Mission Indians – Kizh Nation (also a response to AB 52 notification)
- Grassroots Alhambra
- Union Pacific Railroad

Individuals

- Joel Arnold
- Cliff Bender
- Giselle Betser

- Carmen Celis
- Albert Diaz
- Robert Gutierrez
- Rex Ho
- Caroline Huang
- Peter Ibarra
- Alice Man
- Melissa Michelson
- Paul Cole Padilla
- Lindsay Pond
- Steve Stoico
- Laura Vasquez
- Karen Vrooman

(2) Environmental Issues to be Analyzed in the Draft EIR

In conjunction with the NOP, an Initial Study was prepared for the Project and is also included in **Appendix A** of the Draft EIR. The purposes of the Initial Study, as set forth in Section 15063(c)(3) of the CEQA Guidelines, are to assist the preparation of an environmental impact report by:

(A) Focusing the environmental impact report on the effects determined to be significant;

(B) Identifying the effects determined not to be significant;

(C) Explaining the reasons for determining that potentially significant effects would not be significant; and

(D) Identifying whether a program environmental impact report, tiering, or another appropriate process can be used for analysis of the project's environmental effects.[2]

The Initial Study provides a detailed discussion of the potential environmental impact areas and the reasons that each environmental area is or is not analyzed further in this Draft EIR. The City determined through the Initial Study that there is no substantial evidence that the Project could cause significant environmental effects in the following areas:

- Agricultural and Forestry Resources
- Air Quality
    - Objectionable Odors
- Biological Resources
- Geology and Soils
    - Landslides
    - Soil Erosion/Loss of Topsoil
    - Wastewater Disposal
- Hazards and Hazardous Materials
    - Airport Safety Hazards
    - Private Airstrip Hazards
    - Wildland Fires
- Hydrology and Water Quality
    - Floodplain Hazards
    - Flooding Hazards
    - Inundation Risk
- Land Use and Planning

[2] *In the case of this Project, the appropriate process for analyzing the project's environmental effects is the preparation of a "Project EIR," the most common type of EIR prepared for specific development projects. This Draft EIR constitutes a "Project EIR" under Section 15161 of the CEQA Guidelines.*

    - Physical Community Division
    - Habitat/Natural Community Conservation Plan Conflicts
- Mineral Resources
- Noise
    - Airport Noise
    - Private Airstrip Noise
- Population, Housing, and Employment
    - Displacement of Housing
    - Displacement of People
- Transportation
    - Air Traffic Patterns
- Utilities and Service Systems
    - Compliance with Solid Waste Regulations
- Wildfire

Based on a review of environmental issues by the City, the Initial Study (see **Appendix A** of the Draft EIR), the responses to the NOP, and input received at the scoping meeting, the Draft EIR includes analyses of the following environmental issues:

- Aesthetics
- Air Quality
- Cultural Resources
    - Historical Resources
    - Archaeological Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions

- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population, Housing, and Employment
- Public Services
    - Fire
    - Police
    - Schools
    - Parks and Recreation
    - Libraries
- Transportation
- Tribal Cultural Resources
- Utilities
    - Water
    - Wastewater
    - Solid Waste

(3) Draft and Final EIR Process

The Draft EIR will be circulated for review and comment by the public and other interested parties, agencies, and organizations for a period of 45 days. After completion of the 45-day review period, a Final EIR will be prepared that responds to comments on the Draft EIR submitted during the review period and modifies the Draft EIR as required. Public hearings on the Project will be held after completion of the Final EIR. The City will make the Final EIR available to agencies and the public prior to considering certification of the Final EIR. Notice of the time and location will be published prior to the public hearing date. All comments or questions about the Draft EIR should be addressed to the following:

Paul Lam

Development Services Department
City of Alhambra
111 South First Street
Alhambra, California 91801
Phone: (626) 570-5040
Email: plam@cityofalhambra.org

b) Organization of the Draft EIR

The Draft EIR is organized into the following sections:

Section I (Executive Summary): This section provides an introduction to the Draft EIR and a description of the environmental review process and organization of the document. This section also includes a summary of the Project description; lists the environmental issues that are addressed in the Draft EIR; provides a summary of the alternatives to the Project; lists the areas of known controversy based on issues raised in responses received during the NOP process; lists the issues to be resolved; and presents a tabular summary of the Project's environmental impacts and proposed mitigation measures.

Section II (Project Description): A complete description of the Project including Project location, Project Site characteristics, Project characteristics, Project objectives, and required discretionary actions is presented in this section.

Section III (Environmental Setting): This section includes an overview of the existing environmental conditions as they relate to the Project Site and Project. A list of other known projects in the general vicinity is provided in this section.

Section IV (Environmental Impact Analysis): The Environmental Impact Analysis section is the primary focus of this Draft EIR. Separate discussions are provided to address the potential environmental effects of the Project. Each environmental issue contains a discussion of existing conditions, an assessment and discussion of the significance of the impacts associated with the Project, mitigation measures (where applicable), cumulative impacts, and level of impact significance after mitigation.

Section V (General Impact Categories): This section provides a summary of significant and unavoidable impacts of the Project, a discussion of potential growth inducing effects, and an explanation of the significant irreversible environmental changes.

Section VI (Alternatives to the Project): This section includes an analysis of a range of reasonable alternatives to the Project. The range of alternatives selected is based on their ability to feasibly attain most of the basic objectives of the Project and alternatives that would avoid or substantially lessen any of the significant effects of the Project.

Section VII (Acronyms and Abbreviations): This section provides definitions for all of the acronyms and abbreviations used in this Draft EIR.

Section VIII (Preparers of the Draft EIR and Persons Consulted): This section presents a list of City and other agencies and consultant team members that contributed to the preparation of the Draft EIR.

2. Summary of the Project

a) Project Site Description

The Project Site consists of the entire block bounded by Fremont Avenue on the west, Mission Road on the south, Date Avenue on the east, and Orange Street on the north. The total area that comprises the Project Site is approximately 1,671,725 square feet (or 38.38 acres). The Project Site's location is shown on Figure II-1 (Regional Map) and Figure II-2 (Aerial Map). Detailed site boundaries are shown on Figure II-3 (Site Survey). The Project Site is fully developed with office, retail, warehouse, storage, utility substation, and parking (both structure and surface lot) uses. For photographs illustrating the existing condition of the Project Site, please see **Section III, Environmental Setting**, of the Draft EIR.

Surrounding land uses consist of a mix of retail, office, and light industrial uses. The Union Pacific Railroad corridor abuts the Project Site to the south across Mission Road.

For purposes of the proposed Project, the Project Site is being divided into five plan areas: Office, North, East, South, and Corner. The existing uses within each of these plan areas are described below and the locations of the buildings are illustrated on Figure IV.D-2.

(1) Office Plan Area

The 17.76-acre Office Plan Area is located on the western and northwestern side of the Project Site and contains the following existing uses:

- 902,001 total square feet of office space in 9 buildings ranging from one to six stories in height (Buildings A1-A11, A13, B1, and B6)
- 50,558-square-foot LA Fitness gym
- A 746-space, three-story parking garage (Building B2)
- A 1,032-space, five-story parking garage (Building B7)
- A 22-space surface parking lot

- A utility area
- A guard gate

(2) North Plan Area

The 10.88-acre North Plan Area is located on the northern and northeastern side of the Project Site and contains the following existing uses:

- A two-story, 11,144-square-foot vacant office/warehouse building (Building A12)
- 20,876 total square feet of warehouse/workshop/storage space in three one-story buildings, including two metal structures and one concrete block building (Buildings B14, B15, and B16)
- A 2,370-square-foot decommissioned one-story cooling tower
- Asphalt surface parking lots containing approximately 550 spaces
- A guard gate

(3) East Plan Area

The 1.75-acre East Plan Area is located on the east-central side of the Project Site and contains the following existing uses:

- 21,700 square feet of warehouse/shipping and receiving space in two one-story buildings, one metal and one concrete block (Buildings B12 and B13)
- Southern California Edison utility substation
- Asphalt surface parking lots containing approximately 306 spaces

(4) South Plan Area

The 5.86-acre South Plan Area is located on the southern and southwestern side of the Project Site and contains the following existing uses:

- A 10,145-square-foot one-story office building (Building A0)
- 8,300 square feet of maintenance space in a one-story metal and brick building (Building B11)
- Asphalt surface parking lots containing approximately 503 spaces

(5) Corner Plan Area

The 2.13-acre Corner Plan Area is located on the southeastern side of the Project Site and contains the following existing uses:

- 42,222 square feet of office space in a two-story concrete building (Corner Building)
- Asphalt surface parking lots containing approximately 281 spaces

The Project Site contains landscaping, primarily within the Office Plan Area. The majority of this landscaping consists of trees and other vegetation that is rooted to the ground. Street trees are intermittently located adjacent to the Project Site. The Project Site itself contains a total of 468 trees.

b) Project Overview

The Project Applicant proposes to develop an urban neighborhood across the entire area of the Project Site, including a network of landscape and communal spaces that fuse office and residential uses into a single community with a unique identity and sense of place. All but one of the existing office buildings (one that is currently vacant) on the Project Site would be retained as part of the Project. For detailed site plans and renderings of the Project, please see **Section II, Project Description**, of the Draft EIR. Figures II-4 through II-41 present Project site plans, elevations, renderings, and landscaping examples.

Overall, the proposed Project would construct 1,061 residential units (516 for-sale; 545 rental) and associated open space, landscaping, and vehicle/pedestrian circulation areas to accompany the existing 902,001 square-feet of office space that would be retained within the Office Plan Area. Also, up to 4,347 parking spaces would be provided as part of the proposed Project to serve both the new residential and existing office uses at the Project Site, an increase of 907 spaces over existing conditions. The development proposal for each of the five Project plan areas is described below. Two different buildout scenarios are evaluated in the Draft EIR: under Buildout Scenario 1, the Project would be developed as a single entity with completion projected for 2028. Under Buildout Scenario 2, the Project would be phased with partial buildout of 516 condominium and townhouse units in the North Plan Area completed in 2024 and the remaining 545 apartment units in the South and Corner Plan Areas completed by 2028.

(1) Office Plan Area

No new development would occur within the Office Plan Area, although vehicle and pedestrian circulation areas along its edges would be modified to provide consistent

linkages with the adjacent plan areas. Two parking structures and one surface parking lot (containing a total of 1,800 spaces) would be retained (see Figure II-7).

(2) North Plan Area

The Project proposes the following actions (see also Figures II-29 through II-37):

- Demolition of all existing structures (Buildings A12, B14, B15, and B16), totaling 20,876 square-feet and removal of surface parking lots.
- Construction of 516 for-sale residential units (stacked flats and townhomes) (731,698 square-feet) in five-story buildings (Buildings N1, N2, N3, and N4) with accompanying residential amenities.
- Provision of 1,135 parking spaces for North Plan Area residents and guests in 2.25-level below grade parking garages for stacked flat units, individual garages for townhomes, and on-street parking within the North Plan area.

(3) East Plan Area

The Project proposes the following actions (see also Figures II-26 through II-28):

- Demolition of existing warehouse/storage buildings (Buildings B12 and B13) totaling 21,700 square-feet and removal of surface parking lots.
- Construction of a five-story, 490-stall parking garage (Building E1) to serve the existing office uses in the Office Plan Area as well as the proposed residences in the other plan areas.

(4) South Plan Area

The Project proposes the following actions (see also Figures II-10 through II-17):

- Demolition of all existing structures and surface parking lots, except Building A0 (10,145 square-feet) would be retained.
- Construction of 392 rental apartment units (stacked flats) (449,816 square feet) in two five-story buildings (Buildings S1 and S2) with accompanying residential amenities.
- Provision of 663 parking spaces for South Plan Area residents and guests.

(5) Corner Plan Area

The Project proposes the following actions (see also Figures II-18 through II-25):

- Demolition of existing office and maintenance buildings and removal of surface parking lots.
- Construction of 153 rental apartment units (176,116 square feet) in a five-story building (stacked flats) with accompanying residential amenities (Building C1).
- Provision of 259 parking spaces for Corner Plan Area residents and guests.

(6) Requested Approvals

As part of the Project, the Applicant is requesting approval of the following actions from the City:

1. Pursuant to Alhambra Municipal Code (AMC) Chapter 23.62, Residential Planned Development Permit;
2. Pursuant to AMC Chapter 23.66, Conditional Use Permit for Urban Residential development in the PO Zone;
3. Pursuant to AMC Chapter 22.48, Vesting Tentative Tract Map for a 10-lot subdivision for condominium purposes;
4. Pursuant to AMC Chapter 23.68, Variance to permit shared parking and for reduced office and residential parking;
5. Pursuant to AMC Chapter 23.64, Design Review;
6. Pursuant to AMC Chapter 23.71, Development Agreement with a term of 20 years; and
7. Any other entitlements and permits necessary to construct the Project.

3. Areas of Controversy

Potential areas of controversy and issues to be resolved by the City's decision makers may include whether or how to mitigate potentially significant environmental impacts from the Project, and whether one of the alternatives should be approved rather than the Project. There were also several comments and concerns raised in letters submitted to the City in response to the NOP and at the scoping meeting, including the following:

- Overall size of Project (generally too many residential units)
- Project definition (including proposed phasing of development, alternatives)
- Traffic congestion (including impact at railroad crossings)
- Parking

- Timing of Project review vs. the City's General Plan update/EIR
- Noise and vibration (including from railroad operations)
- Stormwater drainage impacts
- Affordable housing
- Pedestrian safety impacts
- Water supply
- Air quality and dust (including pollution from truck traffic)
- Cumulative impacts and General Plan update
- Impacts on schools related to traffic and population increase
- Tribal/cultural resources and notification

4. Alternatives to the Project

In order to provide informed decision-making in accordance with Section 15126.6 of the CEQA Guidelines, this Draft EIR considers a range of alternatives to the Project. **Section VI, Alternatives to the Project**, of the Draft EIR provides the analysis of each alternative and includes discussion of the following alternatives:

Alternative 1: No Project

Alternative 1 (No Project Alternative) assumes that the Project would not be approved, no new permanent development would occur within the Project Site, and the existing environment would be maintained. Thus, the physical conditions of the Project Site would remain as they are at the time of preparation of the Draft EIR. Under Alternative 1, the Project Site would continue to be used as an office campus with additional fitness center, vehicle storage, maintenance/warehouse, and other office uses. No changes would be made to the Project Site. Future on-site activities would be limited to the continued operation and maintenance of the existing land uses.

Alternative 2: Reduced Density 1

Alternative 2 (Reduced Density 1 Alternative) would redevelop the same portions of the Project Site as the proposed Project, but would reduce the number of condominium and townhome units within the North Plan Area from 516 to 292. Other aspects of Alternative 2 would be similar to the proposed Project.

Alternative 3: Reduced Density 2

Alternative 3 (Reduced Density 2 Alternative) would redevelop the same portions of the Project Site as the proposed Project, but would reduce the number of condominium and townhome units within the North Plan Area from 516 to 230. Other aspects of Alternative 3 would be similar to the proposed Project.

Alternative 4: Reduced Density 3

Alternative 4 (Reduced Density 3 Alternative) would redevelop the same portions of the Project Site as the proposed Project, but would reduce the number of condominium and townhome units within the North Plan Area from 516 to 290 and would reduce the number of apartment units within the South and Corner Plan Areas from 545 to 500. Other aspects of Alternative 4 would be similar to the proposed Project.

Based on the analysis in Section VI, Alternative 3 was selected as the environmentally superior alternative.

5. Environmental Impacts and Mitigation Measures

Table I-1 summarizes the various environmental impacts associated with construction and operation of the Project. Mitigation measures are recommended for significant environmental impacts, and the level of significance remaining for each impact after mitigation is also identified. The environmental impacts included in Table I-1 are analyzed in detail throughout **Section IV, Environmental Impact Analysis**, of the Draft EIR. A Mitigation Monitoring Plan designed to ensure the proper implementation of each mitigation measure will be developed as part of the Final EIR.

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
SECTION IV.B, AESTHETICS		
Scenic Vistas		
Construction activities associated with the Project and the Project's proposed building would not substantially affect existing scenic vistas of the distant San Gabriel Mountains. The Project Site and surrounding area are characterized by dense urban development, and the construction activities associated with development of the Project would not substantially alter existing views available in the area. Therefore, impacts with respect to scenic vistas would be less than significant.	None required	Less Than Significant
Scenic Resources		
The Project Site does not contain trees with scenic significance or rock outcroppings and is not located within a state scenic highway. Therefore, no impact would occur with respect to scenic resources within a state scenic highway. Overall impacts would be less than significant.	None required	Less Than Significant
Visual Character		
Although the Project's construction	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
and development of new buildings on the Project Site would alter the visual character of the Project Site and surrounding area, this alteration would not be considered a substantial degradation. Therefore, Project impacts related to visual character would be less than significant.		
Light and Glare		
Although the Project's construction and operation of new buildings at the Project Site would introduce new sources of light and glare, the Project would comply with AMC light and glare requirements. Thus, the Project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the Project Site area. Therefore, Project impacts related to light and glare would be less than significant.	None required	Less Than Significant
SECTION IV.C, AIR QUALITY		
Air Quality Plan Consistency		
The Project would not increase the frequency or severity of existing air quality violations, cause or contribute to new air quality violations, or delay timely attainment of air quality	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
standards or the interim emission reductions specified in the South Coast Air Management District's (SCAQMD) Air Quality Management Plan (AQMP). Also, the Project would be consistent with the population growth projections upon which AQMP forecasted emission levels are based, would be consistent with Alhambra Municipal Code (AMC) measures that reduce pollutant emissions, and would be consistent with the AQMP's land use policies. Thus, the Project would be consistent with the AQMP. Therefore, Project impacts related to AQMP consistency would be less than significant.		
Increase of Criteria Pollutants for which Region is in Non-Attainment		
Neither construction nor operation of the Project under Buildout Scenario 1 would result in a cumulatively considerable contribution to pollutant concentrations. Therefore, the Project would not 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, and impacts would	**AQ-MM-1**: If the Project Applicant elects to construct the Project under the phased approach identified as Buildout Scenario 2 in the Draft EIR, off-road equipment meeting the EPA's Tier 3 construction equipment emissions standards shall be used. Additionally, only haul trucks with a model year of 2007 or newer shall be used for the on-road transport of materials to and from the Project Site.	<u>Buildout Scenario 1</u> Less Than Significant <u>Buildout Scenario 2</u> Significant and Unavoidable

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
be less than significant. Under Buildout Scenario 2, the Project would result in a cumulatively considerable contribution to both ROG and NO_x (precursors to Ozone, a criteria pollutant for which the region is currently in non-attainment) during the temporary period of overlapping Phase II construction and Phase I operation. This impact would be significant.		
Sensitive Receptors		
The Project's construction and operational activities would not exceed SCAQMD's localized significance thresholds. Thus, the Project would not expose sensitive receptors to substantial pollutant concentrations. Also, the Project would not result in any substantial, long-term emissions of toxic air contaminants (TACs) during the construction or operation phases. Therefore, impacts related to this issue would be less than significant.	None required	Less Than Significant
SECTION IV.D, CULTURAL RESOURCES		
Historical Resources		
The demolition of the buildings on the	**CUL-MM-1**: The Project Applicant	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
Project Site would not result in a substantial adverse change to the CF Braun & Company Historic District, because none of the buildings proposed to be demolished are located within the Historic District. The proposed potential relocation of Building A0 would create a potentially significant impact with respect to the Historic District. The new construction proposed as part of the Project would not diminish the integrity of the Historic District and impacts would be less than significant.	shall retain a qualified historic preservation professional meeting the Secretary of the Interior's Professional Qualifications Standards for historic architecture to create a relocation plan for Building A0. The relocation plan shall include the identification of the receiving site, the orientation of the building after the relocation, a survey of the building to document the physical spaces and features and to assess the current condition of the materials and systems, and an analysis for compliance with the Standards. The relocation plan shall be submitted to the City of Alhambra Director of Development Services for concurrence. Building permits may be issued after the Director has concurred that the relocation plan complies with the Standards for Rehabilitation. **CUL-MM-2**: In advance of the relocation, the historic architect meeting the qualifications described above shall meet with the building mover to review the plan. Within five days of the meeting, the professional shall submit meeting minutes to the	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	City of Alhambra Director of Development Services. **CUL-MM-3**: Prior to the issuance of any building permits, the Project Applicant shall retain a qualified historic preservation professional meeting the Secretary of the Interior's Professional Qualifications Standards for architectural history or historic architecture to review plans related to the alteration of Building A0. The plans shall be reviewed by this professional for compliance with the Standards for Rehabilitation. If the plans do not comply with the Standards, the professional shall make recommendations for changes to the plans so they comply. The review shall be summarized in a memorandum, and submitted to the City of Alhambra Director of Development Services for concurrence. Building permits may be issued after the Director has concurred that the plans comply with the Standards for Rehabilitation.	
Archaeological Resources		
Though no known archaeological resources have been identified within	**CUL-MM-4**: The Project Applicant shall retain a qualified archaeologist,	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
the Project Site, it is possible that archaeological resources are preserved below the surface. Specifically, Historic-period artifacts and features, especially those associated with residences along Date Avenue, as well as industrial uses within the portions of the Project Site being proposed for excavation. For these reasons, the Project Site is concluded to possess a high sensitivity for containing historic archaeological resources. If present, the Project would have the potential to cause a substantial adverse change in the significance of such archaeological resources pursuant to Section 15064.5 of the CEQA Guidelines. Therefore, without mitigation, impacts related to archaeological resources would be potentially significant.	defined as an archaeologist who meets the Secretary of the Interior's Standards for professional archaeology, who will carry out all mitigation measures related to archaeological resources. **CUL-MM-5**: Prior to the commencement of excavation, an Archaeological Resources Monitoring Plan (Monitoring Plan) shall be prepared. The Monitoring Plan shall include, but not be limited to, a monitoring protocol for any initial excavation conducted for the Project, a construction worker training program, and discovery and processing protocol for inadvertent discoveries of archaeological and tribal cultural resources. The Monitoring Plan should identify areas with moderate to high sensitivity determined for archaeological resources that require monitoring and detail a protocol for determining circumstances in which additional or reduced levels of monitoring (e.g., spot-checking) may be appropriate. Specifically, the Monitoring Plan	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	should include a framework for assessing the geo-archaeological setting to determine whether sediments capable of preserving archaeological remains are present (e.g., in native versus fill soils), and the depth at which these sediments would no longer be capable of containing archaeological material. **CUL-MM-6**: Prior to the commencement of excavation, the selected qualified archaeologist or their designee will provide a briefing to construction crews to provide information on regulatory requirements for the protection of archaeological resources. As part of this training, construction crews shall be briefed on proper procedures to follow should unanticipated archaeological resources discoveries be made during construction. Workers will be provided contact information and protocols to follow if inadvertent discoveries are made. In addition, workers will be shown examples of the types of archaeological resources that would require notification of the project	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	archaeologist. **CUL-MM-7**: Prior to ground disturbance, an archaeological monitor shall be present during initial excavation activities as stipulated in the Monitoring Plan. The qualified archaeologist may designate an archaeologist to conduct the monitoring under their direction. Specifically, field observations regarding the geoarchaeological setting should be taken to determine the presence of sediments capable of preserving archaeological remains, and the depth at which these sediments would no longer be capable of containing archaeological material. In the event that archaeological resources are encountered during ground-disturbing activities, work in the vicinity of the discovery will temporarily halt and, if needed, redirected while the archaeological monitor can evaluate the find. The duration and timing of the monitoring shall be determined by the qualified archaeologist in consultation with the City and the Project Applicant. At the	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	conclusion of monitoring activities, a technical report will be prepared documenting the methods and results of all work completed under the Monitoring Plan. The report will be prepared under the supervision of a qualified archaeologist and submitted to the Project Applicant, the City of Alhambra, and the SCCIC.	
SECTION IV.E, ENERGY		
Wasteful, Inefficient, Unnecessary Energy Use		
The Project would not cause a wasteful, inefficient, or unnecessary consumption of energy during the Project's construction or operation phases. The Project's energy needs would not significantly affect local and regional supplies or capacity. The Project's energy usage during peak and base periods would also be consistent with electricity and natural gas future projections for the region. Electricity generation capacity and supplies of natural gas and transportation fuels also would be sufficient to meet the needs of the Project's construction and operation phases. During operation of the Project, the Project would comply with	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
existing energy efficiency requirements. Thus, the Project's demand for energy would not significantly affect available energy supplies and would comply with existing energy efficiency standards. Therefore, Project impacts related to this issue would be less than significant.		
Conflict/Obstruction of State/Local Renewable/Efficient Energy Plans		
The Project does not contain any components that would effectively conflict with or obstruct the implementation of state or local plans for renewable energy or energy efficiency. Project impacts related to this issue would be less than significant.	None required	Less Than Significant
SECTION IV.F, GEOLOGY AND SOILS		
Fault Rupture		
The Project Site is not located within an Alquist-Priolo Earthquake Fault Zone for surface fault rupture hazards. The Project Site is not located within an active fault zone. Accordingly, the potential for surface rupture due to faulting occurring beneath the Project Site is considered very low. As a result, the Project would not directly or	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
indirectly cause potential adverse effects related to fault rupture. Therefore, impacts associated with fault rupture would be less than significant.		
Strong Seismic Ground Shaking		
As with all properties in the seismically active southern California region, the Project Site is susceptible to ground shaking during a seismic event. The main seismic hazard affecting the Project Site is moderate to strong ground shaking on one of the local regional faults. However, the Project would be required to conform to all applicable provisions of the City Building Code and California Building Code with respect to new construction. Adherence to current building codes and engineering practices would ensure that the Project would not expose people, property, or infrastructure to seismically induced ground shaking hazards that are greater than the average risk associated with locations in the southern California region and would minimize the potential to expose people or structures to	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
substantial risk, loss, or injury. As such, impacts related to seismic ground shaking would be less than significant.		
Seismic-Related Ground Failure		
The State of California Seismic Hazard Zone Map for the Los Angeles Quadrangle (1998) indicates that the Project site is not located in an area designated as "liquefiable." The historic high groundwater level at the Project Site is approximately 200 feet beneath the ground surface. Typically, saturated soils within the upper 50 feet of the ground surface or lowest adjacent grade are considered subject to liquefaction. Based on the conditions documented at the Project Site, the potential for liquefaction is very low. Thus, the potential for ground failure to occur at the Project Site is considered low, and development of the Project at this location would not directly or indirectly cause potential adverse effects related to liquefaction or seismically induced ground failure. Therefore, impacts related to ground failure would be less than significant.	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
Geologic or Soil Instability		
The Project Site is not located in an area designated as "liquefiable," and the potential for liquefaction beneath the Project Site is very low. Also, the Project Site is not susceptible to landslides. Furthermore, there appears to be little or no potential for ground subsidence due to withdrawal of fluids or gases at the Project Site. Given the absence of these geologic hazards and the physical conditions within which they are likely to occur at the Project Site, the Project would not be located on a geologic unit or soil that is unstable. Therefore, impacts related to soil/geologic instability would be less than significant.	None required	Less Than Significant
Expansive Soils		
The soils encountered during the Project Site exploration are not subject to measures to mitigate expansive soils. Therefore, the Project would not create direct or indirect substantial risks related to expansive soils, and impacts related to expansive soils would be less than significant.	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
Paleontological Resources		
A records search conducted for the Project Site indicates there are no previously encountered fossil vertebrate localities located within the Project Site. The closest identified localities in proximity to the Project Site are LACM 1023 and 2032, approximately four miles to the southwest, collected, in the latter case, at a depth of 20-35 feet below the surface. The Project Site has been subject to grading and development in the past and grading for the Project would consist of relatively minimal excavation to an approximate depth of 10-12 feet below the existing ground surface. Even so, the possibility exists that paleontological artifacts that were not recovered during prior construction or other human activity may be present given the noted high paleontological sensitivity of the area. As such, the Project could have the potential to destroy a unique paleontological resource or site or unique geologic feature. Therefore, without mitigation, impacts related to paleontological resources would be	**GEO-MM-1**: A Project Paleontologist (meeting Society of Vertebrate Paleontology [SVP] standards) will prepare a Paleontological Resources Monitoring and Mitigation Plan (PRMMP). This plan will address specifics of monitoring and mitigation and comply with the recommendations of the SVP (2010). The Project Paleontologist will also prepare a report of the findings of the monitoring plan after construction is completed. **GEO-MM-2**: The Project Paleontologist will develop a Worker's Environmental Awareness Program (WEAP) to train the construction crew on the legal requirements for preserving fossil resources as well as procedures to follow in the event of a fossil discovery. This training program will be given to the crew before ground-disturbing work commences and will include handouts to be given to new workers. **GEO-MM-3**: All ground disturbances at the Project Site that occur in	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
potentially significant.	previously undisturbed sediment will require monitoring. Monitoring should be conducted by a Paleontological Monitor meeting the standards of the SVP (2010) and under the supervision of the Project Paleontologist. The Project Paleontologist may periodically inspect construction activities to adjust the level of monitoring in response to subsurface conditions. Full-time monitoring can be reduced to part-time inspections or ceased entirely if determined adequate by the Project Paleontologist. Paleontological monitoring will include inspection of exposed sedimentary units during active excavations within sensitive geologic sediments. The monitor will have authority to temporarily divert activity away from exposed fossils to evaluate the significance of the find and, should the fossils be determined significant, professionally and efficiently recover the fossil specimens and collect associated data. Paleontological Monitors will record pertinent geologic data and collect appropriate sediment samples from any fossil localities.	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	GEO-MM-4: In the event of a fossil discovery, whether by the Paleontological Monitor or a member of the construction crew, all work will cease in a 50-foot radius of the find while the Project Paleontologist assesses the significance of the fossil and documents its discovery. Should the fossil be determined significant, it will be salvaged following the procedures and guidelines of the SVP (2010). Recovered fossils will be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility. The most likely repository is the LACM. A repository will be identified and a curatorial arrangement will be signed prior to collection of the fossils.	
SECTION IV.G, GREENHOUSE GAS EMISSIONS		
The Project would not generate greenhouse gas (GHG) emissions either directly or indirectly, that would have a significant impact on the environment. The Project would be consistent with applicable plans,	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
policies, and regulations adopted for the purpose of reducing the emissions of GHG. Therefore, Project impacts related to GHG emissions would be less than significant.		
SECTION IV.H, HAZARDS AND HAZARDOUS MATERIALS		
Transport, Use, or Disposal of Hazardous Materials		
Construction and operation of the Project would involve the temporary transport, use, or disposal of potentially hazardous materials, including paints, adhesives, surface coatings, cleaning agents, fuels, and oils. All potentially hazardous materials would be used and stored in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations, which would ensure that impacts are less than significant. Thus, the Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Therefore, impacts related to this issue would be less than significant.	None required	Less Than Significant
Risk of Upset		
Given the age of the existing	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
structure, it is possible that asbestos-containing materials (ACMs) and lead-based paint (LBP) could be encountered during the Project's demolition phase. However, the Project Applicant would be required to comply with existing regulations to abate these materials. No above or underground storage tanks are known to exist at the Project Site. No evidence of soil contamination was encountered at the Project Site during site reconnaissance. The Phase I Environmental Site Assessment concluded that no recognized environmental conditions (RECs) associated with current uses of the Project Site and the surrounding land uses pose a risk at the Project Site. Existing remediation activities and related institutional controls are in place at the Project Site to contain and clean up contamination in the soils and groundwater beneath the site resulting from historic land uses on-site and in the surrounding area. The Project's site design is consistent with applicable land use limitations in place as a result of this contamination		

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
and ongoing remediation. Accordingly, the Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials. Therefore, Project impacts would be less than significant.		
Hazardous Emissions Near a School		
No schools exist or are proposed within one-quarter mile of the Project Site. Therefore, the Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Thus, no impact would occur with respect to schools.	None required	No Impact
Section 65962.5 List		
The Project Site is included on 46 listings in the database lists compiled pursuant to Government Code Section 65962.5. Seven remediation cases were opened on the Project Site, of which 6 are now closed. Land use restrictions are in place for the property at 1000 S. Fremont Avenue, which would be redeveloped with a	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
parking structure under the proposed Project. Thus, construction and operation of the Project would not create a significant hazard to the public or the environment, as a result of being on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As such, construction and operation of the Project would not cause or exacerbate a significant hazard to the public or the environment. Impacts would be less than significant.		
Emergency Response/Evacuation		
Through implementation of the Project's work zone traffic control plan during construction work and compliance with City requirements governing the placement of evacuation signs and the establishment of an emergency response plan, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, Project impacts related to emergency evacuation and response plans would be less than significant.	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
SECTION IV.I, HYDROLOGY AND WATER QUALITY		
Water Quality		
The Project would not violate water quality standards, otherwise degrade water quality, or provide substantial additional sources of polluted runoff. Because runoff from the Project Site does not directly discharge into any waterbody, runoff from the Project Site would be regulated under the County's Municipal Stormwater Discharge Permit. Construction stormwater would be regulated under the State General Construction Activity Stormwater Permit. Implementation of Low-Impact Design and stormwater BMPs through compliance with City, State, and federal regulations, code requirements, and permit provisions would prevent significant impacts related to the release of potentially polluted discharge into surface water via the municipal storm drain system during construction and operation of the Proposed Project. Impacts would be less than significant.	None required	Less Than Significant
Groundwater		
Construction of the Project is not	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
anticipated to require temporary dewatering for the approximately 10-12-foot deep excavations that would be required. Groundwater levels in the vicinity are noted to be approximately 200 feet below ground surface; thus, excavations for the Project would not be expected to encounter groundwater. Additionally, because the Project Site is approximately 95 percent impervious, there is limited to no groundwater recharge currently occurring. The Project would be expected to result in a substantial reduction in the amount of impervious surface on the site due to the inclusion of extensive green space, landscaping, and stormwater infiltration BMPs as required under the City's LID Ordinance, thereby increasing opportunities for groundwater recharge in comparison to the existing conditions. In addition, the Project would be served by the municipal water and sewer system and no production wells for a source of water would be installed. Therefore, the Project would not substantially deplete groundwater supplies or		

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
interfere substantially with groundwater recharge, yields, or flow directions. Impacts would be less than significant.		
Drainage Pattern Alteration		
The Project Site does not contain any water features, streams, or rivers. Similarly, runoff from the Project Site discharges to the local existing storm drain infrastructure and does not directly discharge to a stream or river. Thus, the Project would not alter the course of any stream or river. The Project would slightly alter the on-site drainage patterns due to the proposed redevelopment. However, this alteration would not result in on-site erosion or siltation because all runoff would be directed to areas of BMPs and/or other storm drain infrastructure. The Project would not substantially alter the existing drainage pattern of the surrounding area in a manner that would result in substantial flooding on- or off-site, nor would it contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
additional sources of polluted runoff, nor would it impede or redirect flood flows. Impacts would be less than significant.		
Interfere with Plan Implementation		
The Project would be required to incorporate permanent (post-construction) stormwater mitigation measures and mandates specific performance criteria that must be achieved concerning the retention of stormwater runoff and the protection of water quality. The primary purpose of these performance criteria and related BMPs is to reduce the quantity and improve the quality of stormwater runoff that leaves a site. Compliance with the City's LID ordinance in terms of Project site design and the design, installation, and maintenance of on-site stormwater quality BMPs would reduce the quantity and improve the overall quality of the stormwater leaving the Project Site as compared to existing conditions. As a result of the above, the Project would aid the implementation of the Basin Plan, rather than conflict with or obstruct it. The Project would not impact	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
groundwater due to both its shallow excavations and the depth to groundwater beneath the Project Site. As a result, the Project would not conflict with or obstruct the implementation of the Five-Year Plan. Impacts would be less than significant.		
SECTION IV.J, LAND USE AND PLANNING		
Physically Divide a Community		
The Project would not physically divide an established community. The Project Site is 38.38 acres in size and is currently developed with an office campus, fitness center, light industrial/storage, other office, and parking uses. No housing currently exists on-site. Redevelopment of portions of the Project Site would not physically divide an established community. Therefore, no impact with respect to community division would occur.	None required	No Impact
Plan, Policy, and Regulation Consistency		
The Project would be substantially consistent with applicable plans, policies, and regulations associated with development of the Project Site. Therefore, Project impacts related to	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
this issue would be less than significant.		
SECTION IV.K, NOISE		
Noise in Excess of Established Standards		
Construction Construction of the Project would generate noise during the estimated eight years of buildout. However, the Project would adhere to the exempted construction hours set forth by Alhambra Municipal Code (AMC) Section 18.02.060(C). As a result, the Project's construction noise would not exceed or otherwise violate the City's noise ordinance standards, and the Project's noise impact from construction sources, both on-site and off-site, would be considered less than significant. Noise levels at the nearest sensitive receptors would not exceed applicable noise standards in either the City's Noise Element or the AMC. Nevertheless, Mitigation Measures NOI-MM-1 through NOI-MM-9 are proposed to institute standard, industry-wide "best practices" for construction in urban or otherwise noise-sensitive areas and to moderate	Construction **NOI-MM-1**: Noise and groundborne vibration-generating construction activities whose specific location on the Project Site may be flexible (e.g., operation of compressors and generators, cement mixing, general truck idling) shall be conducted as far as possible from the nearest off-site land uses. **NOI-MM-2**: Construction and demolition activities shall be scheduled so as to avoid operating several pieces of equipment simultaneously, as feasible. **NOI-MM-3**: Flexible sound control curtains shall be placed around all drilling apparatuses, drill rigs, and jackhammers when in use. **NOI-MM-4**: The Project contractor shall use power construction	Construction Less Than Significant Operation Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
the Project's construction noise impact. <u>Operation</u> The Project's operational activities would not generate noise in excess of the City's threshold. Therefore, the Project's operational noise impacts would be less than significant.	equipment with the appropriate manufacturer-recommended shielding and muffling devices. **NOI-MM-5**: Temporary noise barriers shall be erected along the Project's southern property line that faces the residential neighborhood south of the Project. These noise barriers shall be at least 7 feet in height and constructed of a material with a transmission loss value (TL) of at least 20 dBA. Alternatively, the existing masonry wall that runs the majority of the length of the Project's southern boundary may be maintained throughout all construction phases associated with the South and Corner Plan Area development. The height and structure of this existing wall would be capable of matching or exceeding the mitigation provided by the recommended temporary noise barriers. Any gaps in the masonry wall or other missing segments should be filled with temporary noise barriers meeting the criteria herein. **NOI-MM-6**: Temporary noise barrier	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	"penalty boxes" shall be installed for truck-mounted cranes, concrete pumping trucks, concrete mixing trucks, and any other construction vehicles that may be permitted to temporarily operate from adjacent parking spaces or public right-of-way. These noise barriers shall be at least 7 feet in height and constructed of a material with a TL of at least 20 dBA. **NOI-MM-7**: Two weeks prior to the commencement of construction at the Project Site, notification shall be provided to the immediate surrounding off-site properties that discloses the construction schedule, including the various types of activities and equipment that would be occurring throughout the duration of the construction period. **NOI-MM-8**: Construction staging areas for each phase shall be located as far from sensitive receptors as possible. **NOI-MM-9**: Generators, compressors, and other noisy	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	equipment shall be placed within acoustic enclosures or behind baffles or screens, especially when such equipment has line of sight to nearby noise-sensitive receptors. Operation None required	
Groundborne Vibration		
Construction – Building Damage The Project's construction activities would not be capable of generating groundborne vibration levels in excess of FTA building damage criteria for nearby buildings, including those within the CF Braun & Company Historic District, and the Project's impact would be less than significant. Section 18.02.060(C) of the City's noise ordinance would exempt the Project's construction-related groundborne vibrations from Section 18.02.100's vibration standard, as the Project's construction hours would conform to the exempted time periods outlined by Section 18.02.060(C).	Construction – Building Damage None required Operation None required	Construction – Building Damage Less Than Significant Operation Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
<u>Operation</u> During the Project's operational phase, virtually imperceptible levels of groundborne vibration would be generated by cars moving within the parking areas. Minimal levels of groundborne vibration in the Project Site's vicinity would be generated by its related vehicle travel on local roadways. However, road vehicles rarely create vibration levels perceptible to humans unless road surfaces are poorly maintained and have potholes or bumps. Project-related traffic would expose nearby land uses and other sensitive receptors to vibrations far below levels associated with human annoyance or land use disruption. Therefore, the Project's long-term vibration impacts would be less than significant.		
SECTION IV.L, POPULATION AND HOUSING		
Inducement of Substantial Population Growth		
<u>Construction</u> Project-related construction workers would not be likely to relocate their place of residence as a consequence	<u>Construction</u> None required	<u>Construction</u> Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
of working on the Project. Project-related construction would not represent a permanent or substantial new employment generator that would significantly contribute to local or regional growth. Housing or population impacts from construction of the Project would be less than significant. <u>Operation</u> The Project's increase in housing and population at the Project Site would fall with anticipated growth for the City. Additionally, the Project does not include the development of any new roadways or other infrastructure that would allow for off-site growth. Thus, the Project would not induce substantial 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). Impacts would be less than significant.	<u>Operation</u> None required	<u>Operation</u> Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
SECTION IV.M, PUBLIC SERVICES		
Fire Protection		
The Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for fire protection. Therefore, Project impacts related to fire protection services would be less than significant.	None required	Less Than Significant
Police Protection		
The Project's direct population increase and associated demand for police services, along with the provision of on-site security features, coordination with the Alhambra Police Department (APD), and incorporation of crime prevention features, would not require the provision of new or physically altered police stations in order to maintain acceptable service ratios or other performance objectives for police protection. Therefore,	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
Project impacts on the APD would be less than significant.		
Schools		
Based on the mandatory payment of the school fees established by the Alhambra Unified School District in accordance with existing rules and regulations regarding the calculation and payment of such fees, the Project's direct and indirect impacts to school services would be less than significant.	None required	Less Than Significant
Parks and Recreation		
Due to the amount, variety, and availability of the Project's proposed open space and recreational amenities, it is anticipated that Project residents would generally utilize on-site open space to meet their recreational needs. As such, the Project would meet the applicable open space requirements set forth in the Alhambra Municipal Code (AMC). Furthermore, the Project would comply with AMC requirements regarding payment of Quimby fees for the acquisition of public parkland. Thus, the Project would not result in substantial adverse physical impacts	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks. Therefore, Project impacts would be less than significant.		
Libraries		
Operation of the Project would not create any new exceedance of the capacity of local libraries to adequately serve the existing residential population based on target service populations as defined by the Alhambra Public Library, which would result in the need for new or altered facilities, or substantially increase the demand for library services for which current and future demand exceeds the ability of the facility to adequately serve the population. Therefore, Project impacts related to library services would be less than significant.	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
SECTION IV.N, TRANSPORTATION		
Intersection LOS		
Construction During the Project's construction phase, temporary impacts could occur with respect to traffic, truck deliveries, hauling, and equipment usage. However, Project Design Feature TR-PDF-2, which requires preparation and implementation of the Work Zone Traffic Control Plan, would manage these temporary impacts and reduce them to a less-than-significant level. Operation Under the Existing (2018) With Project traffic condition, the Project's traffic generation would produce significant intersection level of service (LOS) impacts at four intersections in the AM and/or PM peak periods. Under the Cumulative Future (2028) With Project traffic condition, the Project's traffic generation under Buildout Scenario 1 would result in significant LOS impacts at 10 intersections.	Construction None required Operation **TR-MM-1**: If the Project Applicant elects to develop the Project under Buildout Scenario 1, at the intersection of W. Valley Boulevard/Westmont Drive, add one additional westbound through lane (see Figure IV.N-16). **TR-MM-2**: If the Project Applicant elects to develop the Project under either Buildout Scenario 1 or Buildout Scenario 2, at the intersection of Date Avenue/Orange Street, install a traffic signal. **TR-MM-3**: If the Project Applicant elects to develop the Project under either Buildout Scenario 1 or Buildout Scenario 2, at the intersection of Date Avenue/W. Mission Road, install a traffic signal.	Construction Less Than Significant Operation Significant and Unavoidable (Residual significant intersection impacts would remain at 7 intersections under Buildout Scenario 1 and at 5 intersections under Buildout Scenario 2)

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
Under Buildout Scenario 2, the Project's traffic generation would result in significant LOS impacts at 7 intersections under the Cumulative Future (2024) With Project traffic condition.		
Congestion Management Plan Analysis		
The Project would contribute fewer than 150 trips during the AM or PM peak hours in either direction at any of the CMP freeway segments in the vicinity of the study area. However, the Project would contribute more than 50 trips during the AM or PM peak hours at two CMP arterial monitoring intersections and would result in a significant impact at one intersection. Therefore, the Project's CMP impacts would be significant.	See Mitigation Measures **TR-MM-1** through **TR-MM-3** under "Intersection LOS", above.	Significant and Unavoidable
Conflict with Policies, Plans, or Programs		
The Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Therefore, impacts would be less than significant.	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
Hazardous Design Features		
No sharp curves, dangerous intersections, or incompatible uses are being proposed in the Project's access and circulation system. With implementation of Project Design Feature TR-PDF-3, all Project driveways would operate at acceptable levels. Therefore, the Project would not substantially increase hazards due to a design feature or incompatible uses and impacts would be less than significant.	None required	Less Than Significant
Emergency Access		
The Project Applicant would be required to submit a plot plan for approval by the Alhambra Fire Department (AFD) to help ensure that Project construction and operations would not impede fire access to and from the Project Site. Pursuant to Fire Code requirements, emergency access shall be maintained to the Project Site during construction through marked emergency access points approved by the APD. Therefore, the Project would not result in inadequate emergency access, and impacts would be less than significant.	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
SECTION IV.O, TRIBAL CULTURAL RESOURCES		
No previously recorded tribal cultural resources were identified within the Project Site. The Project Site was further assessed for the potential to contain deeply buried, previously unidentified archaeological materials, including those that meet the definition of a tribal cultural resource. The potential for unknown prehistoric archaeological resources and tribal cultural resources to exist at the Project Site is found to be moderate. Specifically, there is potential to encounter subsurface remains of temporary camps that include hearth features, stone tools or debris, shell and faunal remains, and ceramic sherds. Though unlikely, individual Native American burial findings could also occur. If present, such resources have the potential to be significant. If present, it is possible that unidentified tribal cultural resources may be inadvertently discovered through implementation of the Project. In the event of this occurrence, Project impacts could potentially be significant.	See Mitigation Measures **CUL-MM-4** through **CUL-MM-7** under "Section IV.D, Cultural Resources", above.	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
SECTION IV.P, UTILITIES AND SERVICE SYSTEMS		
Wastewater		
During the Project's operational phase, the Project would generate a total net increase of approximately 195,569 gallons per day (gpd) of wastewater over existing Project Site uses (excluding the Office Plan Area, which would not be altered by the Project). The three wastewater treatment plants serving the City have a combined total available excess capacity of 171.4 mgd above their existing levels of wastewater treatment. The Project's 0.196 mgd net increase in wastewater generation over the existing Project Site conditions represents approximately 0.1 percent of the combined remaining capacity at the three treatment plants. Thus, the plants would have adequate capacity to accommodate the Project's wastewater treatment demands. Further, the City's Utilities Department would be required to confirm that the local sewer trunk lines have sufficient capacity to accommodate the Project's projected wastewater flows.	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
Therefore, Project impacts related to wastewater would be less than significant.		
Water		
The Project would result in a net increase in water consumption at the Project Site of approximately 91 acre-feet (AF) per year following buildout and full occupation of Phase I under Buildout Scenario 2 (2025) and approximately 158 AF per year following buildout and full occupation of Phase II or of the full Project under Buildout Scenario 1. The City's 2015 Urban Water Management Plan (UWMP) forecasts adequate water supplies to meet all projected water demands in the City for normal, single-dry, and multi-dry years from 2020 to 2040. The Project is consistent with the population growth projections that were utilized by the City in the preparation of its 2015 UWMP. These data were used for water demand projections in the 2015 UWMP. Thus, the Project would not require or result in the construction of new water	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significance After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
facilities or expansion of existing facilities, the construction of which would cause significant environmental effects. Thus, Project impacts related to water supply would be less than significant. The Project would not require the expansion of public water service infrastructure to serve the Project Site's domestic water and landscaping irrigation demands. Thus, impacts related to water infrastructure would be less than significant.		
Solid Waste		
The Project Site is located in an urban area with established solid waste collection routes. Transport of the Project's solid waste would occur along one of the established routes. Thus, the Project would not result in the need for additional solid waste collection routes. The Project would not be served by a landfill with insufficient permitted capacity to accommodate the Project's solid waste disposal needs. Therefore, Project impacts related to solid waste would be less than significant.	None required	Less Than Significant

II. Project Description

1. Introduction

The purpose of this section is to describe the characteristics and objectives of the Villages at the Alhambra Project (Project). The Project is proposing the development of an urban neighborhood across the entire eastern and southern portions of the Project Site, including a network of landscape and communal spaces that fuse office and residential uses into a single community with a unique identity and sense of place. All but one of the existing office buildings (one that is currently vacant) on the Project Site would be retained as part of the Project. Overall, the Project would construct 1,061 residential units (516 for-sale; 545 rental) and associated open space, landscaping, and vehicle/pedestrian circulation areas to accompany the existing 902,001 square-feet of office space that would be retained within the Office Plan Area. Also, up to 4,347 parking spaces would be provided as part of the proposed Project to serve both the new residential and existing office uses at the Project Site. The Project description below includes the following information:

- The Project Site's location and setting;
- A general description of the Project's technical and environmental characteristics;
- The Project Objectives;
- Discretionary Actions and Approvals sought by the Project Applicant; and,
- A brief statement regarding the intended uses of this Draft Environmental Impact Report (Draft EIR).

2. Project Applicant

Elite-TRC Alhambra Community LLC
Elite-TRC North Parcel LLC
The Corner Company LLC
1000 South Fremont Avenue, Unit 1
Alhambra, CA 91803

3. Project Site Location and Setting

a) Project Site Location

The Project Site is comprised of the following addresses: 1000 South Fremont Avenue; 2215 West Mission Road; and 629, 635, 701, 825, and 1003 South Date Avenue in the City of Alhambra, California 91803. The Project Site consists of the entire block bounded by Fremont Avenue on the west, Mission Road on the south, Date Avenue on the east, and Orange Street on the north. The total area that comprises the Project Site is approximately 1,671,725 square feet (or 38.38 acres). The Project Site is fully developed with office, retail, warehouse, storage, utility substation, and parking (both structure and surface lot) uses. For photographs illustrating the existing condition of the Project Site, please see **Section III, Environmental Setting**, of the Draft EIR.

The Project Site is located approximately 1.0 mile southwest of the Alhambra Civic Center and is approximately 0.7 mile east of the City of Los Angeles boundary at Lowell Avenue. Regional access is provided by the Long Beach Freeway (Interstate 710) located approximately 0.6 mile southwest of the Project Site and the San Bernardino Freeway (Interstate 10) located approximately 0.8 mile south of the Project Site. Local access is provided by Mission Road, Fremont Avenue, Date Avenue, and Orange Street.

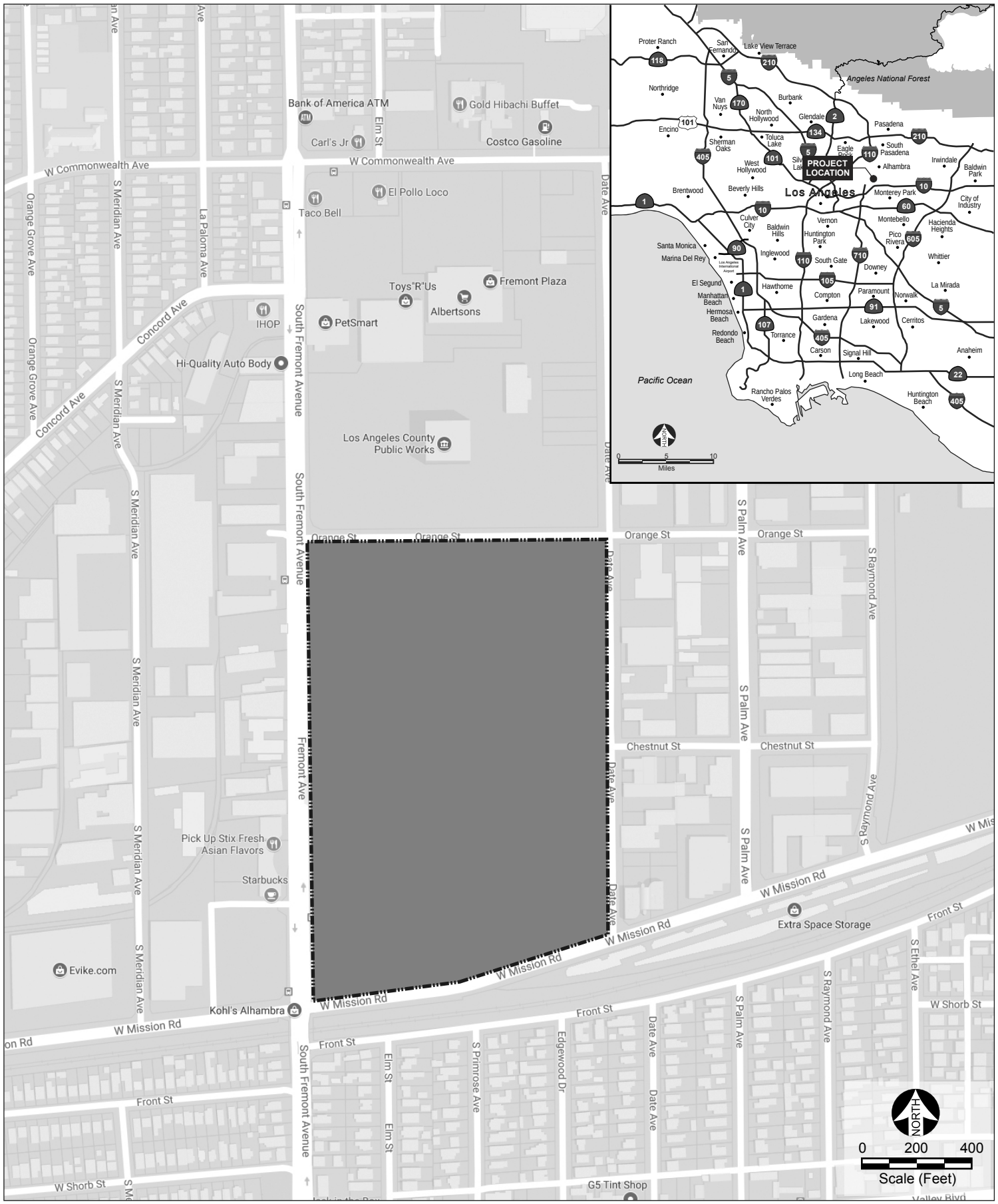
The Project Site is approximately 21 miles east of the Pacific Ocean. Figure II-1 shows the Project Site within the context of the Greater Los Angeles area, while Figure II-2 provides an aerial view of the Project Site and surrounding land uses.

b) Surrounding Uses

The Project Site is immediately surrounded by four City streets: Date Avenue (to the east), Mission Road (to the south), Fremont Avenue (to the west), and Orange Street (to the north). Across each of these streets is a mix of light industrial and office uses (to the east), the below-grade Union Pacific Railroad corridor (to the south), commercial retail uses (to the west), and government office uses (to the north). The residential uses closest to the Project Site consist of single-family homes located to the south of the Union Pacific Railroad corridor and the City street bordering it on the south. A more detailed discussion of land uses surrounding the Project Site is included in **Section III, Environmental Setting**, of the Draft EIR.

c) Transit Access

The Alhambra Community Transit (ACT) shuttle bus provides bus service to the Project Site. Fremont Avenue carries both the Green and Blue Lines, providing service to most portions of the City, including the downtown area and Civic Center. The Los Angeles

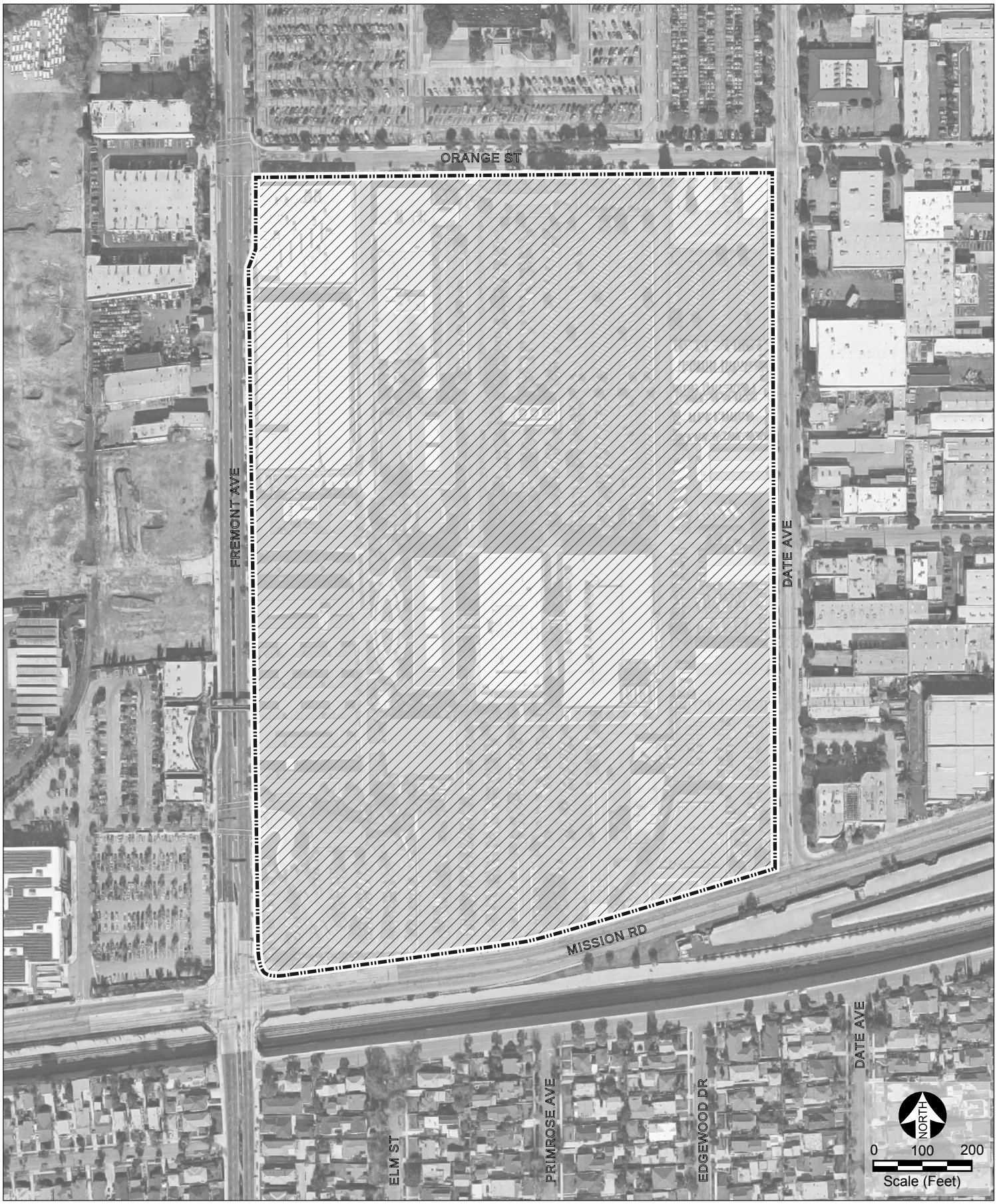


Legend

Project Site

Source: Google Maps., 2018.

Figure II-1
Regional Map



Legend

Project Site

Source: Google Maps., 2018.

Figure II-2
Aerial Map

County Metropolitan Transportation Authority (Metro) provides bus service to the Project Site. Fremont Avenue carries Metro Express bus line 485, connecting Union Station in downtown Los Angeles with Altadena, and Metro Limited bus line 258, connecting downtown Alhambra with Monterey Park, East Los Angeles, Commerce, Bell Gardens, South Gate, and Paramount. Both Metro lines stop at Fremont/Mission and Fremont/Orange, adjacent to the Project Site. Additionally, Metro Limited bus line 258 provides a direct connection to the Metro Gold Line Lake Station in Pasadena and, via transfers, to other Gold Line stations in South Pasadena and Pasadena.

The Project Site is located approximately 1.8 miles northeast of the Southern California Regional Rail Authority's Cal State L.A. Metrolink commuter rail station on its San Bernardino Line, connecting downtown Los Angeles to San Bernardino. Separate shuttle services also provide transportation from the Project Site to both Cal State L.A. and the University of Southern California.

The Project Site is not located within a "transit priority area" as defined in California Public Resources Code (PRC) Section 21099 because it is not located within 0.5 mile of the intersection of two bus routes having a frequency interval of 15 minutes or less during peak commuting hours.

4. Project Site Characteristics

a) Land Use Designation and Zoning

The entire Project Site is zoned as PO (Professional Office). The PO zone permits a wide range of land uses, including professional office, pharmacies, and educational institutions. The PO zone also permits conditional uses such as commercial uses, food sales, and fitness centers. Urban residential (multiple-family residential) uses are only permitted on PO-zoned properties having a minimum size of 30 acres. Because the Project Site is over 38 acres in size, urban residential uses are permitted. The maximum allowable height of structures within the PO zone is five stories or 55 feet, and six stories or 75 feet for urban residential uses. The PO zone also limits allowable maximum Floor Area Ratio (FAR) to 3.28:1 for urban residential uses if included on a site with a minimum size of 30 acres. The Project Site is designated for Office Professional uses in the recently-adopted Alhambra General Plan.

b) Existing Uses

For purposes of the proposed Project, the Project Site is being divided into five plan areas: Office, North, East, South, and Corner. The existing uses within each of these plan areas are described below and the locations of the buildings are illustrated on Figure IV.D-2.

(1) Office Plan Area

The 17.76-acre Office Plan Area is located on the western and northwestern side of the Project Site and contains the following existing uses:

- 902,001 total square feet of office space in 9 buildings ranging from one to six stories in height (Buildings A1-A11, A13, B1, and B6)
- 50,558-square-foot LA Fitness gym
- A 746-space, three-story parking garage (Building B2)
- A 1,032-space, five-story parking garage (Building B7)
- A 22-space surface parking lot
- A utility area
- A guard gate

(2) North Plan Area

The 10.88-acre North Plan Area is located on the northern and northeastern side of the Project Site and contains the following existing uses:

- A two-story, 11,144-square-foot vacant office/warehouse building (Building A12)
- 20,876 total square feet of warehouse/workshop/storage space in three one-story buildings, including two metal structures and one concrete block building (Buildings B14, B15, and B16)
- A 2,370-square-foot decommissioned one-story cooling tower
- Asphalt surface parking lots containing approximately 550 spaces
- A guard gate

(3) East Plan Area

The 1.75-acre East Plan Area is located on the east-central side of the Project Site and contains the following existing uses:

- 21,700 square feet of warehouse/shipping and receiving space in two one-story buildings, one metal and one concrete block (Buildings B12 and B13)
- Southern California Edison utility substation

- Asphalt surface parking lots containing approximately 306 spaces

(4) South Plan Area

The 5.86-acre South Plan Area is located on the southern and southwestern side of the Project Site and contains the following existing uses:

- A 10,145-square-foot one-story office building (Building A0)
- 8,300 square feet of maintenance space in a one-story metal and brick building (Building B11)
- Asphalt surface parking lots containing approximately 503 spaces

(5) Corner Plan Area

The 2.13-acre Corner Plan Area is located on the southeastern side of the Project Site and contains the following existing uses:

- 42,222 square feet of office space in a two-story concrete building (Corner Building)
- Asphalt surface parking lots containing approximately 281 spaces

The Project Site contains landscaping, primarily within the Office Plan Area. The majority of this landscaping consists of trees and other vegetation that is rooted to the ground. Street trees are intermittently located adjacent to the Project Site. The Project Site itself contains a total of 468 trees.

5. Project Characteristics

a) Project Overview

The Project Applicant proposes to develop an urban neighborhood across the entire area of the Project Site, including a network of landscape and communal spaces that fuse office and residential uses into a single community with a unique identity and sense of place. The Project Site consists of the entire block bounded by Fremont Avenue on the west, Mission Road on the south, Date Avenue on the east, and Orange Street on the north within the City of Alhambra (City). The total area that composes the Project Site is approximately 1,671,725 square feet (or 38.38 acres). The Project Site's location is shown on Figure II-1 (Regional Map) and Figure II-2 (Aerial Map). Detailed site boundaries are shown on Figure II-3 (Site Survey). Figures II-4 through II-41 present Project site plans, elevations, renderings, and landscaping examples.

The Project would be a mixed-use development consisting of existing commercial, retail, and office uses, and new residential uses. Active uses would be featured along street frontages in order to avoid blank walls and visible parking areas. All but one of the existing office buildings (one that is currently vacant) on the Project Site would be retained as part of the Project.

The Project's development proposal for each of the above-described plan areas is outlined below.

(1) Office Plan Area

No new development would occur within the Office Plan Area, although vehicle and pedestrian circulation areas along its edges would be modified to provide consistent linkages with the adjacent plan areas. Two parking structures and one surface parking lot (containing a total of 1,800 parking spaces) would be retained (see Figure II-7).

(2) North Plan Area

The Project proposes the following actions (see also Figures II-29 through II-37):

- Demolition of all existing structures (Buildings A12, B14, B15, and B16), totaling 20,876 square-feet and removal of surface parking lots.
- Construction of 516 for-sale residential units (stacked flats and townhomes) (731,698 square feet) in five-story buildings (Buildings N1, N2, N3, and N4) with accompanying residential amenities.
- Provision of 1,135 parking spaces for North Plan Area residents and guests in 2.25-level below grade parking garages for stacked flat units, individual garages for townhomes, and on-street parking within the North Plan area.

(3) East Plan Area

The Project proposes the following actions (see also Figures II-26 through II-28):

- Demolition of existing warehouse/storage buildings (Buildings B12 and B13) totaling 21,700 square feet and removal of surface parking lots.
- Construction of a five-story, 490-stall parking garage (Building E1) to serve the existing office uses in the Office Plan Area as well as the proposed residences in the other plan areas.

(4) South Plan Area

The Project proposes the following actions (see also Figures II-10 through II-17):

- Demolition of all existing structures and surface parking lots, except Building A0 (10,145 square feet) would be retained.
- Construction of 392 rental apartment units (stacked flats) (449,816 square feet) in two five-story buildings (Buildings S1 and S2) with accompanying residential amenities.
- Provision of 663 parking spaces for South Plan Area residents and guests.

(5) Corner Plan Area

The Project proposes the following actions (see also Figures II-18 through II-25):

- Demolition of existing office and maintenance buildings and removal of surface parking lots.
- Construction of 153 rental apartment units (176,116 square feet) in a five-story building (stacked flats) with accompanying residential amenities (Building C1).
- Provision of 259 parking spaces for Corner Plan Area residents and guests.

b) Project Development Summary

Overall, the Proposed Project would construct 1,061 residential units (516 for-sale; 545 rental) and associated open space, landscaping, and vehicle/pedestrian circulation areas to accompany the existing 902,001 square feet of office space that would be retained within the Office Plan Area. Also, up to 4,347 parking spaces would be provided as part of the Proposed Project to serve both the new residential and existing office and retail uses at the Project Site, representing an increase of 907 spaces over existing conditions. The components of the proposed development are listed in Table II-1 below

Table II-1
Project Summary

Type	Dwelling Units	Size (sf)
Office Plan Area		
Existing Buildings to be Retained		
Office	-	**902,001**
North Plan Area		
Multi-Family Residential (For Sale)		
2-Bedrooms	330	**731,698**
3-Bedrooms	150	
Townhomes	36	
Total	**516**	
East Plan Area		
New Parking Structure	-	0
South Plan Area		
Multi-Family Residential (Rental)		
Studio	60	**449,816**
1-Bedroom	167	
2-Bedrooms	148	
3-Bedrooms	17	
Total	**392**	
Corner Plan Area		
Multi-Family Residential (Rental)		
Studio	20	**176,116**
1-Bedroom	70	
2-Bedrooms	59	
3-Bedrooms	4	
Total	**153**	
Project Total	***1,061***	***902,001 existing office 1,080,875 new residential***

Source: TCA Architects, Inc., February 2018

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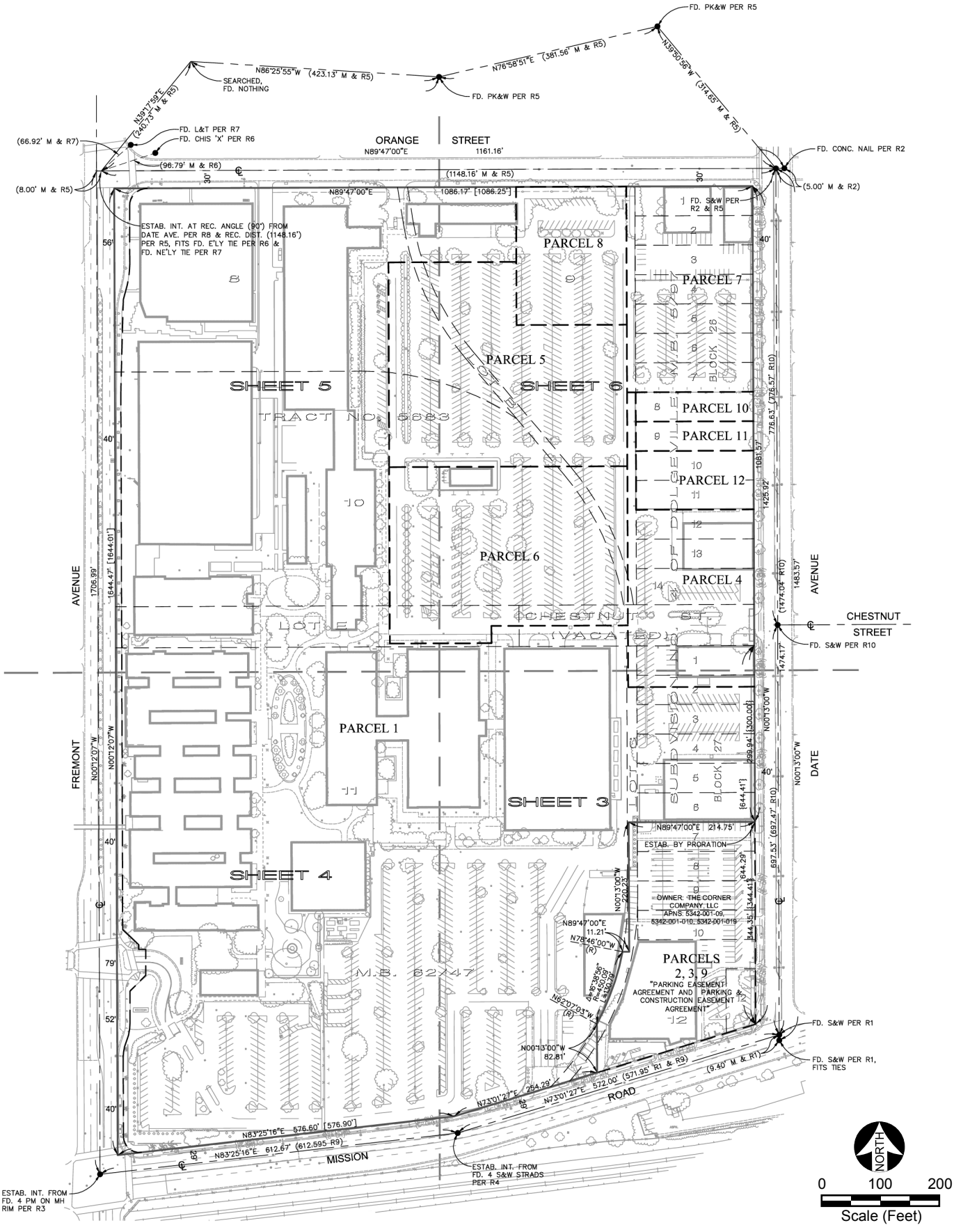


Figure II-3
Site Survey

Source: TCA Architects, Inc., 2018.

Source: TCA Architects, Inc., 2018.

Figure II-4
Proposed Site Plan

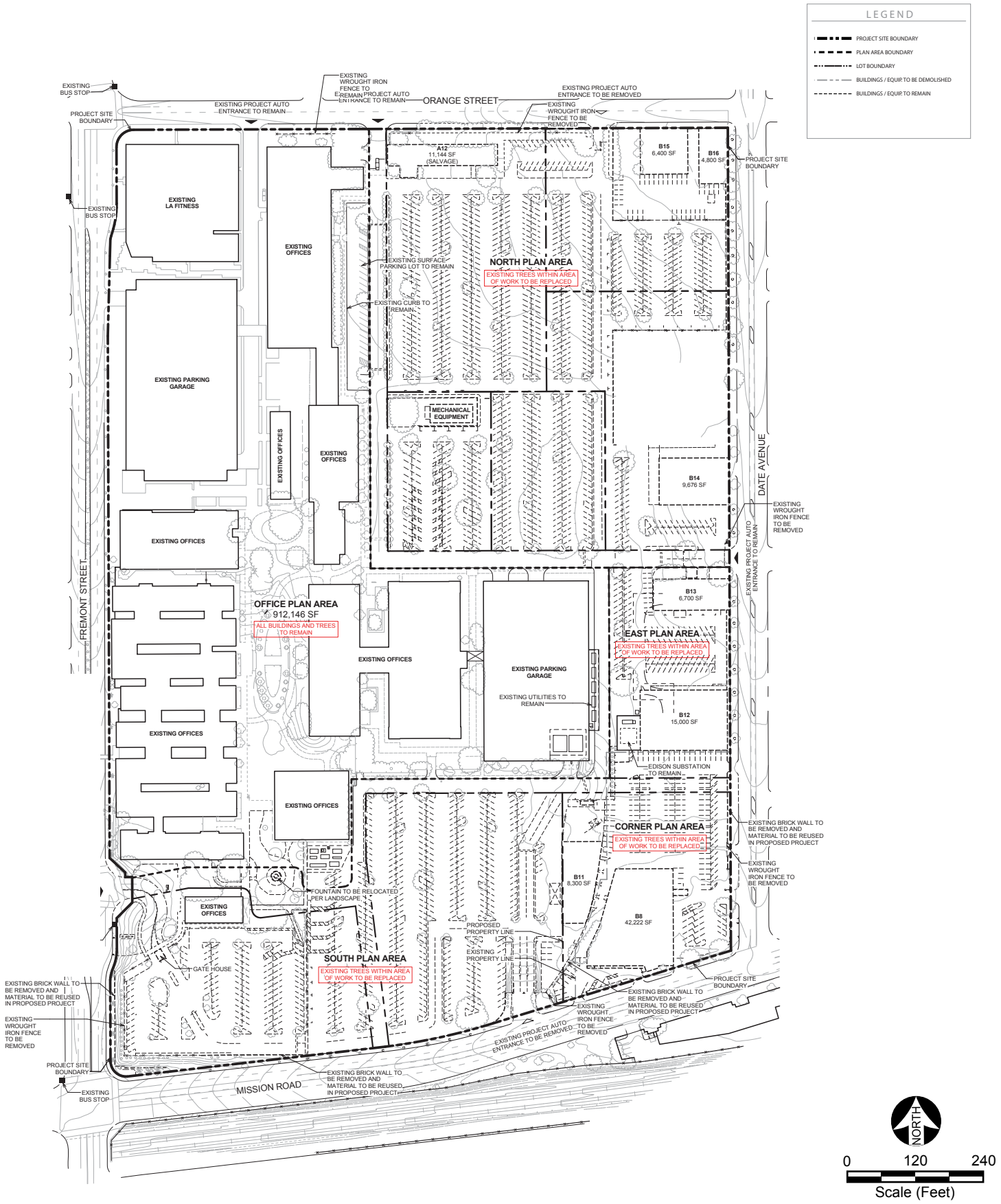


Figure II-5
Proposed Demolition Plan

Source: TCA Architects, Inc., 2018.

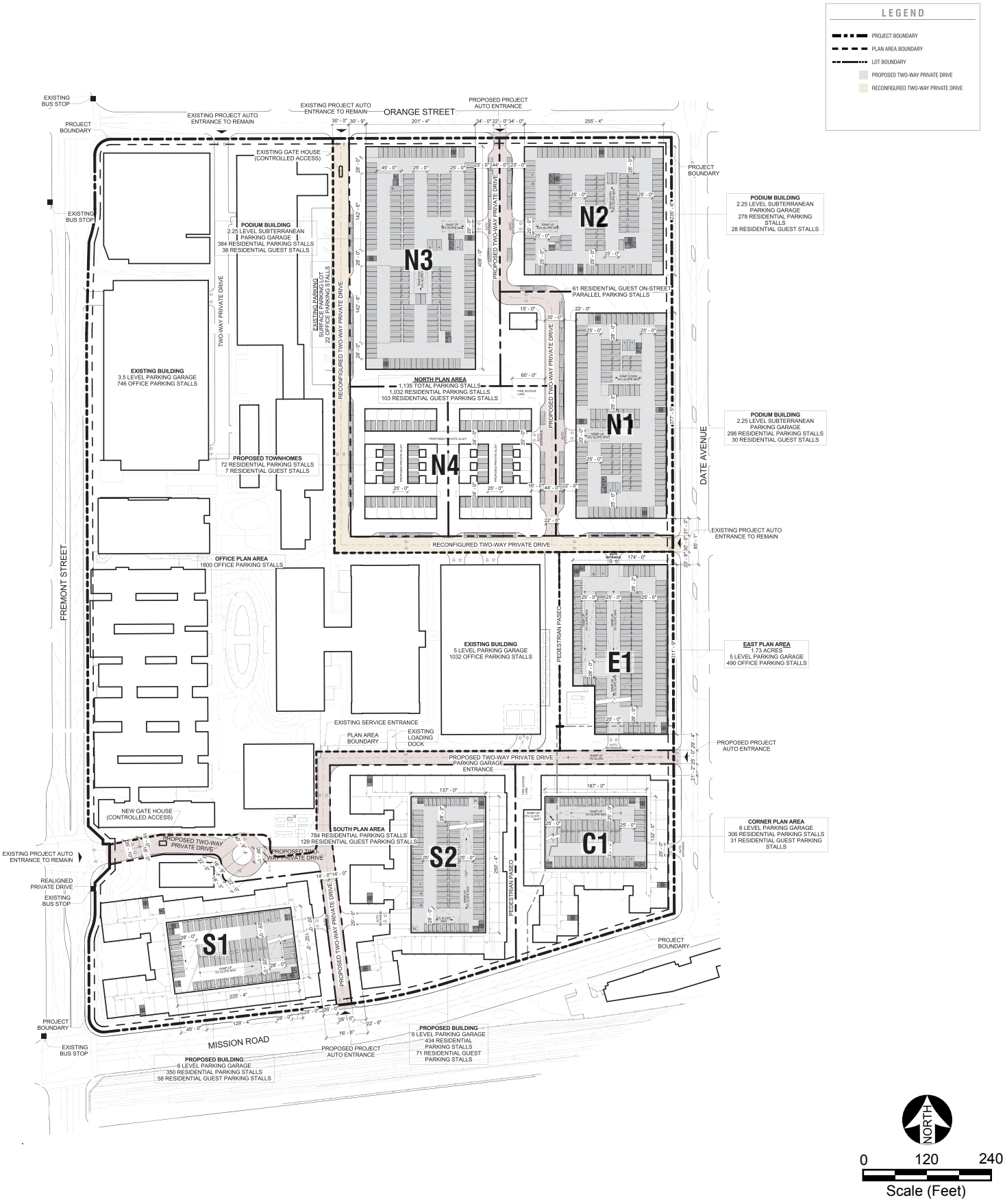


Figure II-6
Proposed Parking and Circulation Plan

Source: TCA Architects, Inc., 2018.

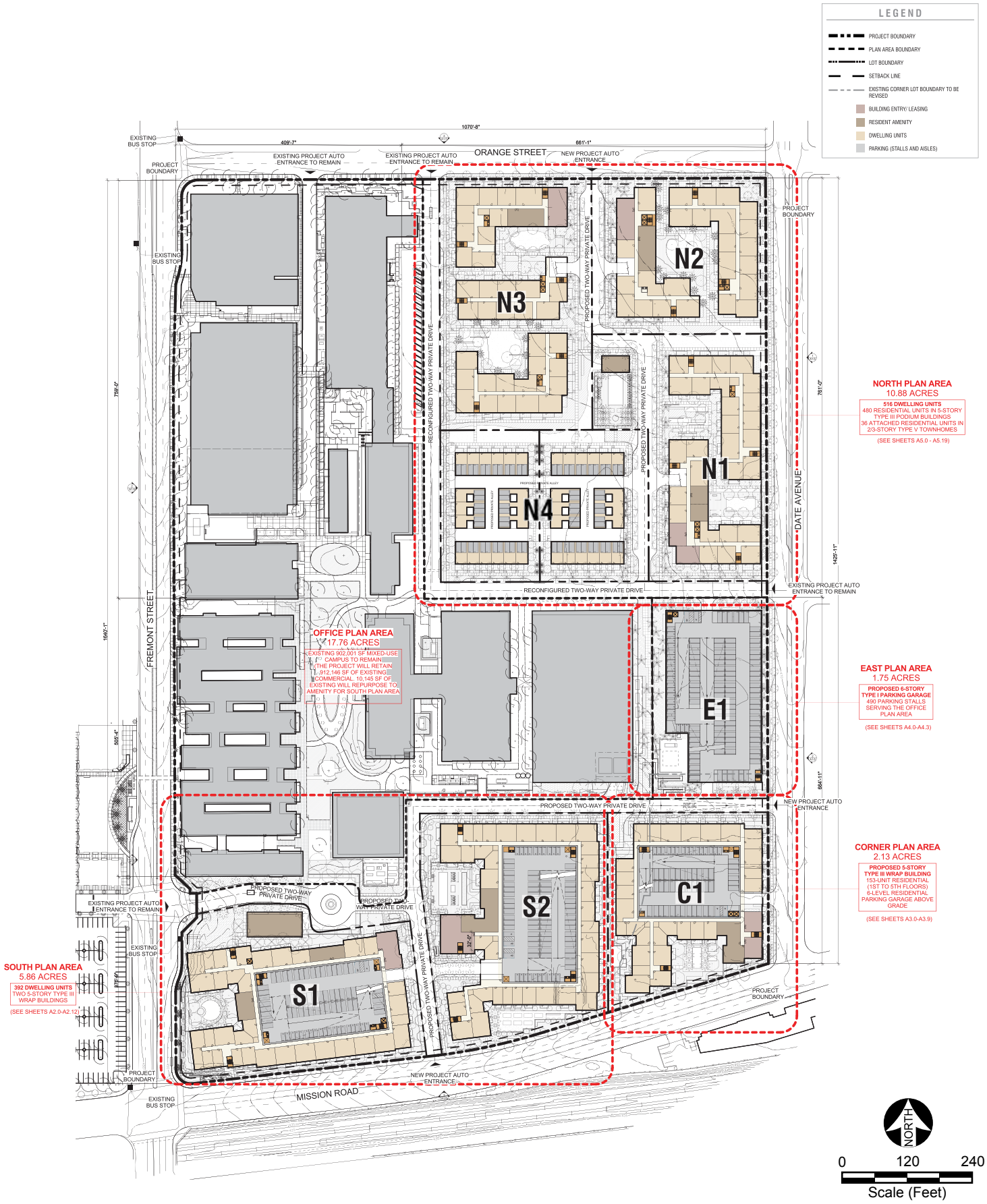
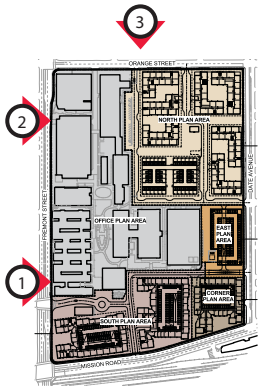


Figure II-7
Proposed Plot Plan

Source: TCA Architects, Inc., 2018.



KEY PLAN

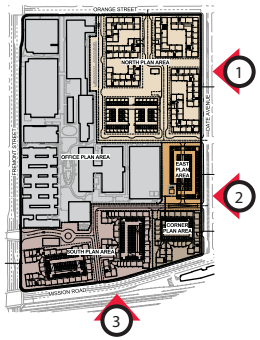
1 WEST ELEVATION (FREMONT STREET)

2 WEST ELEVATION (FREMONT STREET)

3 NORTH ELEVATION (ORANGE STREET)

Source: TCA Architects, Inc., 2018.

Figure II-8
Elevations 1



KEY PLAN

1 EAST ELEVATION (DATE AVENUE)

2 EAST ELEVATION (DATE AVENUE)

3 SOUTH ELEVATION (MISSION ROAD)

Source: TCA Architects, Inc., 2018.

Figure II-9
Elevations 2

SOUTH PLAN AREA

SOUTH PLAN AREA SUMMARY

	TOTAL
SITE AREA (SF)	255,253 SF
SITE AREA (ACRES)	5.86 AC
TOTAL GROSS BLDG AREA (SF)	459,961 SF
F.A.R.	1.80 :1
BUILDING FOOTPRINT (SF)	166,124 SF
LOT COVERAGE	65.1%
NUMBER OF UNITS	392
DENSITY (UNITS PER ACRE)	66.9 DUA
PARKING PROVIDED	663

	TOTAL UNIT
SITE S1	175
SITE S2	217
TOTAL UNITS IN SOUTH PLAN	392

DWELLING UNITS	LVL 01	LVL 02	LVL 03	LVL 04	LVL 05		Total # Units	AVG. NET S.F.*	BALCONY S.F.	Total Net Rent.	% of Unit Mix
STUDIO:											
S1	13	13	13	12	9		60	625 SF	50 SF	37,500 SF	
SUBTOTAL	13	13	13	12	9		60	625 SF	3,000 SF	37,500 SF	15.3%
1 BR:											
A1	28	29	38	36	36		167	725 SF	50 SF	121,075 SF	
SUBTOTAL	28	29	38	36	36		167	725 SF	8,350 SF	121,075 SF	42.6%
2 BR:											
B1	28	28	32	31	29		148	1,075 SF	50 SF	159,100 SF	
B2	0	0	0	0	0		0	1,050 SF	50 SF	0 SF	
SUBTOTAL	28	28	32	31	29		148	1,075 SF	7,400 SF	159,100 SF	37.8%
3 BR:											
C1	3	4	4	3	3		17	1,425 SF	50 SF	24,225 SF	
C2	0	0	0	0	0		0	1,350 SF	50 SF	0 SF	
SUBTOTAL	3	4	4	3	3		17	1,425 SF	850 SF	24,225 SF	4.3%
TOTAL	72	74	87	82	77		392	872 SF	15,600 SF	341,900 SF	100.0%

* Square footage is taken from centerline of parti walls and outside of exterior walls, excluding all decks and balconies.

BUILDING AREA SUMMARY

GROSS BUILDING AREA		Efficiency
Area Type	Total	
Campus Office / Commercial	0 SF	
Dwelling Units	341,900 SF	
Misc. (corridors, stairs, shafts, etc)	95,533 SF	
Residential Amenities	20,128 SF	
Leasing	2,400 SF	
TOTAL	459,961 SF	74%

PARKING SUMMARY

REQUIRED PARKING				
Unit Type	Ratio	#	Total Req'd	
Unit S (Studio)	1.0	60	60	
Unit A (1-BR)	1.5	167	251	
Unit B (2-BR)	1.75	148	259	
Unit C (3-BR)	2.0	17	34	
Unit TH (Townhome)	2.0	0	0	
		Subtotal	604	
Guest (Orange and Date)	0.15	n/a	0	
Guest (Fremont and Mission)	0.15	392	59	
		TOTAL	663	
		Ratio	1.69	

PROVIDED PARKING				
Location (Level)	Handicap 9' x 20'	Standard 9' x 20'	Compact 7'-6"x15'	Total Provided
LVL 01 - Resident	16	13	0	29
LVL 02 - Resident	0	102	21	123
LVL 03 - Resident	0	102	21	123
LVL 04 - Resident	0	102	21	123
LVL 05 - Resident	0	102	21	123
LVL 06 - Resident	0	66	17	83
			Subtotal	604
LVL 01 - Guest	4	43	12	59
LVL 02 - Guest	0	0	0	0
			Subtotal	59
TOTAL	20	530	113	663
Ratio	3%	80%	17%	1.69

OPEN SPACE SUMMARY

REQUIRED OPEN SPACE				
		SF per unit	# Units	Total Req'd
Residential		425 SF	392	166,600 SF
			TOTAL	166,600 SF

30% min must be located in the primary amenity area

PROVIDED OPEN SPACE	Private	Common(Primary Amenity Area)						Total Prov'd
Residential	Porch/Balc.	Indoor	Roof Decks	Hardscape/Paving	Decomposed Granite	Shurb Area	Turf	
	19,600 SF	12,383 SF	12,298 SF	24,212 SF	2,961 SF	58,946 SF	1,669 SF	132,069 SF
							TOTAL	132,069 SF
Ratio	15%						85%	

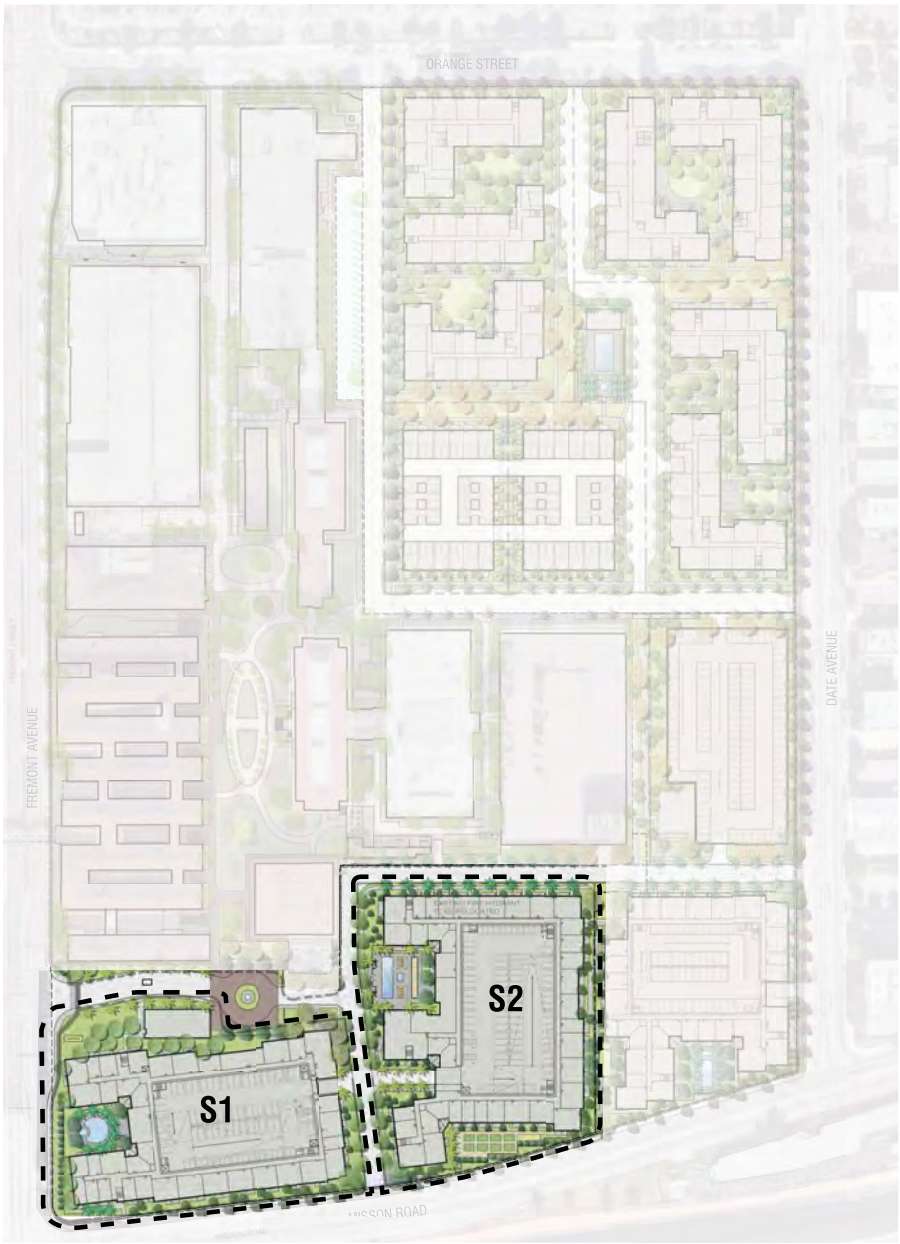


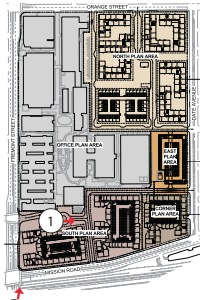
Figure II-10
South Plan Area Summary

Source: TCA Architects, Inc., 2018.

1 PROPOSED PROJECT AUTO ENTRANCE OFF FREMONT

2 CORNER OF MISSION AND FREMONT

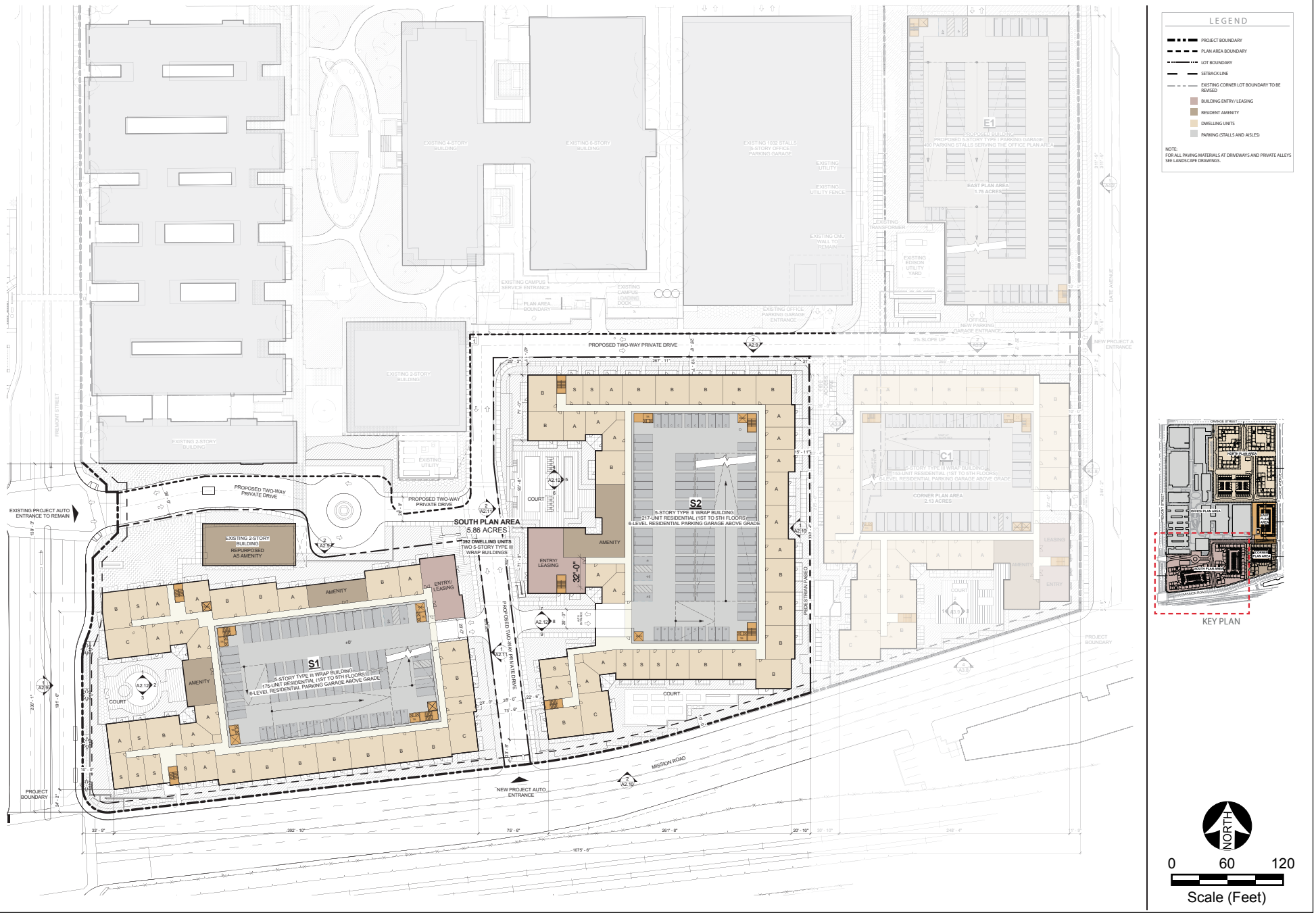
3 CLOSE-UP OF MISSION



2/3 KEY PLAN

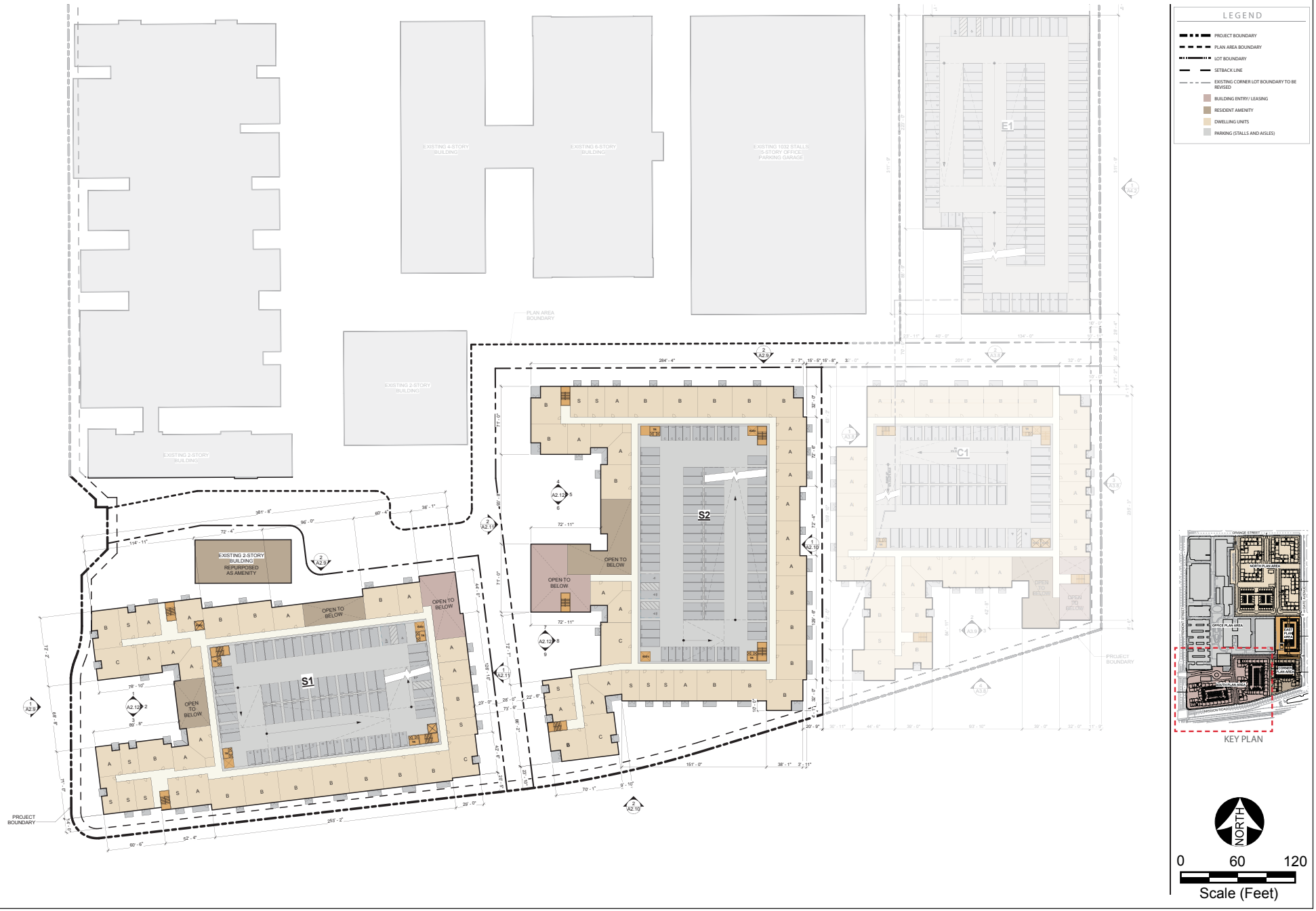
Source: TCA Architects, Inc., 2018.

Figure II-11
South Plan Area Renderings



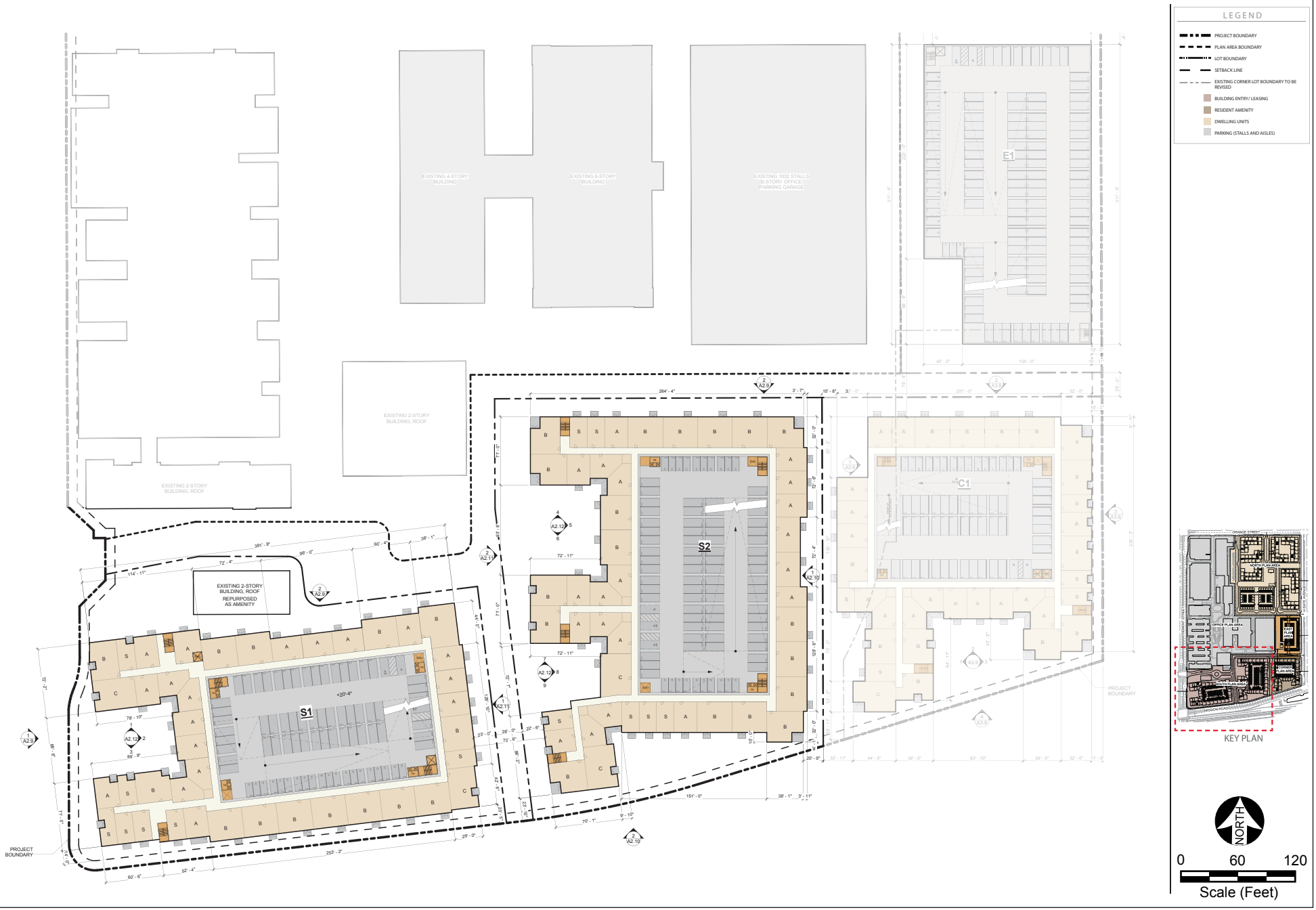
Source: TCA Architects, Inc., 2018.

Figure II-12
South Plan Area Detail – Level 1



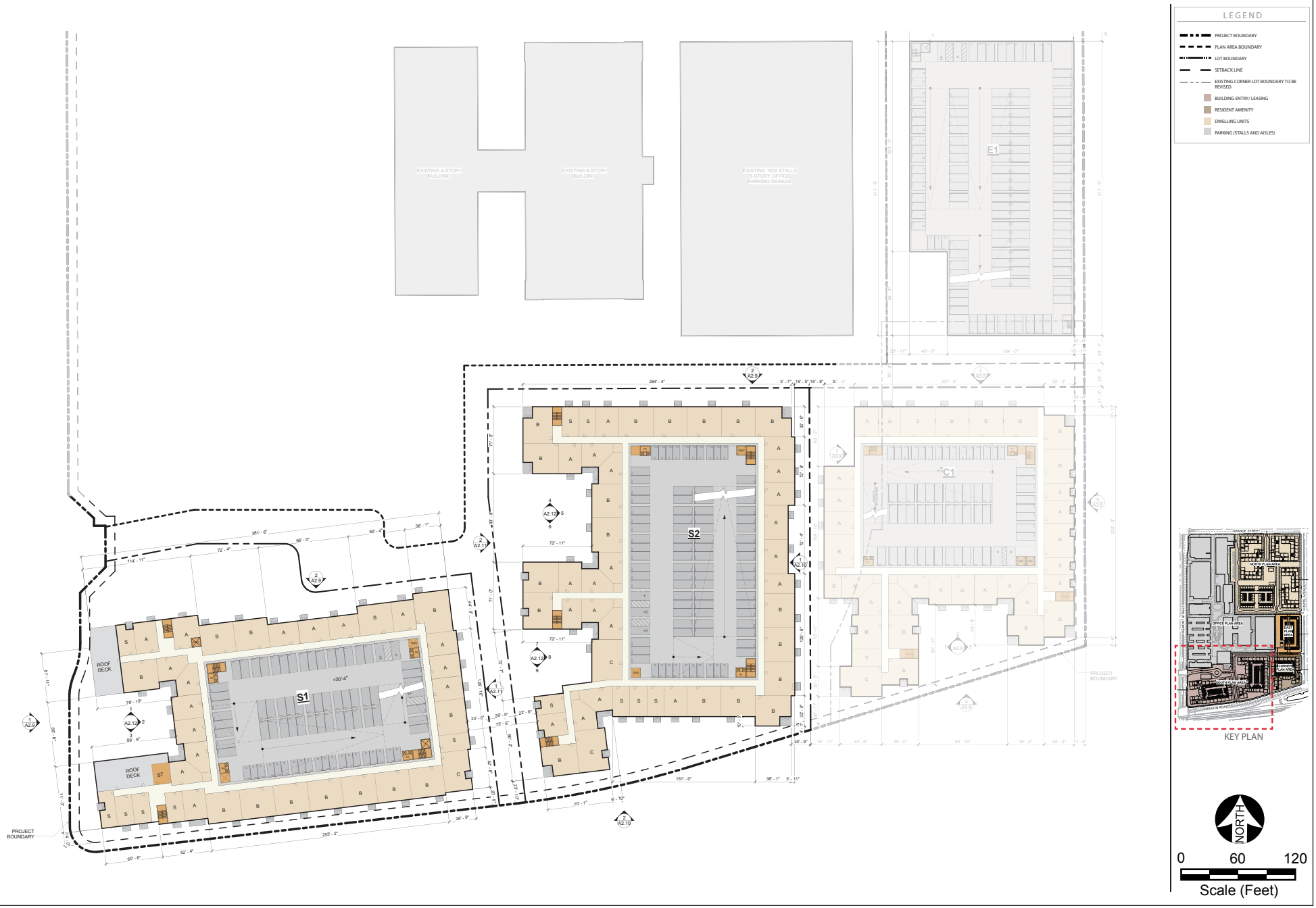
Source: TCA Architects, Inc., 2018.

Figure II-13
South Plan Area Detail – Level 2



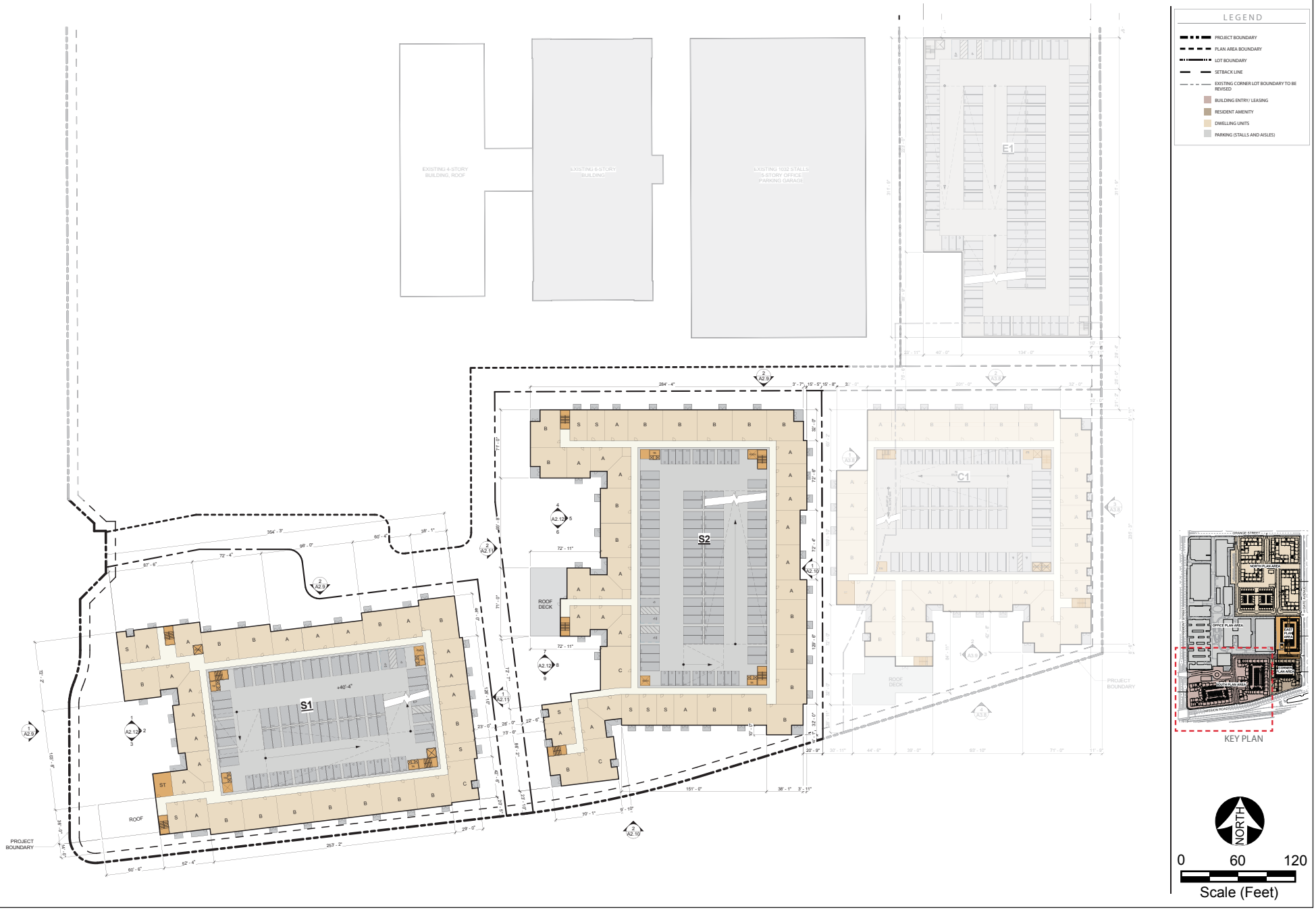
Source: TCA Architects, Inc., 2018.

Figure II-14
South Plan Area Detail – Level 3



Source: TCA Architects, Inc., 2018.

Figure II-15
South Plan Area Detail – Level 4



Source: TCA Architects, Inc., 2018.

Figure II-16
South Plan Area Detail – Level 5

Source: TCA Architects, Inc., 2018.

Figure II-17
South Plan Area Detail – Roof

CORNER PLAN AREA

CORNER PLAN AREA SUMMARY

	TOTAL
SITE AREA (SF)	92,796 SF
SITE AREA (ACRES)	2.13 AC
TOTAL GROSS BLDG AREA (SF)	176,116 SF
F.A.R.	1.90 :1
BUILDING FOOTPRINT (SF)	62,948 SF
LOT COVERAGE	67.8%
NUMBER OF UNITS	153
DENSITY (UNITS PER ACRE)	72.0 DUA
PARKING PROVIDED	259

	TOTAL UNIT
SITE C1	153
TOTAL UNITS IN CORNER PLAN	153

DWELLING UNITS	LVL 01	LVL 02	LVL 03	LVL 04	LVL 05		Total # Units	AVG. NET S.F.*	BALCONY S.F.	Total Net Rent.	% of Unit Mix
STUDIO:											
S1	3	4	5	5	3		20	625 SF	50 SF	12,500 SF	
SUBTOTAL	3	4	5	5	3		20	625 SF	1,000 SF	12,500 SF	13.0%
1 BR:											
A1	13	12	15	15	15		70	725 SF	50 SF	50,750 SF	
SUBTOTAL	13	12	15	15	15		70	725 SF	3,500 SF	50,750 SF	45.8%
2 BR:											
B1	10	11	13	13	12		59	1,075 SF	50 SF	63,425 SF	
B2	0	0	0	0	0		0	1,050 SF	50 SF	0 SF	
SUBTOTAL	10	11	13	13	12		59	1,075 SF	2,950 SF	63,425 SF	38.6%
3 BR:											
C1	1	1	1	1	0		4	1,425 SF	50 SF	5,700 SF	
C2	0	0	0	0	0		0	1,350 SF	50 SF	0 SF	
SUBTOTAL	1	1	1	1	0		4	1,425 SF	200 SF	5,700 SF	2.6%
TOTAL	27	28	34	34	30		153	865 SF	7,668 SF	132,375 SF	100.0%

* Square footage is taken from centerline of parti walls and outside of exterior walls, excluding all decks and balconies.

BUILDING AREA SUMMARY

GROSS BUILDING AREA		Efficiency
Area Type	Total	
Campus Office / Commercial	0 SF	
Dwelling Units	132,375 SF	
Misc. (corridors, stairs, shafts, etc)	38,623 SF	
Residential Amenities	3,918 SF	
Leasing	1,200 SF	
TOTAL	176,116 SF	75%

PARKING SUMMARY

REQUIRED PARKING				
Unit Type	Ratio	#	Total Req'd	
Unit S (Studio)	1.0	20	20	
Unit A (1-BR)	1.5	70	105	
Unit B (2-BR)	1.75	59	103	
Unit C (3-BR)	2.0	4	8	
Unit TH (Townhome)	2.0	0	0	
		Subtotal	236	
Guest (Orange and Date)	0.15	153	23	
Guest (Fremont and Mission)	0.15	N/A	N/A	
		TOTAL	259	
		Ratio	1.69	

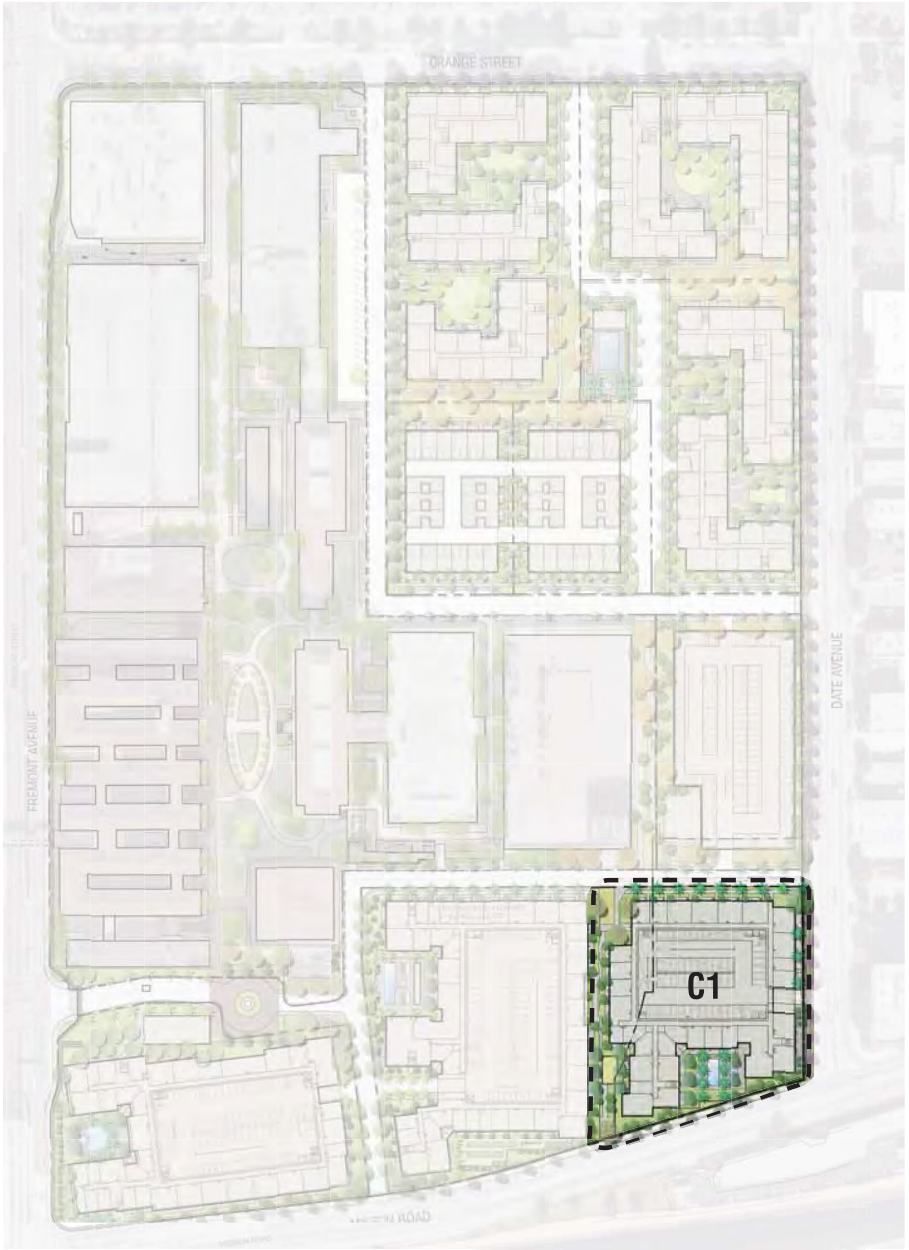
PROVIDED PARKING				
Location (Level)	Handicap	Standard	Compact	Total
	9' x 20'	9' x 20'	7'-6"x15'	Provided
LVL 01 - Resident	5	20	0	25
LVL 02 - Resident	0	37	7	44
LVL 03 - Resident	0	37	7	44
LVL 04 - Resident	0	37	7	44
LVL 05 - Resident	0	37	7	44
LVL 06 - Resident	0	28	7	35
			Subtotal	236
LVL 01 - Guest	1	12	10	23
LVL 02 - Guest	0	0	0	0
			Subtotal	23
TOTAL	6	208	45	259
Ratio	2%	80%	17%	1.69

OPEN SPACE SUMMARY

REQUIRED OPEN SPACE				
		SF per unit	# Units	Total Req'd
Residential		425 SF	153	65,025 SF
			TOTAL	65,025 SF

30% min must be located in the primary amenity area

PROVIDED OPEN SPACE								
	Private	Common(Primary Amenity Area)						Total Prov'd
Residential	Porch/Balc.	Indoor	Roof Decks	Hardscape/Paving	Decomposed Granite	Shurb Area	Turf	
	7,660 SF	5,118 SF	3,101 SF	9,432 SF	0 SF	13,859 SF	1,617 SF	40,777 SF
							TOTAL	40,777 SF
Ratio	19%						81%	

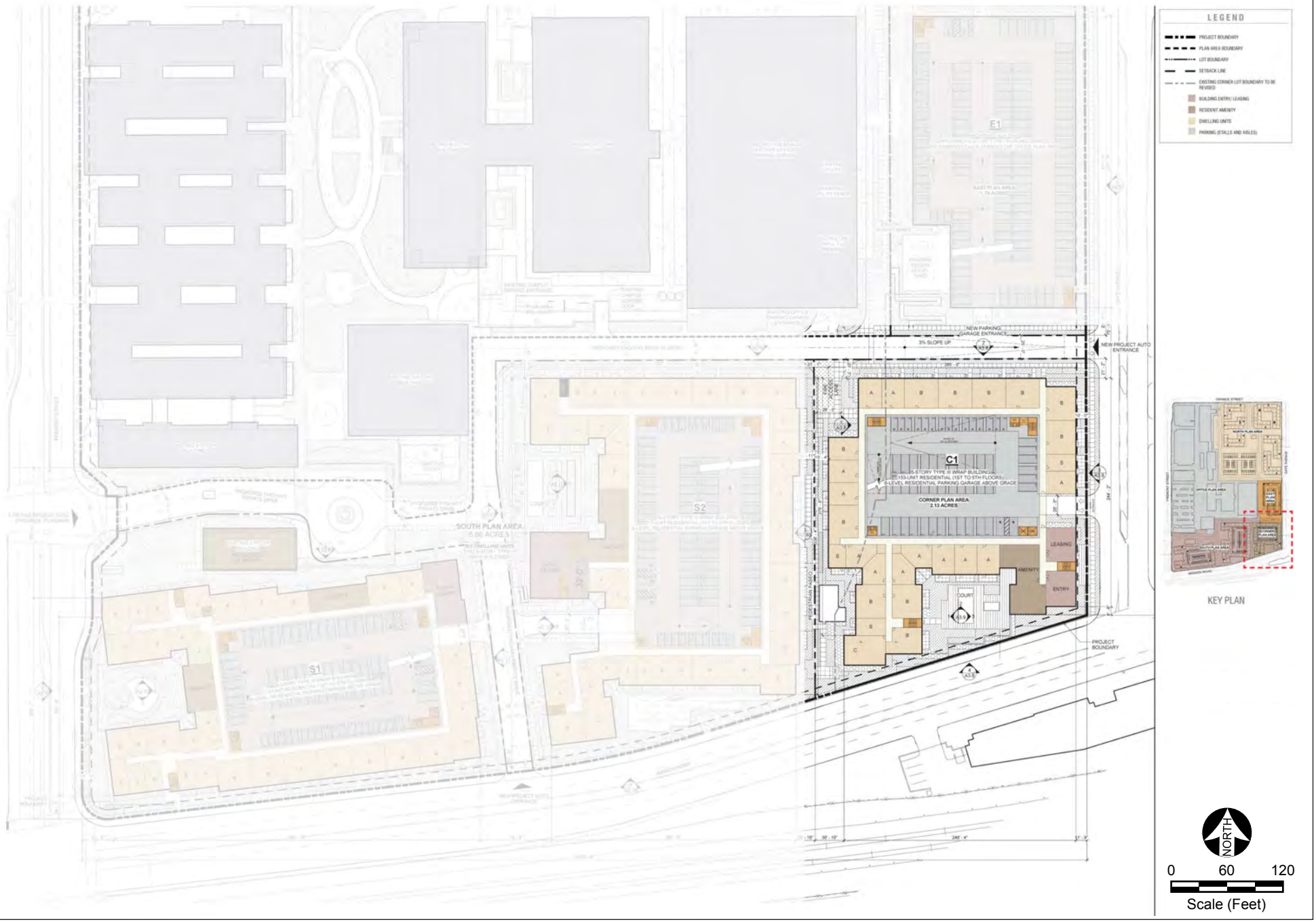


Source: TCA Architects, Inc., 2018.

Figure II-18
Corner Plan Area Summary

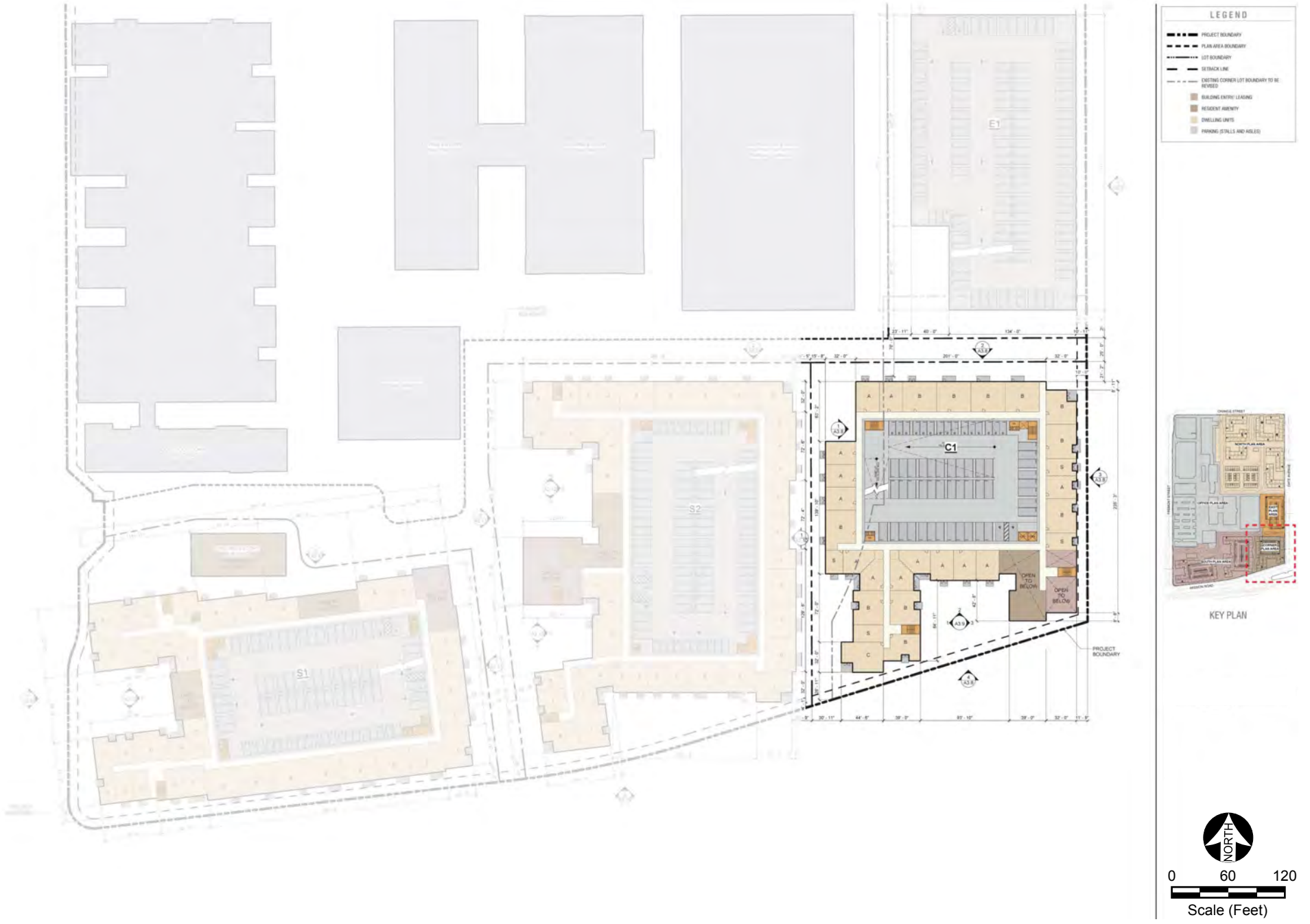
Source: TCA Architects, Inc., 2018.

Figure II-19
Corner Plan Area Renderings



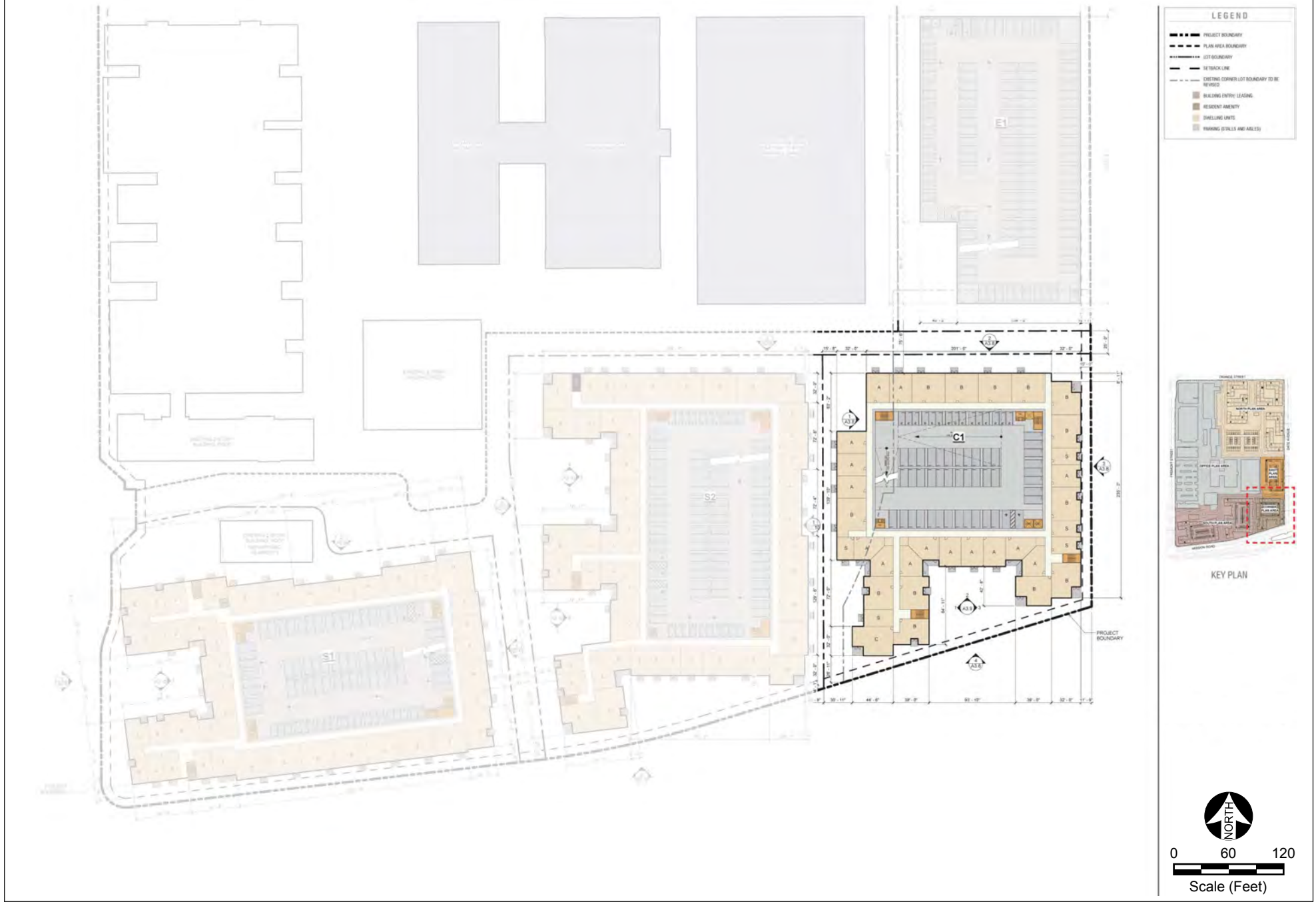
Source: TCA Architects, Inc., 2018.

Figure II-20
Corner Plan Area Detail – Level 1



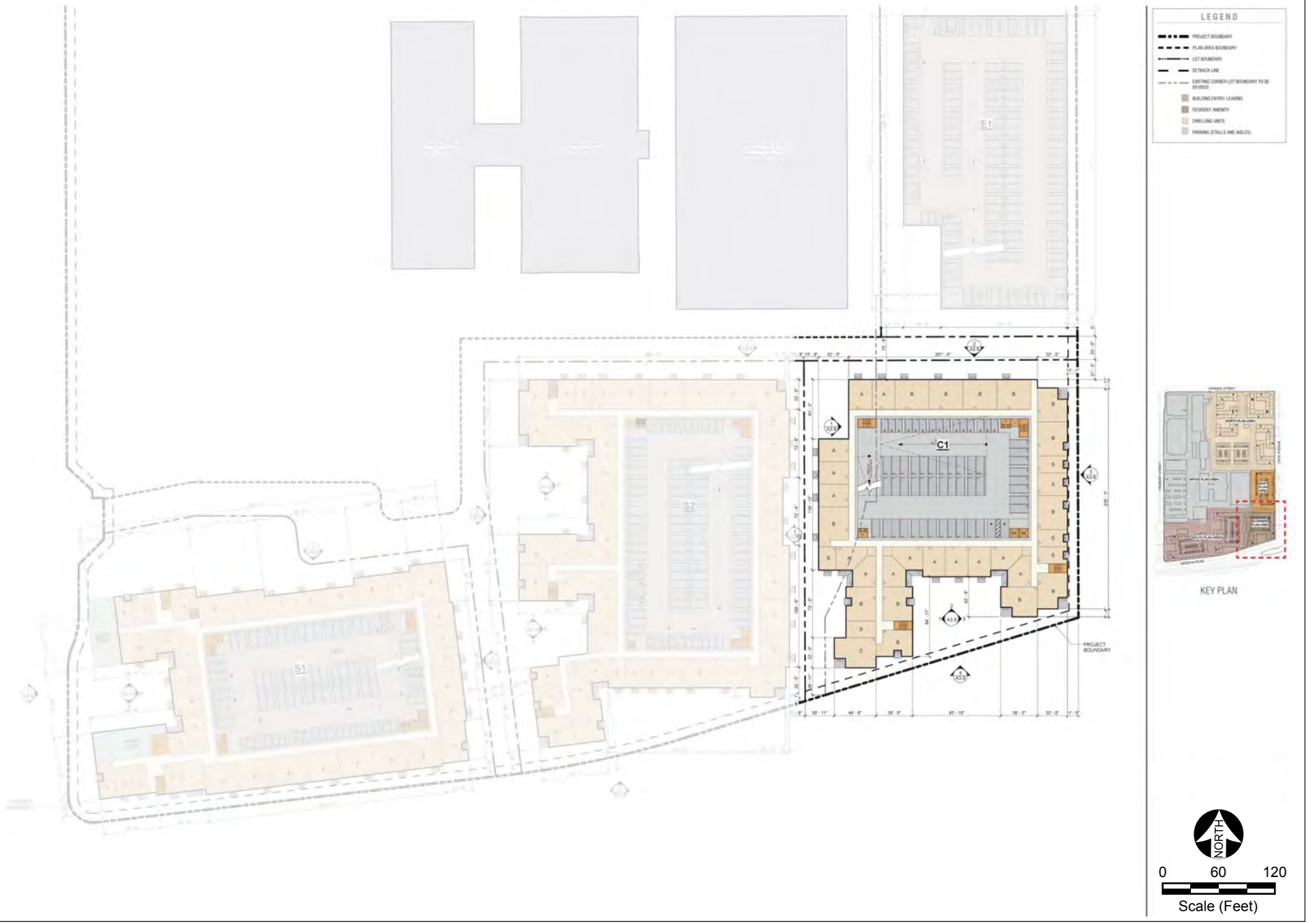
Source: TCA Architects, Inc., 2018.

Figure II-21
Corner Plan Area Detail – Level 2



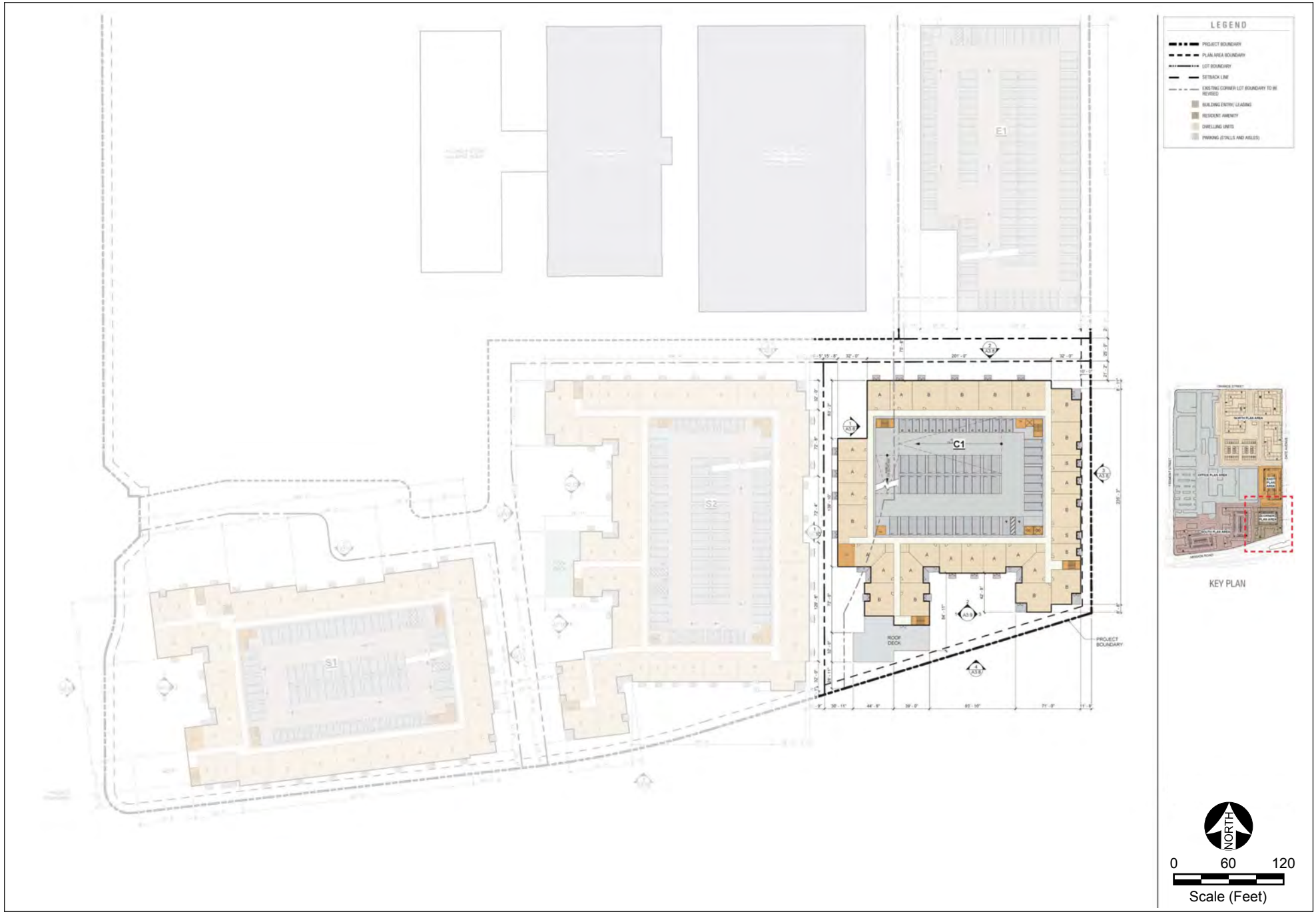
Source: TCA Architects, Inc., 2018.

Figure II-22
Corner Plan Area Detail – Level 3



Source: TCA Architects, Inc., 2018.

Figure II-23
Corner Plan Area Detail – Level 4



Source: TCA Architects, Inc., 2018.

Figure II-24
Corner Plan Area Detail – Level 5

Source: TCA Architects, Inc., 2018.

Figure II-25
Corner Plan Area Detail – Roof

EAST PLAN AREA

EAST PLAN AREA SUMMARY

	TOTAL
SITE AREA (SF)	76,278 SF
SITE AREA (ACRES)	1.75 AC
TOTAL GROSS BLDG AREA (SF)	253,475 SF
F.A.R.	3.32
BUILDING FOOTPRINT (SF)	50,695 SF
LOT COVERAGE	66.5%
NUMBER OF UNITS	0
DENSITY (UNITS PER ACRE)	0.0 DUA
PARKING PROVIDED	490

DWELLING UNITS	LVL 01	LVL 02	LVL 03	LVL 04	LVL 05		Total # Units	AVG. NET S.F.*	BALCONY S.F.	Total Net Rent.	% of Unit Mix
STUDIO:											
S1	0	0	0	0	0		0	625 SF	50 SF	0 SF	
SUBTOTAL	0	0	0	0	0		0	0 SF	0 SF	0 SF	0.0%
1 BR:											
A1	0	0	0	0	0		0	725 SF	50 SF	0 SF	
SUBTOTAL	0	0	0	0	0		0	0 SF	0 SF	0 SF	0.0%
2 BR:											
B1	0	0	0	0	0		0	1,075 SF	50 SF	0 SF	
B2	0	0	0	0	0		0	1,050 SF	50 SF	0 SF	
SUBTOTAL	0	0	0	0	0		0	0 SF	0 SF	0 SF	0.0%
3 BR:											
C1	0	0	0	0	0		0	1,425 SF	50 SF	0 SF	
C2	0	0	0	0	0		0	1,350 SF	50 SF	0 SF	
SUBTOTAL	0	0	0	0	0		0	0 SF	0 SF	0 SF	0.0%
TOWNHOME:											
TH	0	0	0	0	0		0	1,600 SF	50 SF	0 SF	
SUBTOTAL	0	0	0	0	0		0	0 SF	0 SF	0 SF	0.0%
TOTAL	0	0	0	0	0		0	0 SF	0 SF	0 SF	0.0%

* Square footage is taken from centerline of parti walls and outside of exterior walls, excluding all decks and balconies.

BUILDING AREA SUMMARY

GROSS BUILDING AREA	
Area Type	Total
Campus Office / Commercial	0 SF
Dwelling Units	0 SF
Misc. (corridors, stairs, shafts, etc)	253,475 SF
Residential Amenities	0 SF
Leasing	0 SF
TOTAL	253,475 SF

(Parking stalls, drive aisles, stairs, elevators, etc., are not considered gross floor area for floor area ratio purposes)

PARKING SUMMARY

REQUIRED PARKING (PER CLIENT DIRECTION TO SERVE OFFICE CAMPUS)			
Use Type	Ratio	#	Total Reqd
Residential		0	0
Campus Office / Commercial		0	490
		0	0
		0	0
		0	0
		Subtotal	490
Guest (Orange and Date)	0.20	N/A	N/A
Guest (Fremont and Mission)	0.33	N/A	N/A
		TOTAL	490
		Ratio	N/A

PROVIDED PARKING				
Location (Level)	Handicap	Standard	Compact	Total
	9' x 20'	9' x 20'	7'-6"X15'	Provided
LVL 01 - Office	10	70	18	98
LVL 02 - Office		80	18	98
LVL 03 - Office		80	18	98
LVL 04 - Office		80	18	98
LVL 05 - Office		80	18	98
TOTAL	10	390	90	490
Ratio	2%	80%	18%	N/A

OPEN SPACE SUMMARY

REQUIRED OPEN SPACE			
	Ratio	Ratio	Total Reqd
Parking Garage	N/A	N/A	0 SF
		TOTAL	0 SF

30% min must be located in the primary amenity area

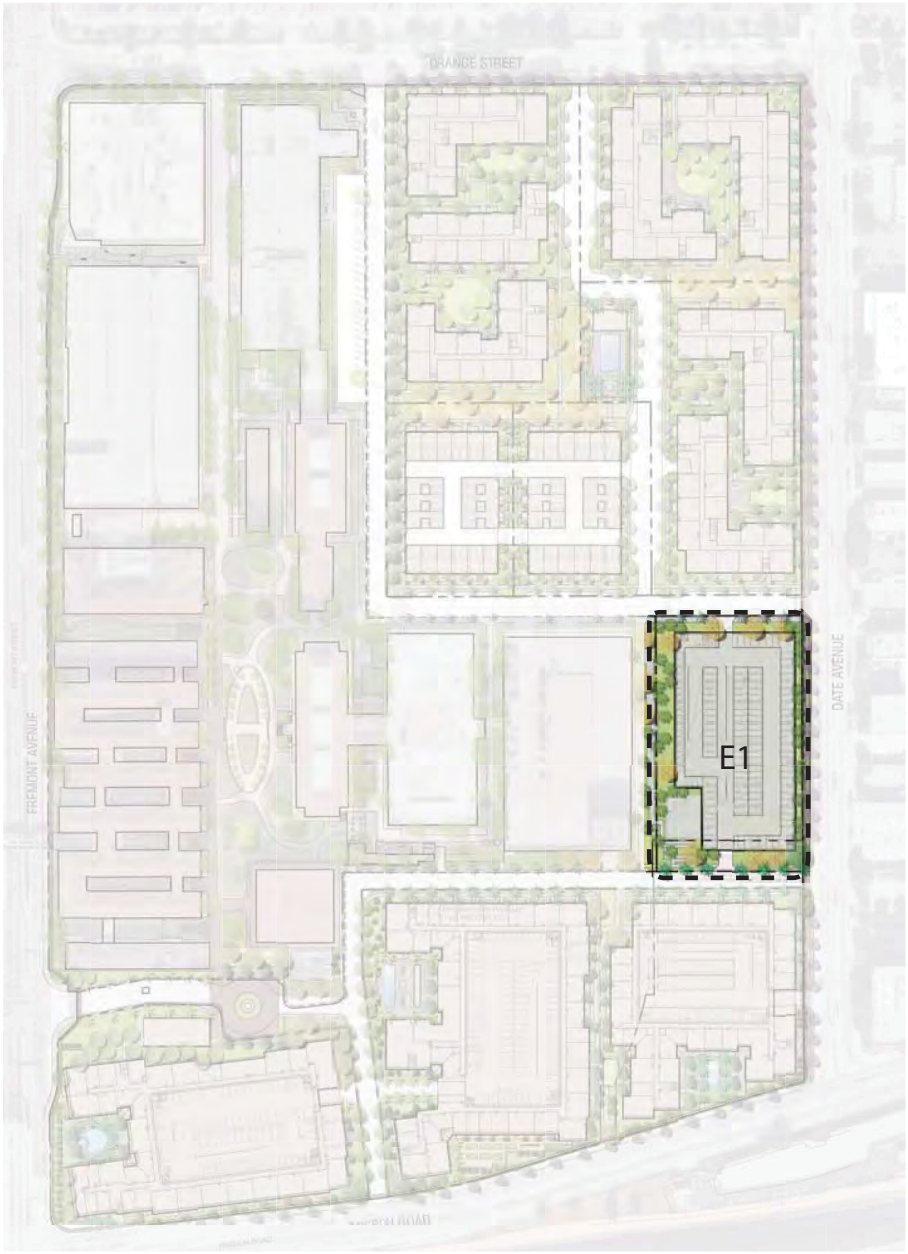
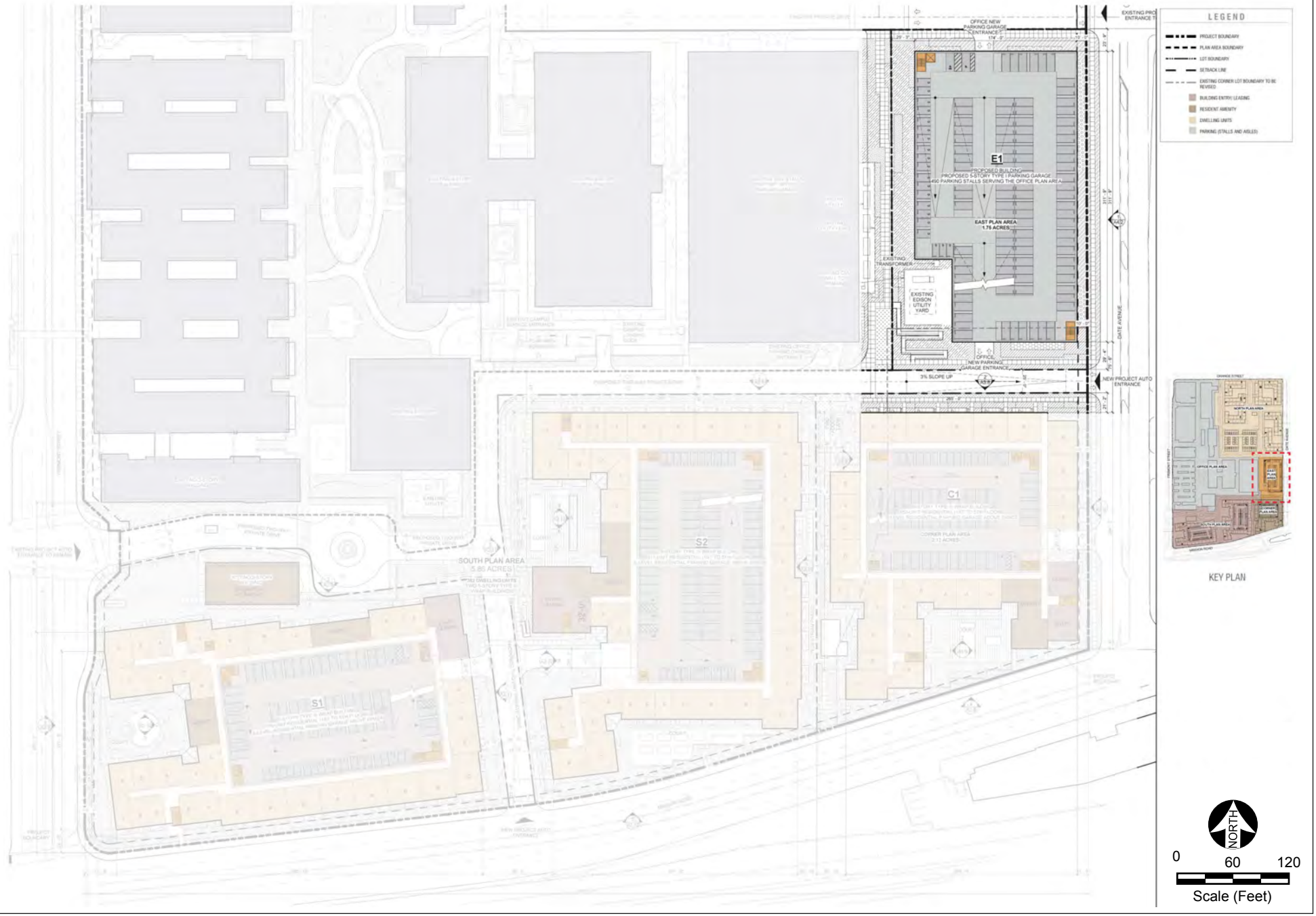


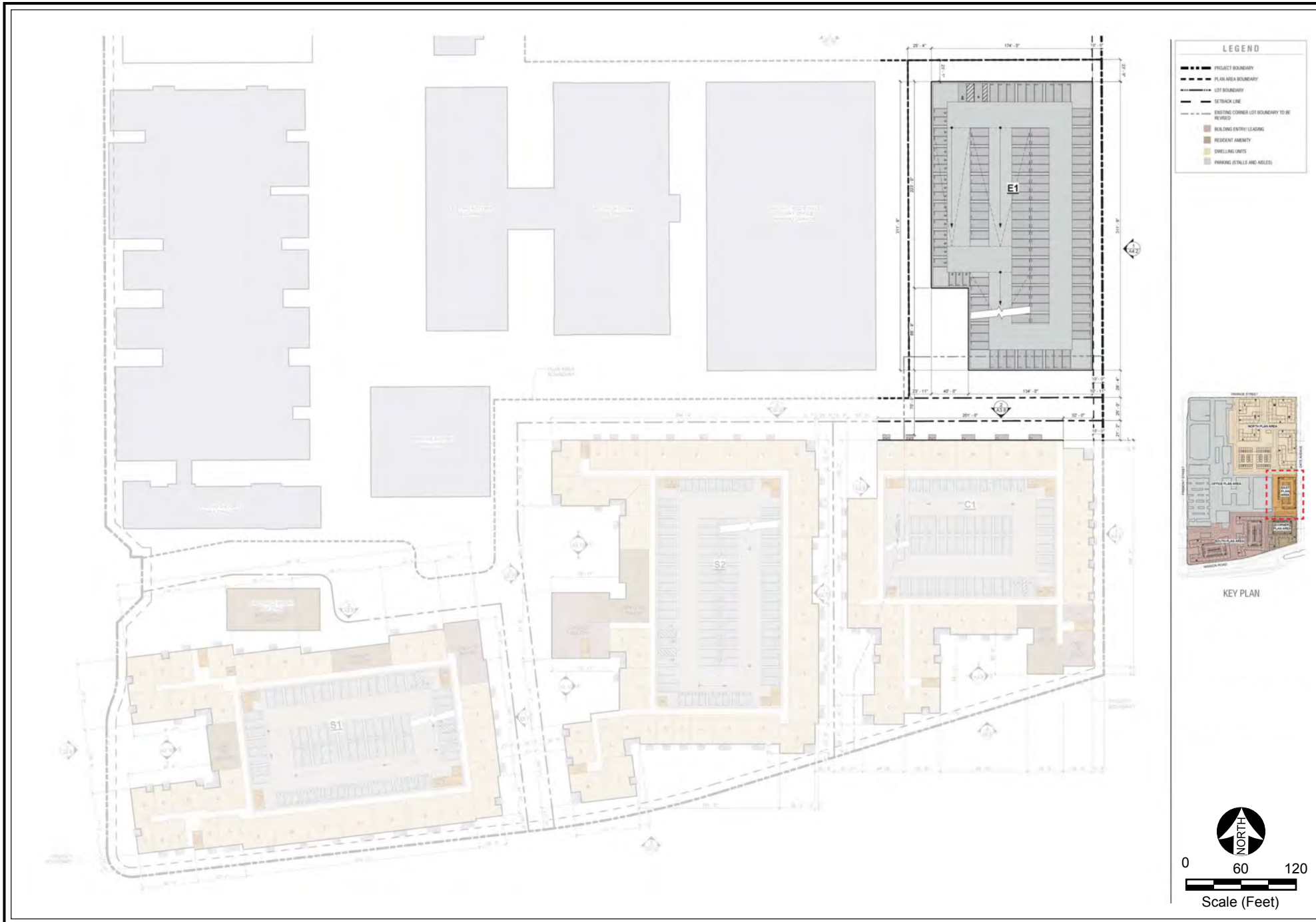
Figure II-26
East Plan Area Summary

Source: TCA Architects, Inc., 2018.



Source: TCA Architects, Inc., 2018.

Figure II-27
East Plan Area Detail – Typical Level 1



Source: TCA Architects, Inc., 2018.

Figure II-28
East Plan Area Detail – Typical Levels 2-5

NORTH PLAN AREA

NORTH PLAN AREA SUMMARY

	TOTAL
SITE AREA (SF)	473,884 SF
SITE AREA (ACRES)	10.88 AC
TOTAL GROSS BLDG AREA (SF)	731,698 SF
F.A.R.	1.54 :1
BUILDING FOOTPRINT (SF)	182,173 SF
LOT COVERAGE	38.4%
NUMBER OF UNITS	516
DENSITY (UNITS PER ACRE)	47.4 DUA
PARKING PROVIDED	1135

	TOTAL UNIT
SITE N1	149
SITE N2	139
SITE N3	192
SITE N4	36
TOTAL UNITS IN NORTH PLAN	516

DWELLING UNITS	LVL 01	LVL 02	LVL 03	LVL 04	LVL 05		Total # Units	AVG. NET S.F.*	BALCONY S.F.	Total Net Rent.	% of Unit Mix
STUDIO:											
S1	0	0	0	0	0		0	625 SF	50 SF	0 SF	
SUBTOTAL	0	0	0	0	0		0	0 SF	0 SF	0 SF	0.0%
1 BR:											
A1	0	0	0	0	0		0	725 SF	50 SF	0 SF	
SUBTOTAL	0	0	0	0	0		0	0 SF	0 SF	0 SF	0.0%
2 BR:											
B1	0	0	0	0	0		0	1,075 SF	50 SF	0 SF	
B2	59	64	69	69	69		330	1,050 SF	50 SF	346,500 SF	
SUBTOTAL	59	64	69	69	69		330	1,050 SF	16,500 SF	346,500 SF	68.8%
3 BR:											
C1	0	0	0	0	0		0	1,425 SF	50 SF	0 SF	
C2	27	31	32	32	28		150	1,350 SF	50 SF	202,500 SF	
SUBTOTAL	27	31	32	32	28		150	1,350 SF	7,500 SF	202,500 SF	31.2%
							480	1,144 SF	24,000 SF	549,000 SF	
TOWNHOME:											
TH1	24	0	0	0	0		24	1,600 SF	150 SF	38,400 SF	
TH2	12	0	0	0	0		12	1,600 SF	100 SF	19,200 SF	
SUBTOTAL	36	0	0	0	0		36	1,600 SF	3,600 SF	57,600 SF	100.0%
TOTAL	122	95	101	101	97		516	1,176 SF	27,600 SF	606,600 SF	

* Square footage is taken from centerline of parti walls and outside of exterior walls, excluding all decks and balconies.

BUILDING AREA SUMMARY

GROSS BUILDING AREA		Efficiency
Area Type	Total	
Campus Office / Commercial	0 SF	
Dwelling Units	606,600 SF	
Misc. (corridors, stairs, shafts, etc)	109,263 SF	
Residential Amenities	12,235 SF	
Leasing	3,600 SF	
TOTAL	731,698 SF	

82% Podium buildings only
83% Plan Area total (Townhomes and Podiums)

PARKING SUMMARY

REQUIRED PARKING			
Unit Type	Ratio	#	Total Req'd
Unit S (Studio)	2.0	0	0
Unit A (1-BR)	2.0	0	0
Unit B (2-BR)	2.0	330	660
Unit C (3-BR)	2.0	150	300
Unit TH (Townhome)	2.0	36	72
		Subtotal	1032
Guest (Orange and Date)	0.20	516	103
Guest (Fremont and Mission)	0.33	N/A	N/A
		TOTAL	1135
		Ratio	2.20

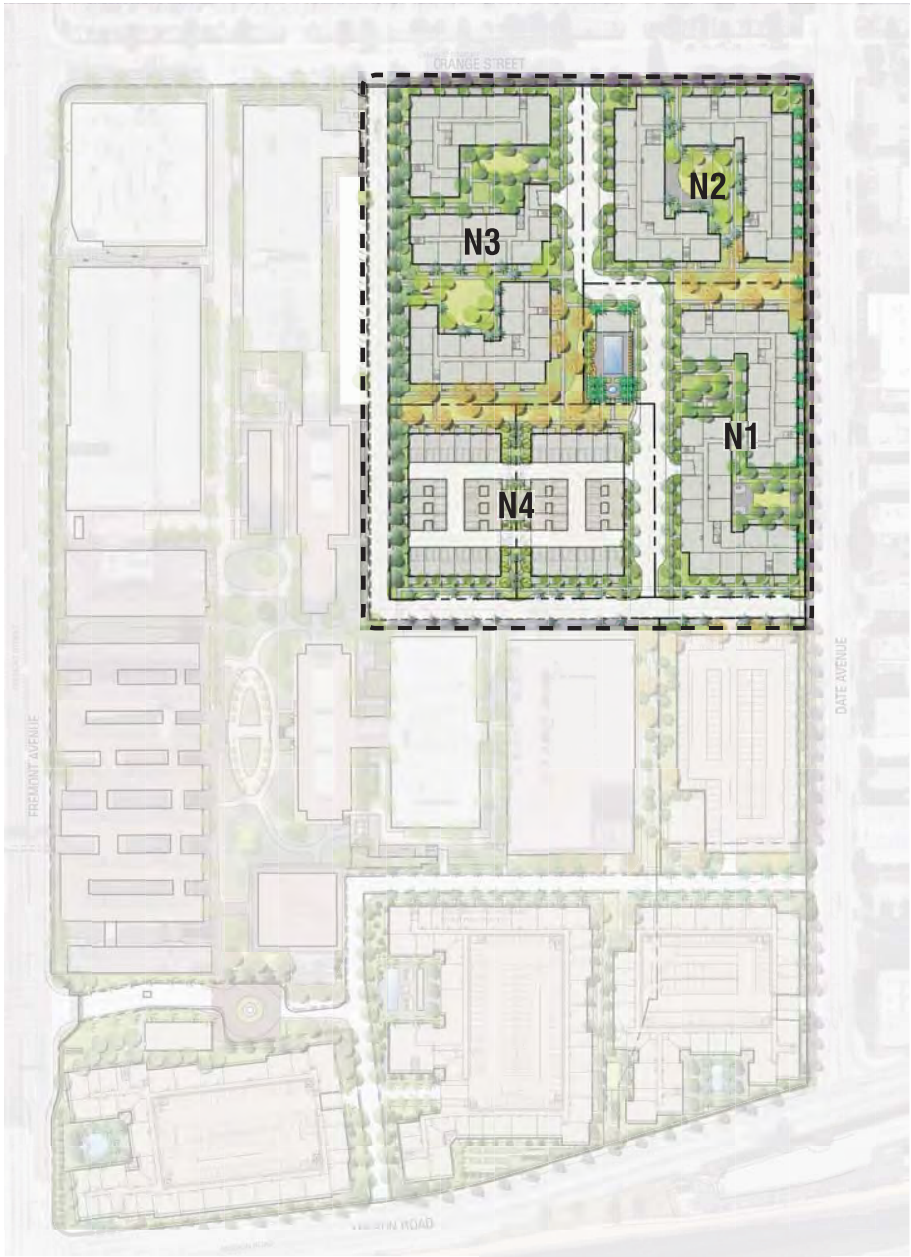
PROVIDED PARKING				
Location (Level)	Handicap 9' x 20'	Standard 9' x 20'	Compact 7'-6"x15'	Total Provided
LVL 01 - Resident	0	72	0	72
LVL B1 - Resident	21	330	61	412
LVL B2 - Resident	0	437	62	499
LVL B3 - Resident	0	31	18	49
			Subtotal	1032
LVL 01 - Guest (on-street)	4	51	0	55
LVL B1 - Guest	0	48	0	48
			Subtotal	103
TOTAL	25	969	141	1135
Ratio	2%	85%	12%	2.20

OPEN SPACE SUMMARY

REQUIRED OPEN SPACE			
	SF per unit	# Units	Total Req'd
Residential	425 SF	516	219,300 SF
		TOTAL	219,300 SF

30% min must be located in the primary amenity area

PROVIDED OPEN SPACE							
	Private	Common(Primary Amenity Area)					Total Prov'd
Residential	Porch/Balc.	Indoor	Roof Decks	Hardscape/Paving	Decomposed Granite	Shurb Area / Turf	
	27,600 SF	15,835 SF	5,280 SF	59,764 SF	2,237 SF	99,928 SF / 25,841 SF	236,485 SF
						TOTAL	236,485 SF
Ratio	12%					88%	



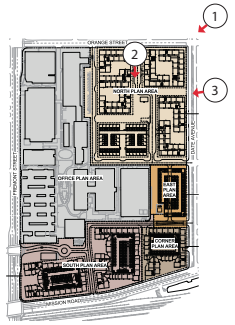
Source: TCA Architects, Inc., 2018.

Figure II-29
North Plan Area Summary

1 PROPOSED PROJECT AUTO ENTRANCE OFF ORANGE

2 VIEW TOWARDS AMENITY BUILDING

3 CLOSE-UP OF PEDSTRIAN PASEO OFF DATE AVE.



KEY PLAN

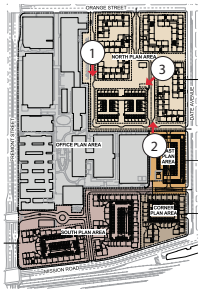
Source: TCA Architects, Inc., 2018.

Figure II-30
North Plan Area Renderings 1

1 VIEW FACING SOUTH

2 VIEW FACING NORTH

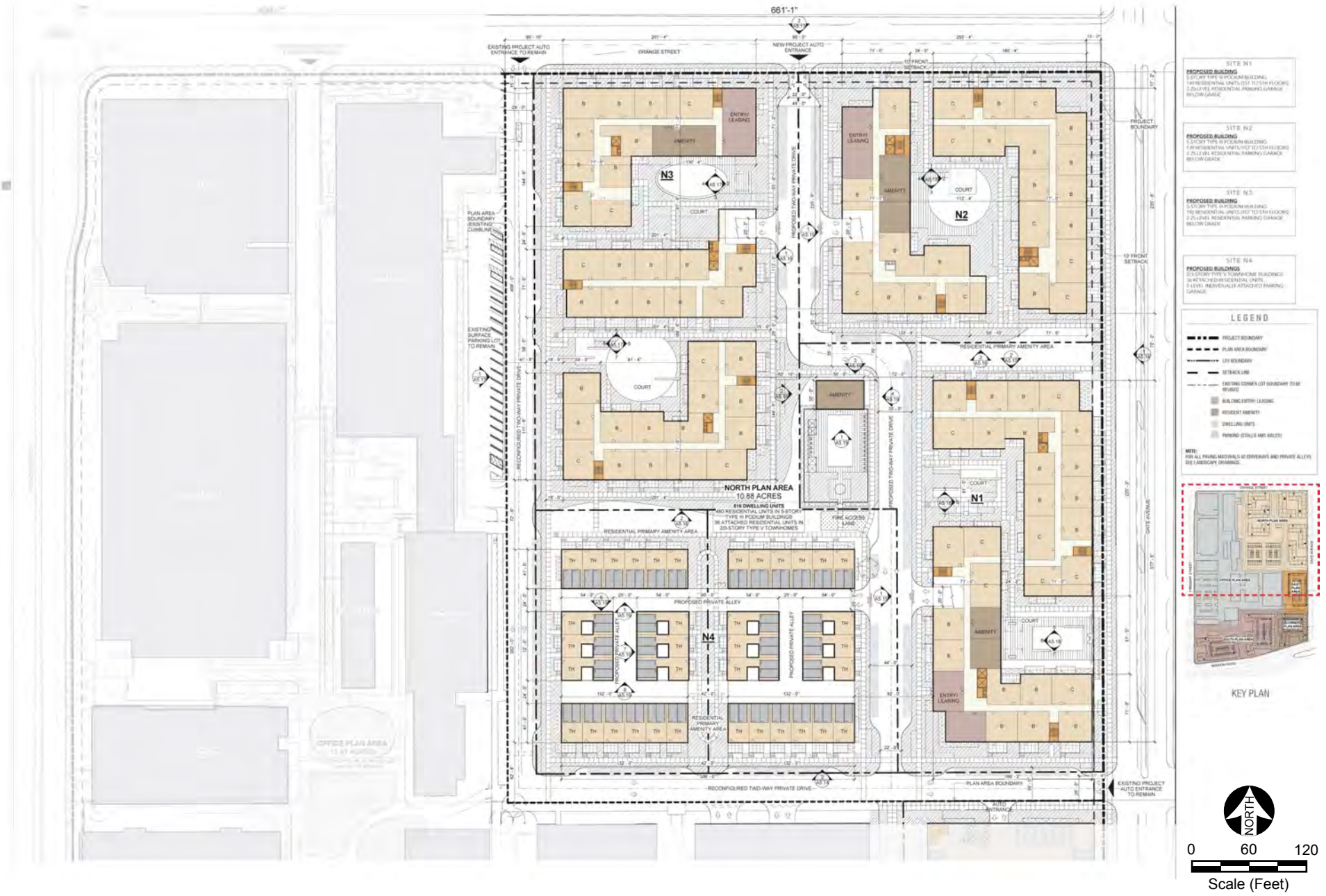
3 CLOSE-UP OF TOWNHOME ENTRY



KEY PLAN

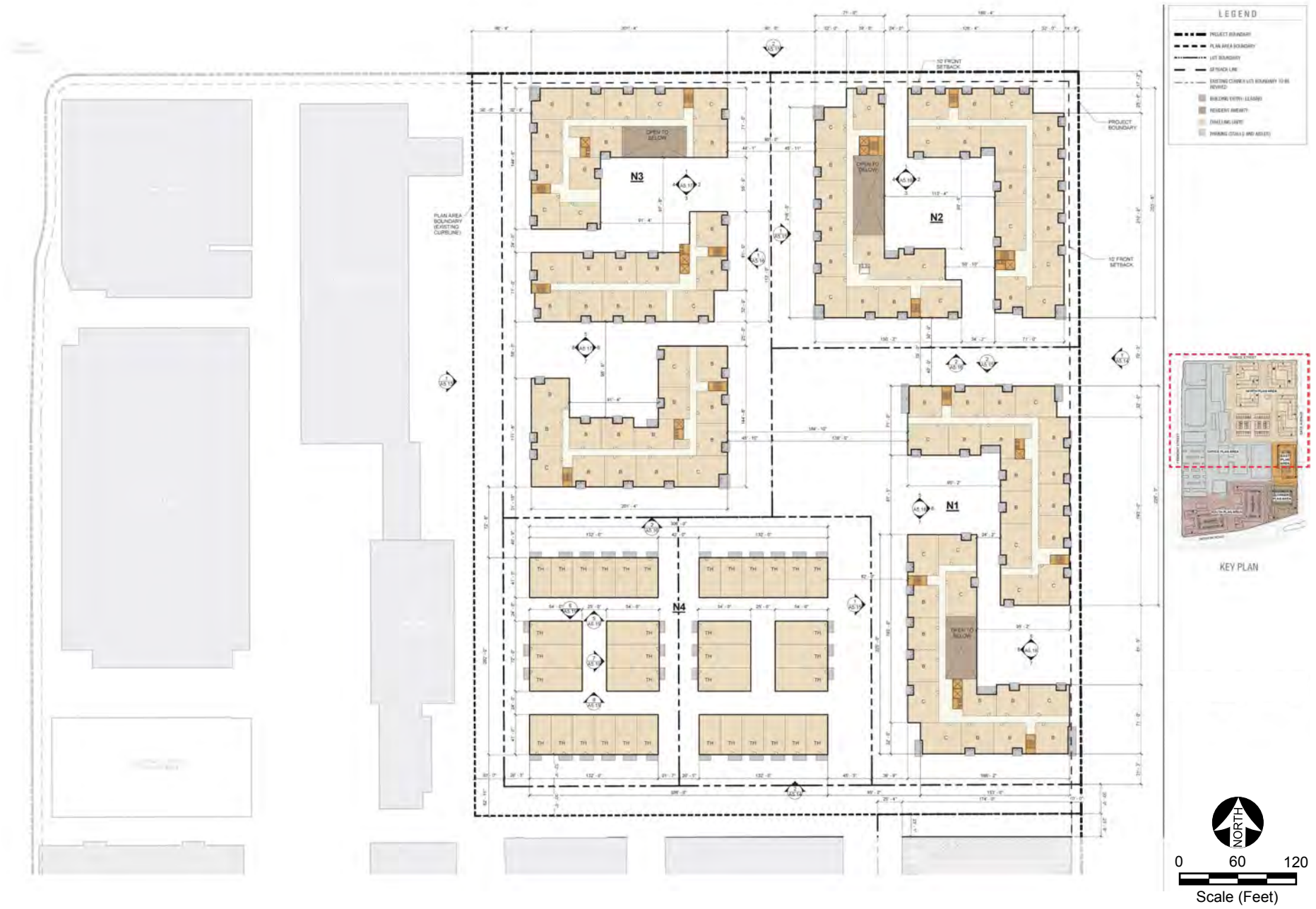
Source: TCA Architects, Inc., 2018.

Figure II-31
North Plan Area Renderings 2



Source: TCA Architects, Inc., 2018.

Figure II-32
North Plan Area Detail – Level 1



Source: TCA Architects, Inc., 2018.

Figure II-33
North Plan Area Detail – Level 2

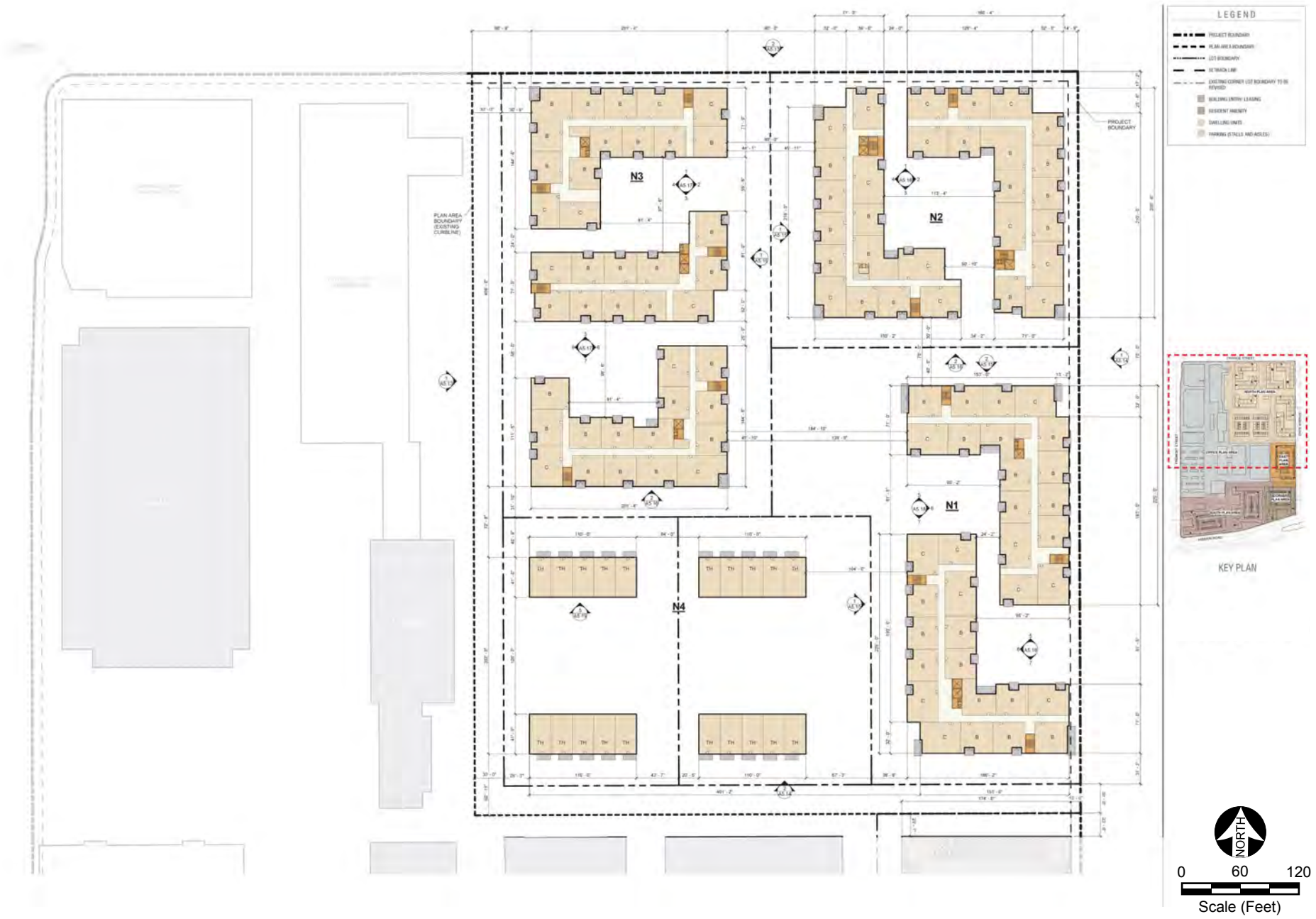


Figure II-34
North Plan Area Detail – Level 3

Source: TCA Architects, Inc., 2018.

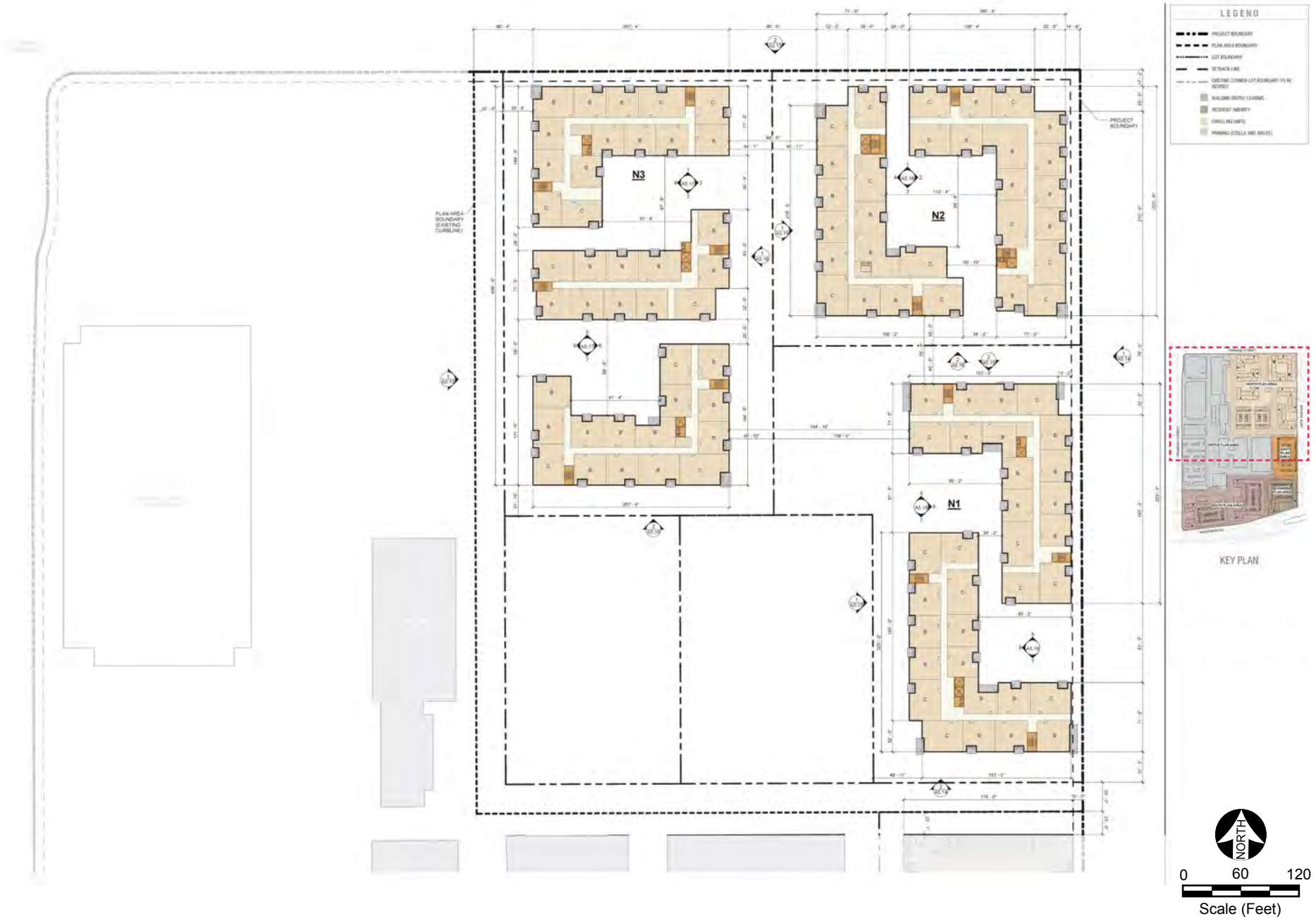


Figure II-35
North Plan Area Detail – Level 4

Source: TCA Architects, Inc., 2018.

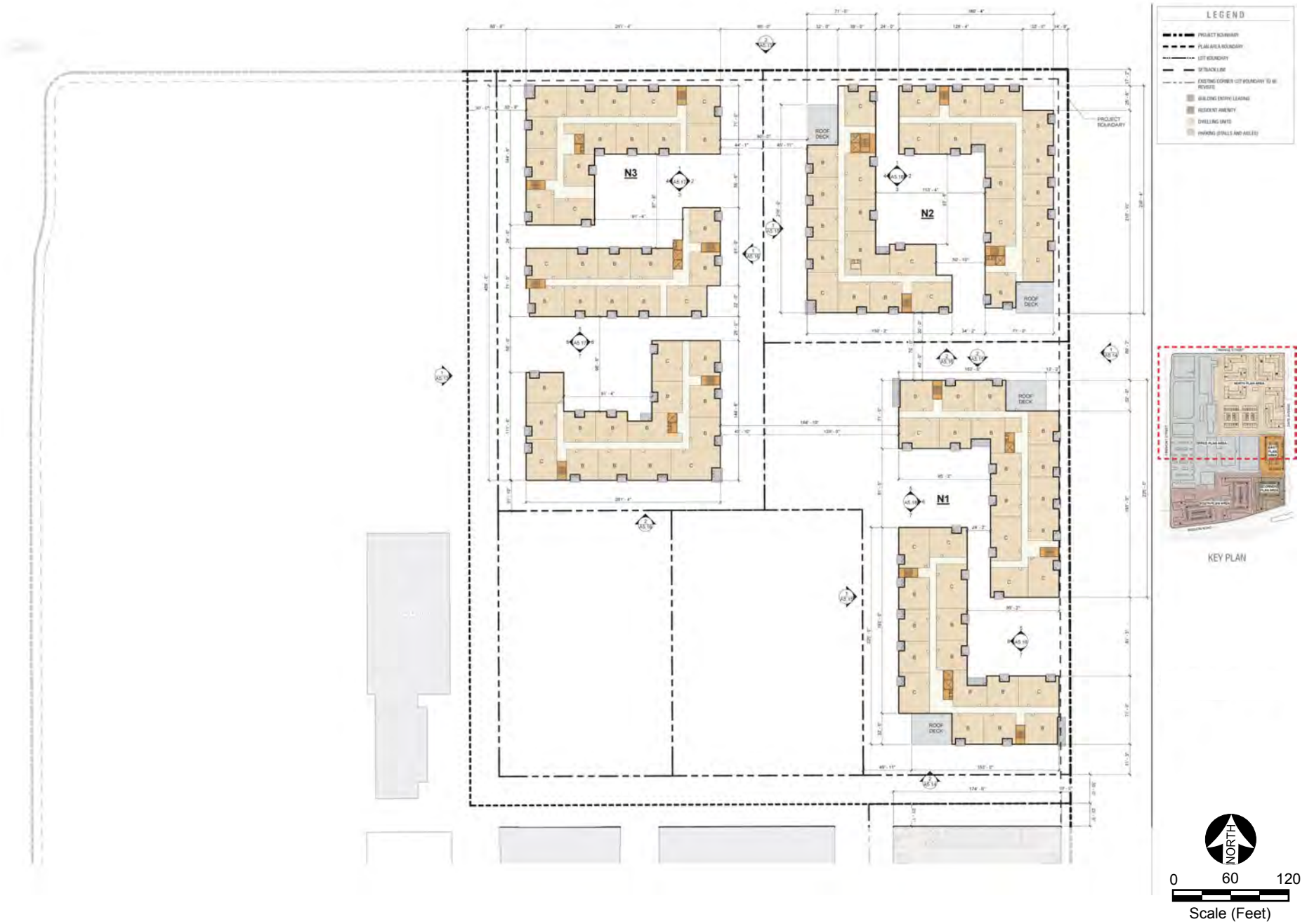


Figure II-36
North Plan Area Detail – Level 5

Source: TCA Architects, Inc., 2018.

Source: TCA Architects, Inc., 2018.

Figure II-37
North Plan Area Detail – Roof

North

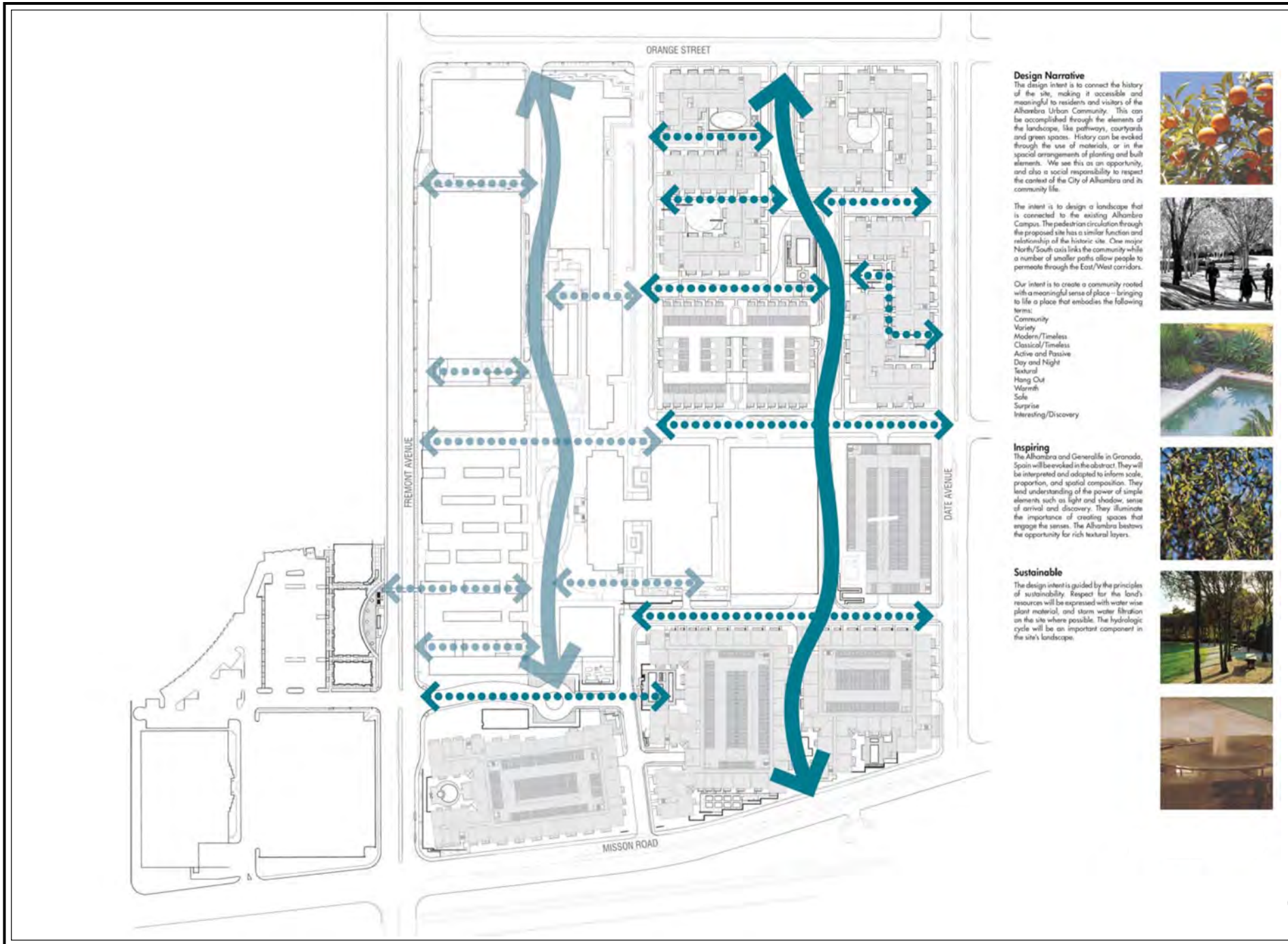
South

Source: TCA Architects, Inc., 2017.

Figure II-38
Site Imagery

Source: TCA Architects, Inc., 2017.

Figure II-39
Landscaping Overview and Tree Palette



Source: TCA Architects, Inc., 2018.

Figure II-40
Landscaping Plan – North Portion

Figure II-41
Landscaping Plan – South Portion

Source: TCA Architects, Inc., 2018.

c) Project Design

The proposed Project is intended to build upon the framework of the original CF Braun engineering facility located on the Project Site (for more detail, see **Section IV.D, Cultural Resources**, of the Draft EIR) to develop a new urban community. Within a largely industrial and commercial zone, the Project envisions an urban neighborhood; a place that combines residential living with a rich network of landscape spaces. The best design features of the original campus landscape (mature trees, rational circulation, elegant communal space, a network of courtyards) would be maintained, with these elements expanded throughout the new development being proposed for the remainder of the Project Site. A Project objective is to utilize planning, architecture, and landscaping to make the entirety of the Project Site and its discrete land uses (residential, office, health club, parking) merge seamlessly into a destination within the City.

The design of the Project pays close attention to the existing historic and contemporary building scale, massing, and style currently present while, at the same time encouraging innovative architectural design that expresses the campus identity. The design principles illustrated in Figures II-8, II-9, II-11, II-19, II-30, II-31, II-38, and II-39 depict the approach chosen for creating this proposed urban community.

The design of the Project would accommodate active uses along street frontages to avoid blank walls, visible parking, and visible “back of house” uses. Residential units and common areas with transparent windows are strongly encouraged while parking would not be visible from off-site locations.

d) Project Massing

Within the Office Plan Area, the existing seven-story, 91-foot tall office building in the center of the Project Site (Building A9) would remain, as would the existing six-story, 86-foot tall office building adjacent to it (Building A9 East). All of the other buildings, including all of the proposed new construction, would be lower than the code allowed 75 feet in height. The new five-story residential buildings in the North Plan Area would be a maximum of 60 feet in height above street grade, while the new five-story residential buildings in the Corner Plan Area would be a maximum of 62 feet in height above street grade. The new six-story residential buildings in the South Plan Area would be a maximum of nearly 67 feet in height above street grade, while the new five-level parking structure in the East Plan Area would be approximately 40 feet in height above street grade.

e) Vehicular and Pedestrian Access and Circulation

Vehicular access to the Proposed Project would be achieved via multiple existing and new entrances as illustrated on Figure II-6. The existing entrance from Fremont Avenue would be retained and would lead to a two-way private drive providing access to the Office and South Plan Areas. Two of the three existing entrances from Orange Street would also be retained, with the western entrance leading to parking areas for the existing office buildings to remain in the Office Plan Area, the center driveway leading to a modified two-way private drive providing access to the Office and North Plan Areas, and the eastern-most driveway being removed. A third, new entrance from Orange Street would be constructed farther east and would connect to a proposed two-way private drive within the North Plan Area. The existing mid-block entrance from Date Avenue would be retained and would lead to a two-way private drive, connecting to each of the private drives from the Orange Street frontage, providing access to the North, Office, and East Plan Areas. A new entrance from Date Avenue would be constructed farther south that would lead to a proposed two-way private drive providing access to the Corner, South, East, and Office Plan Areas and which would connect to the Fremont Avenue entrance across the Project Site. Lastly, a new entrance is proposed from Mission Road to provide access to the South, Office, and Corner Plan Areas. This entrance would connect to a new two-way private drive that would link to the Fremont Avenue and new Date Avenue entrances. Pedestrian access would be on all sides of the Project Site.

f) Parking

Table II-2 provides the amount of Alhambra Municipal Code (AMC)-required and proposed parking for the Project. Based on the current breakdown of uses on the Project Site and the amount of floor area that would remain after the proposed demolition of some existing buildings, the AMC-required parking for the remaining campus would be 4,206 spaces. However, the City approved a parking variance to allow shared parking and attended tandem parking for the existing office and commercial campus at the Project Site in 2004 (Variance V-04-19). This approved variance was based on a parking demand study that identified a peak parking demand of 2,867 parking spaces (3.03 spaces/1,000 sf) during the week and a total parking supply of 3,202 spaces (3.38 spaces/1,000 sf) when, at the time, 4,518 parking spaces were required by the AMC for the 942,284 square feet of office and commercial uses on the Project Site. This parking variance reduced the required parking from the AMC requirements. Utilizing the blended parking rate approved in the 2004 variance (3.38 spaces/1,000 sf of floor area) for the proposed Project's parking supply, the proposed existing office floor area to remain following Project development of 902,201 square feet would require a supply of 3,049 parking spaces.

A Shared Parking Analysis (included as **Appendix B** of the Draft EIR) has been prepared for the Project Site, which demonstrates that the maximum parking demand for the existing uses to remain in the Office Plan Area is 2,213 spaces during weekdays and 788 spaces on weekends. Thus, even though the AMC would require 4,206 spaces based on the proposed total of 902,201 square feet of office space, only 2,213 spaces would be needed to meet the actual parking demands of the tenants and guests at the Project Site. The Project proposes to provide approximately 1,800 parking spaces within two existing parking structures and an existing surface lot. An additional 490-space parking structure is proposed to be constructed in the East Plan Area to primarily serve the parking needs of the Office Plan Area. With the construction of this parking garage, there would be 2,290 parking spaces provided for the exclusive use of the Office Plan Area, which exceeds the maximum daily parking demand of 2,213 spaces for the amount of office space that is proposed to remain on-site under the Project.

The proposed residential component of the Project would require a total of 2,387 resident and guest parking spaces per the AMC. The Project Applicant is also requesting a variance to reduce the required amount of residential parking in the South and Corner Plan Areas. The Shared Parking Analysis (see **Appendix B** of the Draft EIR) recommends the use of parking rates for the apartment buildings in the South and Corner Plan Areas based on the Urban Land Institute's (ULI) residential parking generation rates (1 space per unit for studios, 1.5 spaces per unit for 1-bedroom units, 1.75 spaces per unit for 2-bedroom units, and 2 spaces per unit for 3-bedroom units). These rates are more in line with the current demands for residential parking than the City's AMC-required parking of two spaces per unit irrespective of unit size. Based on the ULI parking generation rates, 922 parking spaces are proposed in the South and Corner Plan Areas instead of the 1,252 spaces that would be required by the AMC. Each of the residential Plan Areas would be self-sufficient for parking. A total of 2,057 parking spaces would be provided for the residential uses proposed as part of the Project. Pursuant to Section 23.68 of the AMC, a Variance for shared parking and reduced residential parking is required for the Office component of the proposed Project to allow the shared parking and to allow for the reduction in the number of residential parking spaces required.

Table II-2
Project Vehicle Parking

Use	Plan Area Served (number of spaces)					Total
	Office	North	East	South	Corner	
Number of Spaces Required by Variance V-04-19[1]						
Office	3,202	N/A	N/A	N/A	N/A	3,202
Total						**3,202**
Number of Spaces Required by Alhambra Municipal Code for Proposed Project[2]						
Residential	N/A	1,135	N/A	915	337	2,387
Office	4,206	N/A	N/A	N/A	N/A	4,206
Total						**6,593**
Number of Spaces Recommended by Shared Parking Analysis for Proposed Project[2]						
Residential	N/A	1,135	N/A	663	259	2,057
Office	2,213	N/A	N/A	N/A	N/A	2,213
Total						**4,270**
Number of Spaces Provided for Proposed Project[2]						
Residential	0	1,135	0	663	259	2,057
Office	1,800	0	490	0	0	2,290
Total						**4,347**

[1] Variance V-04-19 included 946,284 square feet of floor area and no residential units.
[2] The Proposed Project includes 902,201 square feet in the Office area and 1,061 new residential units.

Source: TCA Architects, Inc., April 2018

g) Open Space

Table II-3 provides the amount of required and provided open space to be included in the proposed Project. The proposed Project exceeds the net amount of required open space. Each proposed residential unit is required to have 425 square feet of open space, at least 30 percent of which must be located in the primary amenity area. The proposed residential units would require a total of 450,925 square feet of open space, while the office space on the Project Site would not require any open space per the AMC. The Project would provide a total of 716,434 square feet of open space, 450,509 square feet of which would be within the primary amenity area for each Plan Area/lot.

Table II-3
Project Open Space

Use	Open Space in Plan Area (square feet)					Total
	Office	North	East	South	Corner	
Residential: Required	0	219,300	0	166,600	65,025	450,925
Residential: Provided		*236,485*		*132,069*	*40,777*	*409,331*
Office: Required	0	0	0	0	0	0
Office: Provided	*276,040*	*0*	*31,063*	*0*	*0*	*307,103*
TOTAL Provided						*716,434*

Source: TCA Architects, Inc., April 2018

h) Landscaping

All of the 303 existing trees within the Office Plan Area would be retained. The remaining portions of the Project Site contain 165 trees. All of these trees would be removed and replaced during Project construction (for additional detail, see **Section IV.A, Impacts Found to be Less Than Significant**, of the Draft EIR). The Project proposes 864 new trees on the Project Site. Preliminary landscape plans and examples are illustrated on Figures II-39 through II-41. The intent of the landscape design is to provide lush, tree-shaded pedestrian corridors, paseos, and courtyards throughout the proposed residential community.

i) Signage and Lighting

Project signage would be integrated with the architecture of the buildings. The Project would feature coherent signage that would be consistent in shape, size, color, height, and lettering and complimentary to the buildings' architecture. Exterior Project and tenant signage would consist of wayfinding and tenant identification signs.

The Project would include low to moderate levels of interior and exterior lighting for security, parking, and architectural highlighting. Consistent with AMC lighting requirements, the Project's lighting would not produce sources of illumination that point towards adjacent buildings but would be directed downward to provide safe and adequate lighting levels for pedestrians. Additionally, compliance with City and state energy conservation measures currently in place would limit unnecessary interior illumination during evening and nighttime hours. Soft accent lighting used for signage and architectural highlighting would be directed to permit visibility of the highlighted elements but would not be so bright as to cause light spillover. All proposed outdoor lighting would be subject to applicable regulations contained within the AMC.

6. Project Phasing and Construction

Two different Project buildout scenarios are being considered and evaluated in the Draft EIR. Under Buildout Scenario 1, the Project would be developed as a single entity with completion projected for 2028. Under this scenario, demolition would occur for approximately 3 months and would require the demolition and removal of 104,242 square feet of existing uses. Grading/soil export and foundation preparation would occur for approximately 7 months and 120,000 cubic yards of soil export would be required. Building construction would occur for approximately 26 months and would include the construction of the proposed structures, connection of utilities, laying irrigation for landscaping, architectural coatings, paving, and landscaping the Project Site. Due to the eight-year buildout period, the 36 months of construction activities would not occur continuously but would be episodic across the entire buildout period.

Under Buildout Scenario 2, the Project would be phased with partial buildout of 516 condominium and townhouse units in the North Plan Area (Phase I) completed in 2024 and the remaining 545 apartment units in the South and Corner Plan Areas (Phase II) completed by 2028. Phase I involves the demolition of 42,576 square feet of existing uses, and the construction of 480 condominium and 36 townhouse units and 1,625 parking spaces, built by 2024. Under this phase, demolition would occur for approximately 1 month. Grading/soil export and foundation preparation would occur for approximately 3.5 months and 60,000 cubic yards of soil export would be required. Building construction would occur for approximately 13 months. Phase II would involve the demolition of 61,666 square feet of existing uses, and the construction of 545 apartment units and 922 parking spaces, built by 2028. Under this phase, demolition would occur for approximately 2 months. Grading/soil import and foundation preparation would occur for approximately 3.5 months and 60,000 cubic yards of soil export would be required. Building construction would occur for approximately 13 months. The estimated Project construction duration under each Buildout Scenario is shown in Table II-4.

As noted, approximately 120,000 cubic yards of earthen material is expected to be exported from the Project Site during construction work.[1] Demolition of approximately 104,242 square feet of existing structures on-site would also generate material requiring hauling from the Project Site. The proposed haul route for excavated/demolished materials within the City would consist of Date Avenue to Mission Road to Fremont Avenue, and then either Fremont Avenue south to Interstate 10 or Valley Boulevard west to Interstate 710 (for additional detail, see **Section IV.P.3, Utilities and Service Systems – Solid Waste**, of the Draft EIR).

Table II-4
Project Buildout Scenario Construction Phasing and Schedules

Phase	Approximate Duration	Start	End
Buildout Scenario 1			
Full Site	36 months	2020	2028
Buildout Scenario 2			
Phase I	17.5 months	2020	2024
Phase II	18.5 months	2025	2028
Construction schedule, including start, end, and duration dates are estimates only. Phases I and II under Buildout Scenario 2 would overlap. *Estimates provided by the Project Applicant, April 2019.*			

[1] *Estimates provided by the Project Applicant, December 2017.*

7. Project Objectives

Section 15124(b) of the CEQA Guidelines states that the project description shall contain "a statement of the objectives sought by the proposed project." Section 15124(b) of the CEQA Guidelines further states, "the statement of objectives should include the underlying purposes of the project." The underlying purpose of the Project is to capitalize on a smart growth opportunity by intensifying a currently underutilized site with a mix of residential uses near office space, commercial land uses, and public transit lines. The objectives of the Project are as follows:

- Retain the existing office buildings within the Office Plan Area portion of the site.
- Contribute housing stock toward the City's Regional Housing Needs Assessment (RHNA) allocation.
- Contribute to the economic health of the City by developing residential uses that generate local tax revenues, provide new construction jobs, and generate residents who support local businesses.
- Improve the aesthetic quality of the site by removing older structures and parking lots and developing new, more attractive residential buildings across a lushly landscaped campus.
- Develop an economically feasible project featuring a high level of quality in architectural design and placemaking that can create an urban community that serves as a destination within the City.

8. Discretionary Actions and Approvals

The City of Alhambra is the Lead Agency for the Project. In order to construct the Project, the Project Applicant is requesting approval of the following actions from the City:

1. Pursuant to Alhambra Municipal Code (AMC) Chapter 23.62, Residential Planned Development Permit;
2. Pursuant to AMC Chapter 23.66, Conditional Use Permit for Urban Residential development in the PO Zone;
3. Pursuant to AMC Chapter 22.48, Vesting Tentative Tract Map for a 10-lot subdivision for condominium purposes;
4. Pursuant to AMC Chapter 23.68, Variance to permit shared parking and for reduced office and residential parking;
5. Pursuant to AMC Chapter 23.64, Design Review;

6. Pursuant to AMC Chapter 23.71, Development Agreement with a term of 20 years; and
7. Any other entitlements and permits necessary to construct the Project.

9. Intended Use of the EIR

This Draft EIR serves as the environmental document for consideration of the City's discretionary actions associated with development of the Project. This Draft EIR is also intended to cover all federal, state, regional and/or local government discretionary or ministerial permits or approvals that may be required to develop the Project, whether or not they are explicitly listed above. State and regional agencies and City departments and commissions that may have jurisdiction over the Project include, but are not limited to:

- Alhambra Fire Department;
- Alhambra Police Department;
- Los Angeles Regional Water Quality Control Board;
- South Coast Air Quality Management District;
- Alhambra Public Works Department; and
- Alhambra Utilities Department.

III. Environmental Setting

1. Overview of Environmental Setting

a) Regional Setting

The Project Site is located within the western portion of the City of Alhambra (the City), approximately 1.0 mile southwest of the Alhambra Civic Center. The Project Site is approximately 0.7 mile east of the City of Los Angeles boundary at Lowell Avenue and approximately 21 miles east of the Pacific Ocean. The Project Site is located at the western end of the San Gabriel Valley, approximately 7 miles south of the southern edge of the San Gabriel Mountains. See Figure II-1 for the Project Site's location within the context of the City. See Figure II-2 for an aerial perspective of the Project Site and surrounding areas.

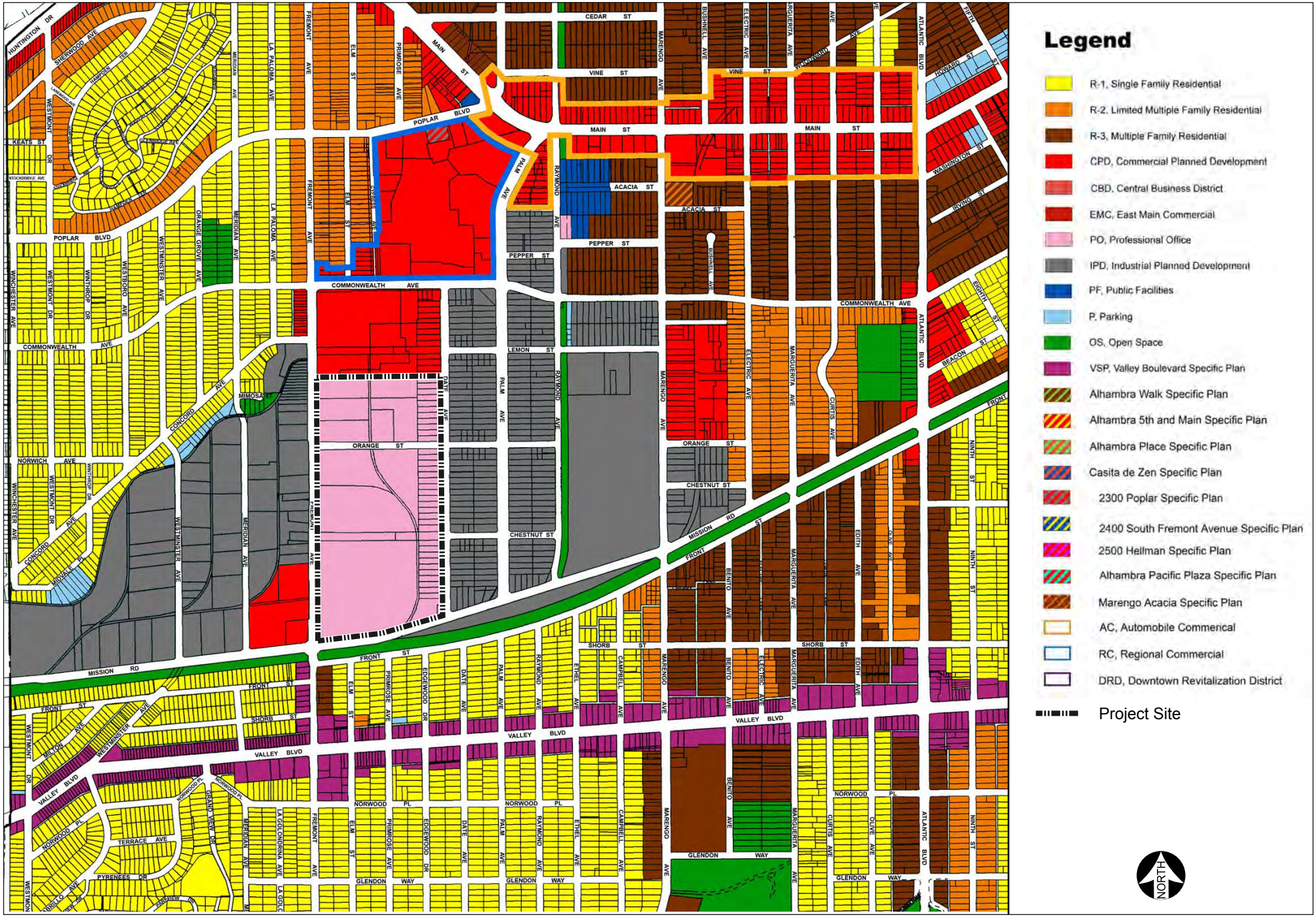
Regional access to the Project Site vicinity is provided by the Long Beach Freeway (Interstate 710) located approximately 0.6 mile southwest of the Project Site and the San Bernardino Freeway (Interstate 10) located approximately 0.8 mile south of the Project Site.

b) Local Setting

The Project Site is comprised of the following addresses: 1000 South Fremont Avenue; 2215 West Mission Road; and 629, 635, 701, 825, and 1003 South Date Avenue in the City of Alhambra, California 91803. The Project Site consists of the entire block bounded by Fremont Avenue on the west, Mission Road on the south, Date Avenue on the east, and Orange Street on the north. The total area that comprises the Project Site is approximately 1,671,725 square feet (or 38.38 acres). Local access to the Project Site is provided by Mission Road, Fremont Avenue, Date Avenue, and Orange Street. The Project Site is fully developed with office, retail, warehouse, storage, utility substation, and parking (both structure and surface lot) uses (see **Section II, Project Description**, of the Draft EIR for a detailed description of existing uses at the Project Site).

The Project Site's assessor parcel number (APN), zoning, land use designation, and lot size for each of the component parcels comprising the Project Site is listed in Table III-1. The Project Site is zoned PO (Professional Office) and is designated for Office Professional uses in the City's adopted General Plan. An Urban Residential overlay

zone also applies to the entire Project Site. The zoning and land use designations of the Project Site are shown in Figures III-1 and III-2, respectively.



Source: City of Alhambra, 2018.

Figure III-1
Project Site Zoning

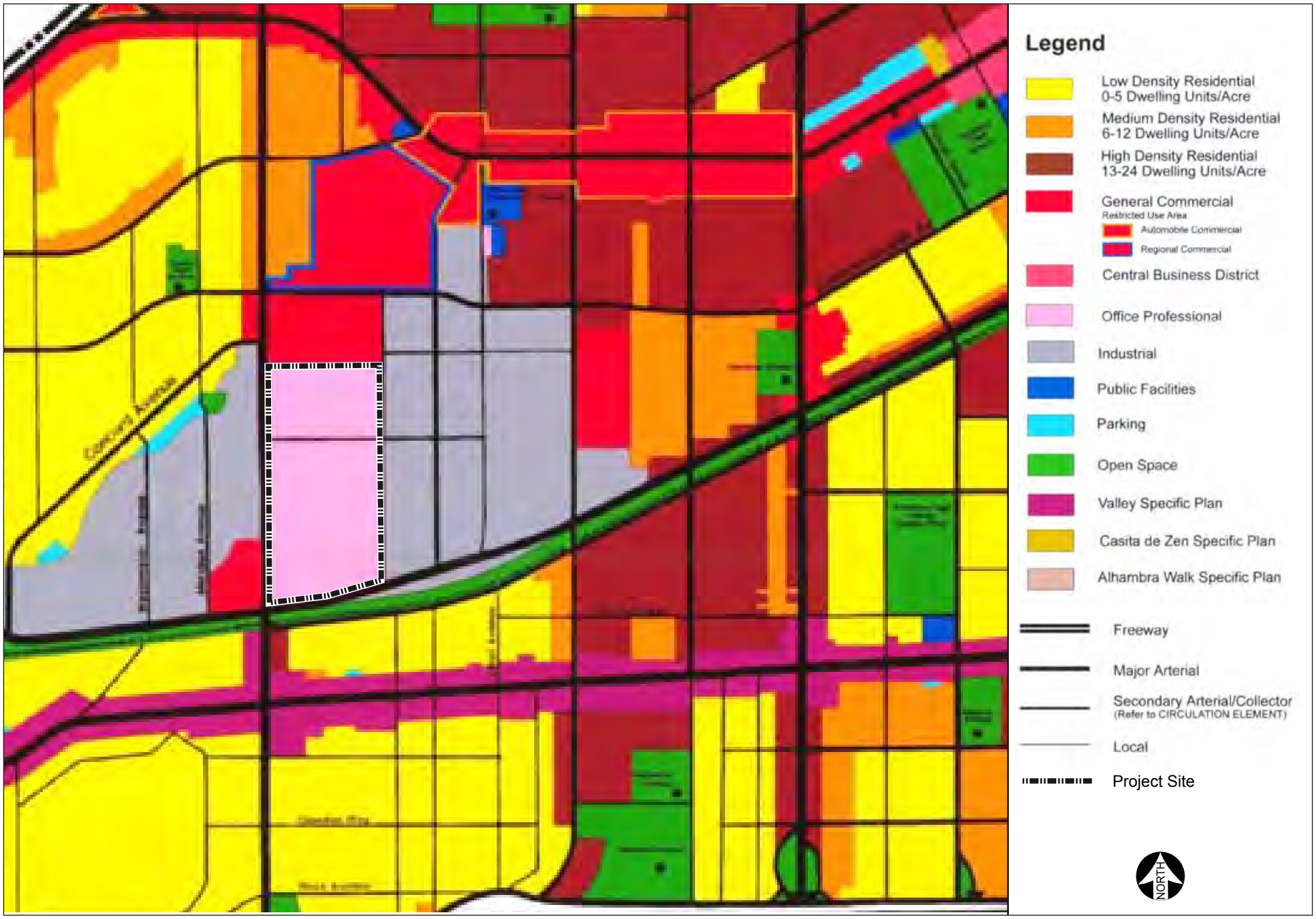


Figure III-2
Project Site Land Use Designation

Source: City of Alhambra, 2018.

Table III-1
Project Site Parcel Information

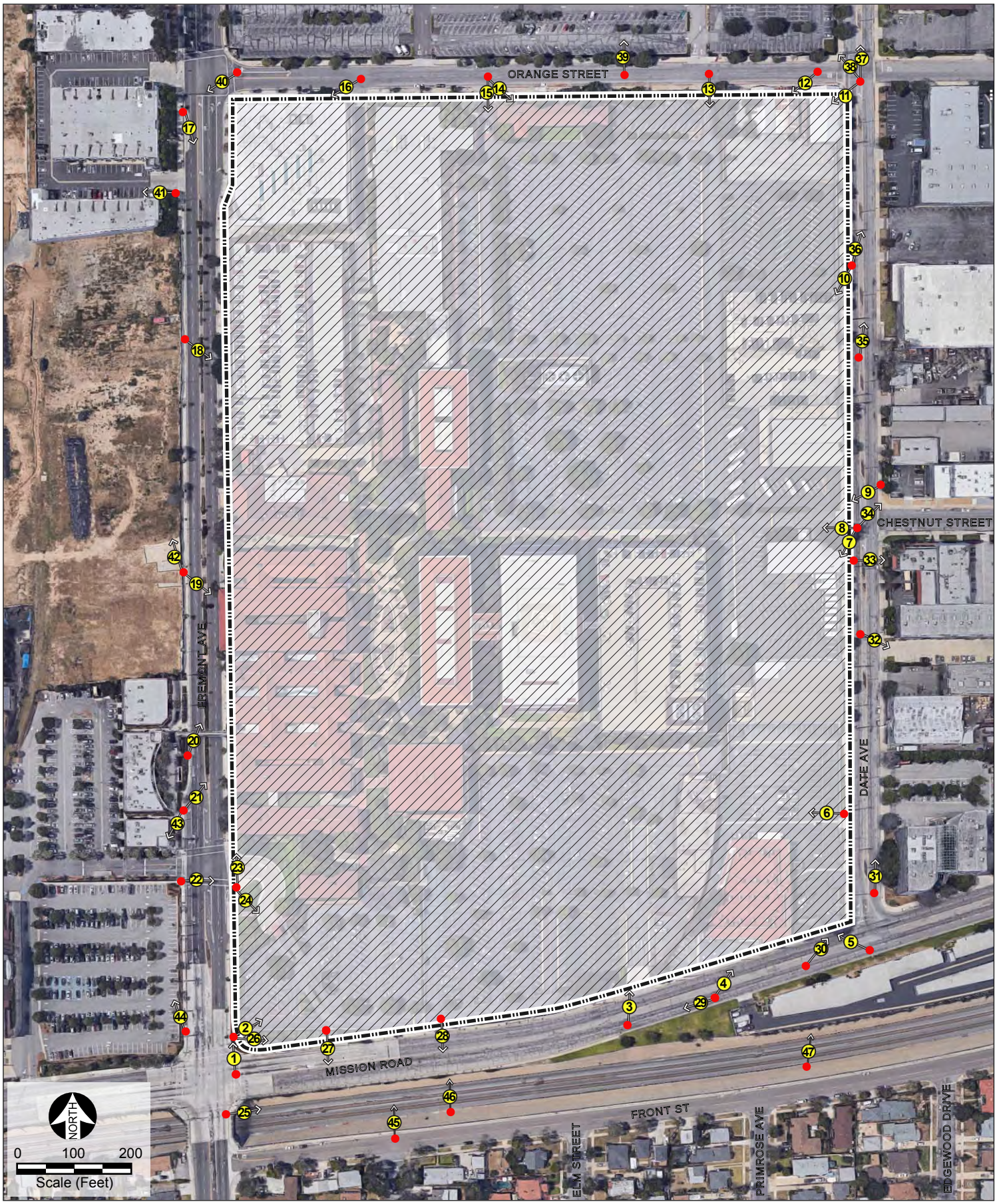
Address	APN	Zone	General Plan Land Use	Size (sf)
825 S. Date Avenue	5342-001-009	PO with Urban Residential overlay	Office Professional	19,984
1003 S. Date Avenue	5342-001-010			19,984
2215 W. Mission Road	5342-001-019			48,183
629 S. Date Avenue, Lot 8	5342-001-006			10,016
635 S. Date Avenue, Lot 9	5342-001-007			10.016
701 S. Date Avenue, Lot 10 & 11	5342-001-008			20,031
1000 S. Fremont Avenue	5342-001-021			1,043,571
Orange/Date #22, Lot 1-7	5342-001-022			119,378
Date Avenue Lot 12, 13, 14, alley, 1 & ½ of Lot 2	5342-001-023			67,601
Date Avenue ½ of Lot 2 & Lot 3-6	5342-001-024			49,180
Orange Street #25 between Lot 8 & 9	5342-001-025			27,750
Orange Street #26 between Lot 8, 9 & 10	5342-001-026			120,970
Orange Street #27 by Lot 10 & east of Lot 9	5342-001-027			15,038
			Total	**1,675,498**

Source: The Ratkovich Company; Los Angeles County Assessor Records

A photo location map is provided in Figure III-3 and existing views of the Project Site are shown in Figures III-4 through III-9. For purposes of the proposed Project, the Project Site is being divided into five plan areas: Office, North, East, South, and Corner. The existing uses within each of these plan areas are described in **Section II, Project Description**, of the Draft EIR.

c) Public Transit

The Alhambra Community Transit (ACT) shuttle bus provides bus service to the Project Site. Fremont Avenue carries both the Green and Blue Lines, providing service to most portions of the City, including the downtown area and Civic Center. The Los Angeles



Legend

Project Site

Source: Google Maps., 2018.

Figure III-3
Photo Location Map

View 1: View looking north on the intersection of Fremont Avenue and Mission Road of the southwestern portion of the Project Site .

View 2: View looking northeast on Mission Road of the southern portion on the Project Site.

View 3: View looking north on Mission Road of the existing structures on the southern portion of the Project Site.

View 4: View looking northeast on Mission Road of the existing structure on the southern portion of the Project Site.

Figure III-4
Views of the Project Site 1-4

Source: CAJA Environmental Services, LLC, 2018.

View 5: View looking northwest on the intersection of Mission Road and Date Avenue of the existing structures on the southeastern portion of the Project Site.

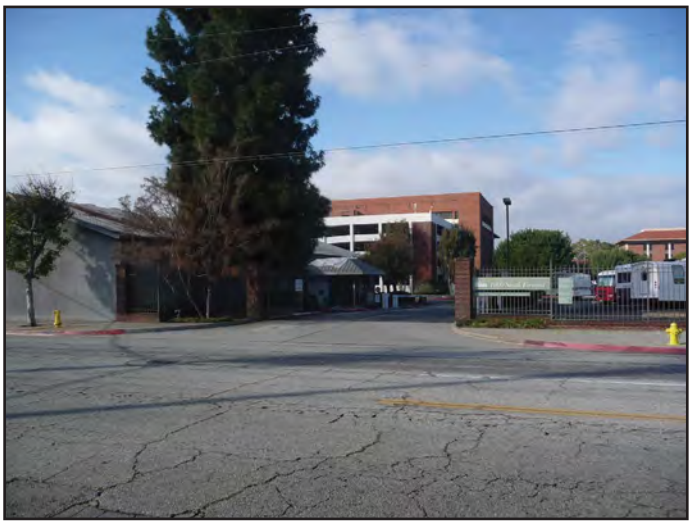
View 6: View looking west on Date Avenue of existing parking lot and structures on the southeastern portion of the Project Site.

View 7: View looking southwest on Date Avenue of the existing structures on the eastern portion of the Project Site.

View 8: View looking west on Date Avenue of vehicle entryway and existing structures on the eastern portion of the Project Site.

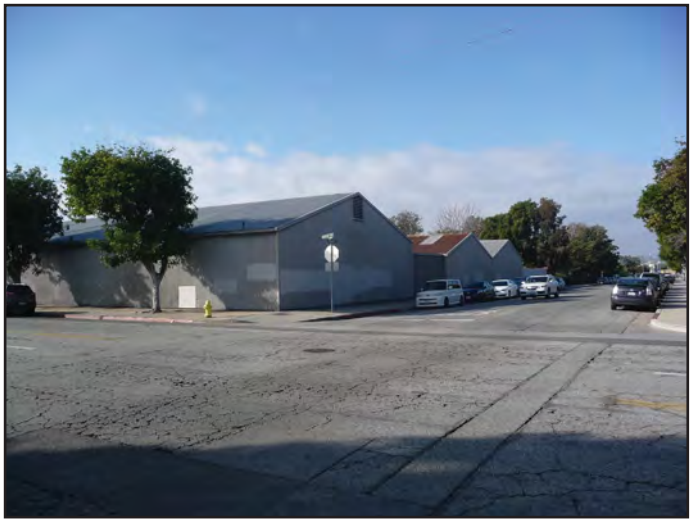
Figure III-5
Views of the Project Site 5-8

Source: CAJA Environmental Services, LLC, 2018.



View 9: View looking southwest on Date Avenue of vehicle entry and existing structures on the eastern portion of the Project Site.

View 10: View looking southwest on Date Avenue of existing parking lot and structures on the northeastern portion of the Project Site.



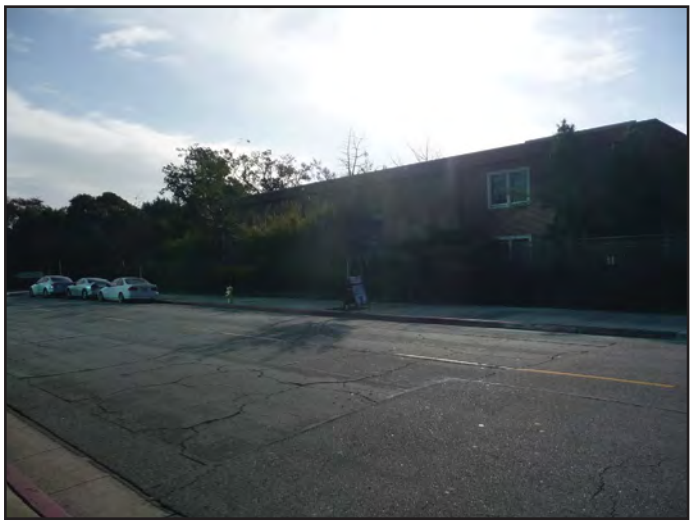
View 11: View looking southwest on the intersection of Date Avenue and Orange Avenue of the existing structures on the northeastern portion of the Project Site.

View 12: View looking southwest on Orange Avenue of existing structures on the northeastern portion of the Project Site.

Figure III-6
Views of the Project Site 9-12

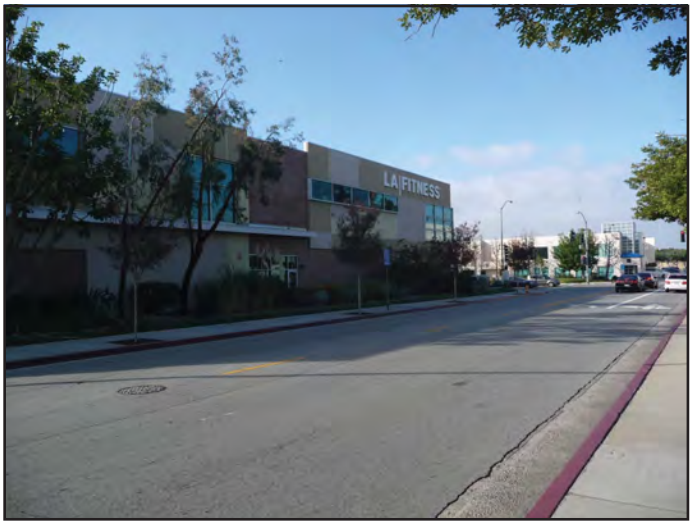
Source: CAJA Environmental Services, LLC, 2018.

View 13: View looking south on Orange Avenue of vehicle entryway and existing structures on the northern portion of the Project Site.



View 14: View looking southeast on Orange Avenue of existing structures on the northern portion of the Project Site.

View 15: View looking south on Orange Avenue of vehicle entryway and existing structures on the northern portion of the Project Site.



View 16: View looking southwest on Orange Avenue of existing structure adjacent to the northwestern portion of the Project Site.

Figure III-7
Views of the Project Site 13-16

Source: CAJA Environmental Services, LLC, 2018.

View 17: View looking southeast on Fremont Avenue of existing structure adjacent to the northwestern portion of the Project Site.

View 18: View looking southeast on Fremont Avenue of existing parking lot adjacent to the northwestern portion of the Project Site.

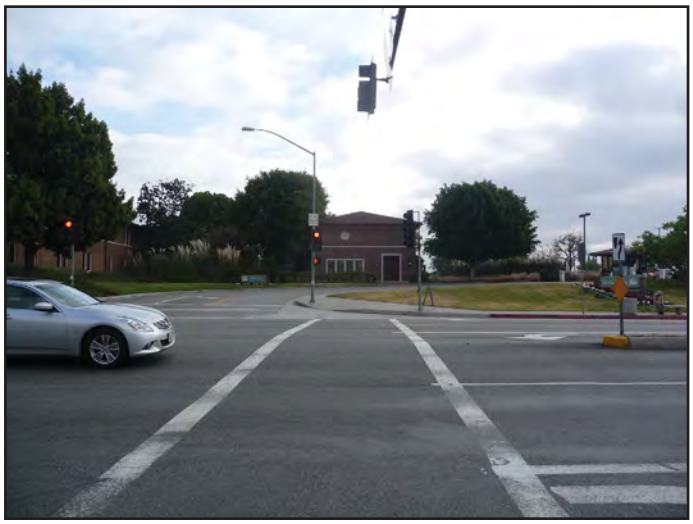
View 19: View looking southeast on Fremont Avenue of existing structure adjacent to the southwestern portion of the Project Site.

View 20: View looking northeast on Fremont Avenue of existing structure and pedestrian bridge adjacent to the southwestern portion of the Project Site.

Figure III-8
Views of the Project Site 17-20

Source: CAJA Environmental Services, LLC, 2018.

View 21: View looking northeast on Fremont Avenue of existing structure and pedestrian bridge adjacent to the southwestern portion of the Project Site.



View 22: View looking east on Fremont Avenue of vehicle entryway and existing structures adjacent to the southwestern portion of the Project Site.

View 23: View looking north on the intersection of Fremont Avenue and 1000 Fremont Avenue of vehicle entryway and existing structures adjacent to the southwestern portion of the Project Site.

View 24: View looking southeast on Fremont Avenue of vehicle entryway and parking lot adjacent to the southwestern portion of the Project Site.

Figure III-9
Views of the Project Site 21-24

Source: CAJA Environmental Services, LLC, 2018.

County Metropolitan Transportation Authority (Metro) provides bus service to the Project Site. Fremont Avenue carries Metro Express bus line 485, connecting Union Station in downtown Los Angeles with Altadena, and Metro Limited bus line 258, connecting downtown Alhambra with Monterey Park, East Los Angeles, Commerce, Bell Gardens, South Gate, and Paramount. Both Metro lines stop at Fremont/Mission and Fremont/Orange, adjacent to the Project Site. Additionally, Metro Limited bus line 258 provides a direct connection to the Metro Gold Line Lake Station in Pasadena and, via transfers, to other Gold Line stations in South Pasadena and Pasadena.

The Project Site is located approximately 1.8-miles northeast of the Southern California Regional Rail Authority's Cal State L.A. Metrolink commuter rail station on its San Bernardino Line, connecting downtown Los Angeles to San Bernardino. Separate shuttle services also provide transportation from the Project Site to both Cal State L.A. and the University of Southern California.

The Project Site is not located within a "transit priority area" as defined in California Public Resources Code (PRC) Section 21099 because it is not located within 0.5 mile of the intersection of two bus routes having a frequency interval of 15 minutes or less during peak-commuting hours.

d) Surrounding Land Uses

A photo location map is provided in Figure III-3 and views of the existing land uses surrounding the Project Site are provided in Figures III-10 through III-15.

(1) West

To the west across Fremont Avenue, from north to south, are (i) a two-story business park/office building and associated surface parking; (ii) a one-story towing service building and attached parking lot; (iii) a vacant parcel; (iv) a one-story retail/commercial complex featuring fast-food restaurants and a café (with a pedestrian bridge over Fremont Avenue connecting to the Project Site); and (v) a Kohl's department store with an associated surface parking lot. The first three uses are on properties zoned IPD (Industrial Planned Development), while the one-story retail center and Kohl's store are on a property zoned CPD (Commercial Planned Development).

(2) East

To the east across Date Avenue, from north to south, are (i) a one-story warehouse/shipping and receiving center with associated surface parking; (ii) a one-story Carpet King warehouse/office with associated surface parking; (iii) a one-story office/warehouse building; (iv) a one-story office complex with carport; (v) a two-story printing/copying center with associated surface parking (on the north side of Chestnut

View 25: View looking east on Fremont Avenue at Railroad tracks across southern portion from the Project Site.

View 26: View looking southeast on Mission Road of existing housing and Railroad tracks across southern portion from the Project Site.

View 27: View looking south on Mission Road of existing housing and Railroad tracks across southern portion from the Project Site.

View 28: View looking south on Mission Road of existing housing and Railroad tracks across southern portion from the Project Site.

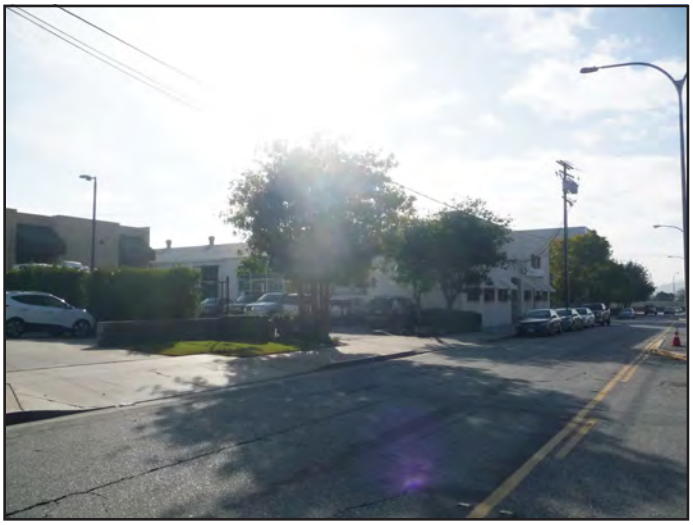
Figure III-10
Views of the Surrounding Area 25-28

Source: CAJA Environmental Services, LLC, 2018.

View 29: View looking southwest on Mission Road of existing housing and Railroad tracks across southern portion from the Project Site.

View 30: View looking northeast on Mission Avenue of existing office building adjacent to the southeastern portion of the Project Site.

View 31: View looking north on Date Street of existing office building adjacent to the southeastern portion of the Project Site.



View 32: View looking southeast on Date Street of existing commercial buildings adjacent to the southeastern portion of the Project Site.

Figure III-11
Views of the Surrounding Area 29-32

Source: CAJA Environmental Services, LLC, 2018.

View 33: View looking east on the corner of Date Avenue and Chestnut Street of existing office building adjacent to the eastern portion of the Project Site.

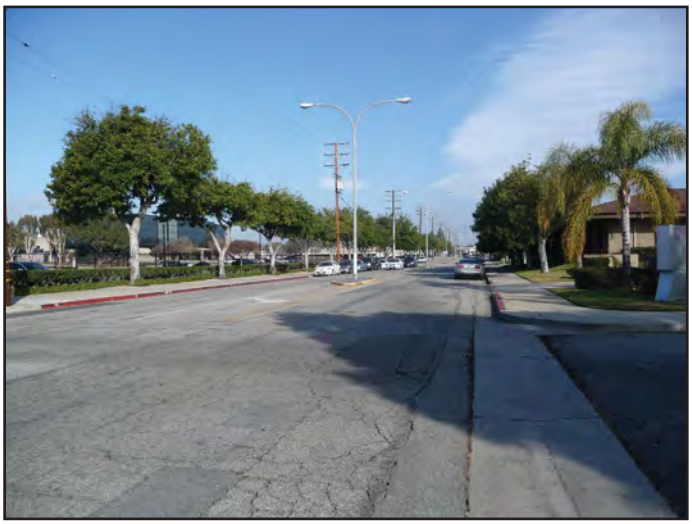
View 34: View looking northeast on the corner of Date Avenue and Chestnut Street of existing office buildings adjacent to the eastern portion of the Project Site.

View 35: View looking northeast on Date Avenue of existing commercial buildings adjacent to the eastern portion of the Project Site.

View 36 View looking northeast on Date Avenue of existing commercial buildings adjacent to the northeastern portion of the Project Site.

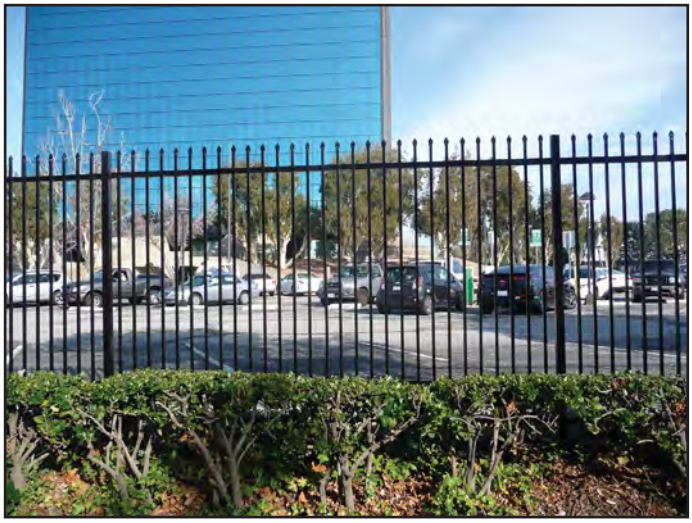
Figure III-12
Views of the Surrounding Area 33-36

Source: CAJA Environmental Services, LLC, 2018.

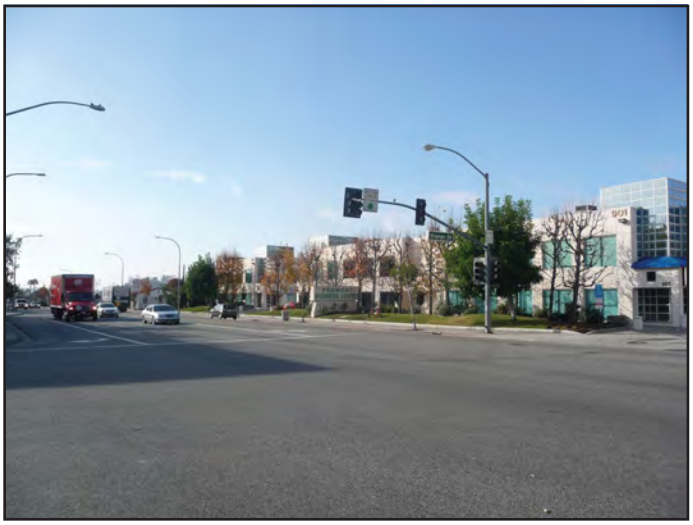


View 37: View looking north on the corner of Date Avenue and Orange Street of existing office buildings and single-family homes adjacent to the northeastern portion of the Project Site.

View 38: View looking northwest on the corner of Date Avenue and Orange Street of existing office buildings adjacent to the northeastern portion of the Project Site.



View 39: View looking north on Orange Street of existing office building adjacent to the northern portion of the Project Site.



View 40: View looking southwest on the corner of Orange Street and Fremont Avenue of existing office buildings adjacent to the northwestern portion of the Project Site.

Figure III-13
Views of the Surrounding Area 37-40

Source: CAJA Environmental Services, LLC, 2018.

View 41: View looking west on Fremont Avenue of existing office buildings adjacent to the northwestern portion of the Project Site.

View 42: View looking northwest on Fremont Avenue of vacant lot and commercial buildings adjacent to the northern portion of the Project Site.

View 43: View looking southwest on Fremont Avenue of existing mixed-use buildings adjacent to the southwestern portion of the Project Site.

View 44: View looking northwest on Fremont Avenue of existing shopping center and mixed-use buildings adjacent to the southwestern portion of the Project Site.

Figure III-14
Views of the Surrounding Area 41-44

Source: CAJA Environmental Services, LLC, 2018.

View 45: View looking north on Front Street of the existing structures on the southern portion of the Project Site.

View 46: View looking north on Front Street of the existing structures on the southern portion of the Project Site.

View 47: View looking northeast on Front Street of the existing structures on the southern portion of the Project Site.

Figure III-15
Views of the Surrounding Area 45-47

Source: CAJA Environmental Services, LLC, 2018.

Street); (vi) a two-story office building (on the south side of Chestnut Street); (vii) a one-story concrete office/warehouse complex with associated surface parking; (viii) a two-story stucco office building with associated surface parking; and (ix) a three-story concrete office development with associated surface parking. All of these properties are zoned IPD (Industrial Planned Development).

(3) North

To the north across Orange Street, from west to east, are (i) asphalt surface parking lots and (ii) the approximately 25-story Los Angeles County Public Works office building and associated surface parking. These properties are zoned PO (Professional Office).

(4) South

To the south across Mission Road are (i) the below-grade, dual Union Pacific Railroad tracks and (ii) a one-story storage and moving supplies business, located between Mission Road and the railroad corridor across from the Project Site's southeastern frontage. The rail corridor is zoned OS (Open Space), while the other property is zoned IPD (Industrial Planned Development).

The nearest existing residential uses to the Project Site are the single-family homes to the south along Front Street, across the railroad tracks from Mission Road, each approximately 200-feet away from the edge of the Project Site.

e) Sensitive Receptors

Sensitive receptors include such land uses as residences, schools, childcare centers, hospitals, and parks. In addition, noise-sensitive uses include sound recording spaces, such as studios and production facilities. The nearest sensitive receptors to the Project Site are the existing single-family homes to the south along Front Street, across the railroad tracks from Mission Road, each approximately 200-feet away from the edge of the Project Site.

f) Other Development Projects

Section 15130 of the State CEQA Guidelines requires that an EIR consider the significant environmental effects of a proposed project as well as the project's "cumulative impacts." CEQA defines a cumulative impact as an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts (State CEQA Guidelines Section 15355). As stated in State CEQA Guidelines Section 15130(a)(1), the cumulative impacts discussion in an EIR need not discuss impacts that do not result in part from the project evaluated in the EIR. Cumulative impacts may be analyzed by considering a list of past, present, and

probable future projects producing related or cumulative impacts (State CEQA Guidelines Section 15130(b)(1)(A)).

All projects that are proposed (i.e., with pending applications), recently approved, under construction, or reasonably foreseeable that could contribute to a cumulative impact on the local environment when considered in conjunction with the proposed project are included in an EIR. These projects can include, if necessary, projects outside of the control of the lead agency. If a concise list of such projects is not available, cumulative impacts may be analyzed using the regional or area-wide growth projections contained in an adopted or certified general plan or related planning document. The analysis includes both specific cumulative development projects and cumulative impacts (which consider ambient growth per the Project Traffic Impact Analysis).

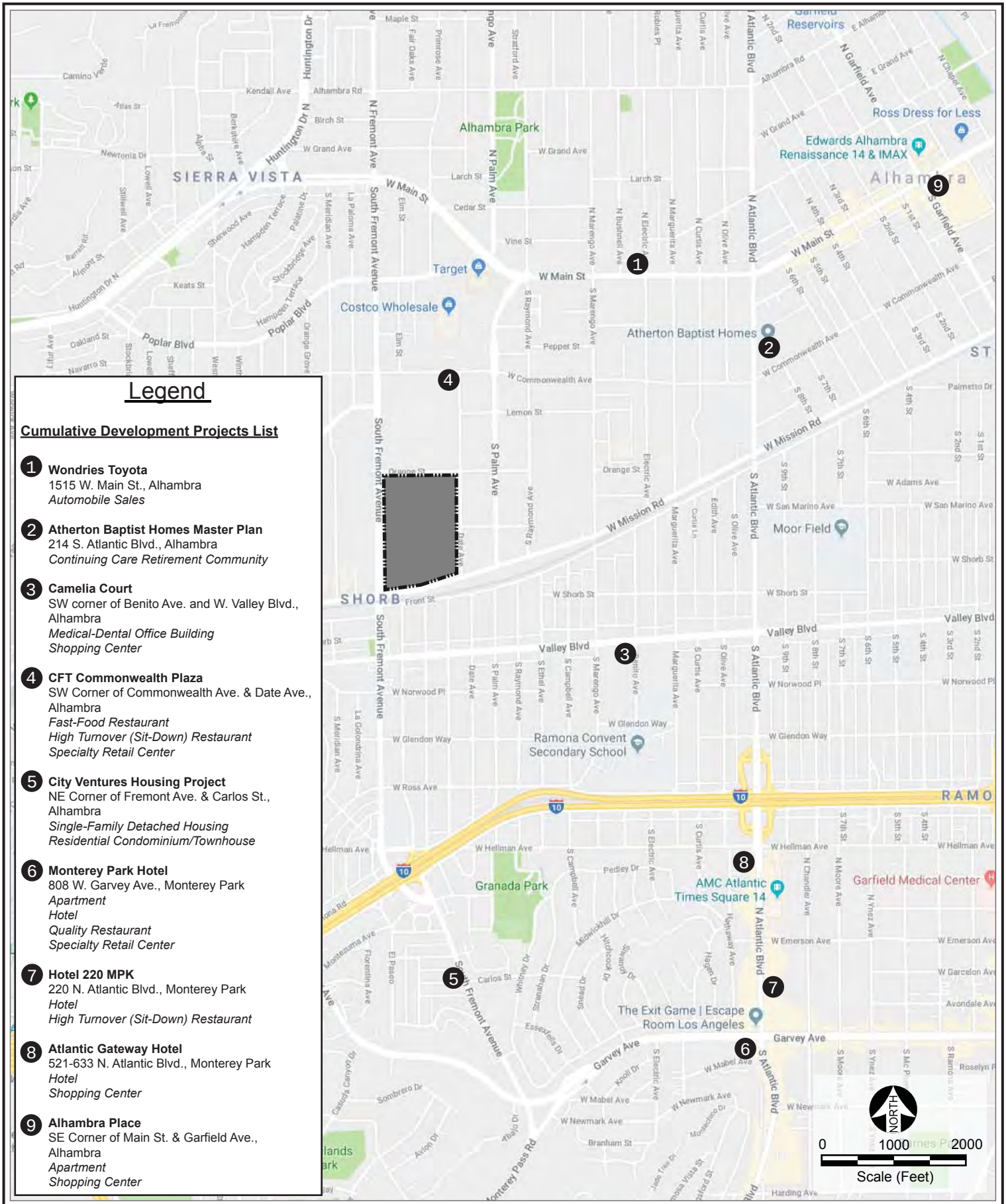
In the Draft EIR, cumulative impact analyses are provided for each environmental issue discussed in **Section IV, Environmental Impact Analysis**, and can be found in each respective subsection (e.g., Air Quality, Transportation, etc.) under the heading "Cumulative Impacts".

The list of other development projects (referred to throughout the Draft EIR as "cumulative projects") is based on information provided by the City of Alhambra as of the date of the Project's Notice of Preparation, October 10, 2017. Though the buildout years for these cumulative projects are uncertain and may be well beyond the projected buildout year of the proposed Project, and notwithstanding that some may never be approved or developed, all were considered as part of this Draft EIR and conservatively assumed to be completed by the Project buildout year. Table III-2 lists the cumulative projects that were considered in each cumulative impact analysis. The locations of the cumulative projects are depicted on Figure III-16.

Table III-2
Cumulative Development Projects List

#	Project Name	Address	Land Use	Size
1	Wondries Toyota	1515 W. Main St., Alhambra	Automobile Sales	45,985 sq. ft. of automobile sales
2	Atherton Baptist Homes Master Plan	214 S. Atlantic Blvd., Alhambra	Continuing Care Retirement Community	177 continuing care retirement units
3	Camelia Court	SW corner of Benito Ave. and W. Valley Blvd., Alhambra	Medical-Dental Office Building Shopping Center	126 condo/townhome units 18,000 sq. ft. medical office 12,490 sq. ft. shopping center
4	CFT Commonwealth Plaza	SW Corner of Commonwealth Ave. & Date Ave., Alhambra	Fast-Food Restaurant High Turnover (Sit-Down) Restaurant Specialty Retail Center	3,981 sq. ft. fast-food restaurant 10,265 sq. ft. sit-down restaurant 7,423 sq. ft. specialty retail center
5	City Ventures Housing Project	NE Corner of Fremont Ave. & Carlos St., Alhambra	Single-Family Detached Housing Residential Condominium/Townhouse	37 single home units 25 townhouse units
6	Monterey Park Hotel	808 W. Garvey Ave., Monterey Park	Apartment Hotel Quality Restaurant Specialty Retail Center	98 apartment units 148 hotel rooms 5,421 sq. ft. quality restaurant 1,570 sq. ft. specialty retail center
7	Hotel 220 MPK	220 N. Atlantic Blvd., Monterey Park	Hotel High Turnover (Sit-Down) Restaurant	187 hotel rooms 3,428 sq. ft. sit-down restaurant

8	Atlantic Gateway Hotel	521-633 N. Atlantic Blvd., Monterey Park	Hotel Shopping Center	288 hotel rooms 6,200 sq. ft. shopping center
9	Alhambra Place	SE Corner of Main St. & Garfield Ave., Alhambra	Apartment Shopping Center	260 apartment units 142,000 sq. ft. shopping center
Source: Kimley-Horn, 2018				



Legend

Project Site

Figure III-16
Cumulative Project Location Map

Source: CAJA Environmental Services, LLC, 2018.

IV. Environmental Impact Analysis

A. Impacts Found to be Less Than Significant

1. Introduction

This section includes information from the following items, which are included as **Appendices A-3** and **C** of the Draft EIR:

A-3 Initial Study, CAJA Environmental Services, October 2017.

C The Alhambra Tree Survey, BrightView Tree Care Services, April 2018.

In addition to the environmental impact categories analyzed in detail in this EIR, the City of Alhambra (the City) has determined through the preparation of an Initial Study (included as **Appendix A-3** of the Draft EIR) that the development and operation of the Project would not result in potentially significant impacts to the environmental impact topics discussed below. Section 15128 of the CEQA Guidelines states:

> *An EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Such a statement may be contained in an attached copy of an Initial Study.*

It has been determined that there is no evidence that the Project would cause significant environmental effects in the following areas and that no further environmental review of these issues, as presented in Appendix G of the State CEQA Guidelines, is necessary:

Agricultural and Forestry Resources	All Thresholds
Biological Resources	All Thresholds
Mineral Resources	All Thresholds
Wildfire	All Thresholds

Each of these issue areas is discussed subsequently in this section of the Draft EIR.

Additionally, it has been determined in the Initial Study that the Project would result in either no impact or a less-than-significant impact with respect to the following areas included in Appendix G of the State CEQA Guidelines:

Aesthetics	Threshold b
Air Quality	Threshold e
Geology and Soils	Thresholds a.iv, b, and e
Hazards and Hazardous Materials	Thresholds e and g
Hydrology and Water Quality	Threshold d
Land Use and Planning	Threshold a
Noise	Threshold c
Population and Housing	Thresholds b and c
Transportation	Threshold c
Public Services	Threshold g
Utilities and Service Systems	Threshold g

Notwithstanding the conclusions of the Initial Study, a brief discussion of each of these Appendix G issues has been incorporated into the relevant sections of the Draft EIR.

2. Discussion of Impacts Found to be Less Than Significant

AGRICULTURAL AND FORESTRY RESOURCES

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

A significant impact may occur if a project were to result in the conversion of State-designated agricultural land from agricultural use to another non-agricultural use. The Project Site is currently developed with multiple buildings and surface parking and is located in a highly urbanized area. No farmland or agricultural activity exists on or in the vicinity of the Project Site. According to the Soil Candidate Listing for Prime Farmland of Statewide Importance, Los Angeles County, which was prepared by the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS), the soils at

the Project Site are not candidates for listing as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. In addition, the Project Site has not been mapped pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. The California Department of Conservation, Division of Land Protection, lists Prime Farmland, Unique Farmland, and Farmland of Statewide Importance under the general category of "Important Farmland" in California. The Project Site is not included in the Prime Farmland, Unique Farmland, or Farmland of Statewide Importance category.[1] Therefore, the Project would have no impact on the conversion of farmland to non-agricultural uses, and no further analysis of this issue is required.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act Contract?

The Williamson Act of 1965 allows local governments to enter into contract agreements with local landowners with the purpose of trying to limit specific parcels of land to agricultural or other related open space use.[2] The Project Site does not contain any State-designated agricultural lands or open space. Thus, the Project Site is not subject to a Williamson Act Contract.

The Project Site is located within the jurisdiction of the City and, thus, is subject to the applicable land use and zoning requirements in the Alhambra Municipal Code (AMC). The Project Site is currently zoned PO (Professional Office) and has a land use designation of Office Professional in the Alhambra General Plan. The Project Site is not zoned for agricultural production, and there is no farmland at the Project Site. Therefore, no impact with respect to land zoned for agricultural use or under a Williamson Act Contract would occur, and no further analysis of this issue is required.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined by Public Resources Code section 122220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)?

Neither the Project Site nor the surrounding parcels are zoned for forestland or timberland, and there is no timber production at the Project Site. The Project Site is occupied by multiple buildings and surface parking and is completely surrounded by urban uses and infrastructure. No forested lands or significant natural vegetation exist

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[1] *State of California Department of Conservation, Farmland Mapping and Monitoring Program, Los Angeles County Important Farmland 2010, Map, website: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2010/los10.pdf, accessed January 25, 2016.*

[2] *State of California Department of Conservation, Williamson Act Program, website: http://www.conservation.ca.gov/dlrp/lca/Pages/index.aspx, January 25, 2016.*

on or in the vicinity of the Project Site. Therefore, no impact related to loss or conversion of forestland or timberland would occur, and no further analysis of this issue is required.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

Neither the Project Site nor nearby properties are currently utilized for forestry uses, and as discussed above, the Project Site is not zoned for forestland or timberland uses. No impacts related to the loss of forest land or conversion of forestland to a non-forest use would occur as a result of the Project, and no further analysis of this issue is required.

e) Would the project 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?

Neither the Project Site nor nearby properties are currently utilized for agricultural or forestry uses, and as discussed above, the Project Site is not classified in any "Farmland" category designated by the State of California. The Project Site is not located near or in any significant farmland area (i.e., a significant commercial crop or animal producing site). No impacts related to the conversion of farmland to a non-agricultural use or conversion of forestland to a non-forest use would occur as a result of the Project, and no further analysis of this issue is required.

BIOLOGICAL RESOURCES

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

The Project Site is located in an urbanized area of Alhambra and is currently developed with multiple buildings and surface parking lots. The Project Site contains landscaping but does not contain natural open spaces, act as a wildlife corridor, or possess any areas of significant biological resource value. No hydrological features are present on the Project Site, and there are no sensitive habitats present. Due to the lack of biotic resources, no candidate, sensitive, or special status species identified in local plans, policies, regulations, by the California Department of Fish and Wildlife (CDFW), the California Native Plant Society (CNPS), or the U.S. Fish and Wildlife Service (USFWS) would occur on the Project Site.

The Project Site contains landscaping, primarily within the Office Plan Area. The majority of this landscaping consists of trees and other vegetation that is rooted to the ground. Street trees are intermittently located adjacent to the Project Site. The Project

Site itself contains a total of 468 trees (see tree survey included as **Appendix C** of the Draft EIR), the majority of which are located within the Office Plan Area. There are a total of 18 protected trees on the Project Site (per AMC Section 23.87, Tree Preservation), consisting of four White Alder, 11 California Sycamore, and three Coast Live Oak. Two of the White alder trees and three of the California sycamore trees that are located in the area between existing Buildings A0 and A1 on the boundary between the Office Plan Area and the South Plan Area are proposed for removal as part of Project development. These trees would be removed and replaced in accordance with the requirements of AMC Section 23.87. Due to the developed history of the Project Site and general lack of native vegetation, the likelihood of a State- or federally-listed species being present on-site is negligible. Therefore, Project impacts would be less than significant and no further analysis of this issue is required.

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

The Project Site is occupied by a multiple buildings and surface parking lots. No riparian or other sensitive natural communities are located on or adjacent to the Project Site. The Project Site is devoid of vegetation other than within landscaped areas. Therefore, implementation of the Project would not result in any adverse impacts to riparian habitat or other sensitive natural communities. As such, no impact would occur, and no further analysis of this issue is required.

c) Would the project 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?

The Project Site is developed with multiple buildings and parking lots, does not contain any wetlands or natural drainage channels, and is located in an urbanized area of the City. Therefore, the Project Site does not have the potential to support any riparian or wetland habitat. No state or federally protected wetlands (e.g., emergent, forested/shrub, estuarine and marine deep water, estuarine and marine, freshwater pond, lake, riverine) occur on or in the vicinity of the Project Site.[3] Therefore, the Project would not result in the direct removal, filling, or hydrological interruption of a state or federally protected wetland. As such, no impact to state or federally protected wetlands would occur as a result of the Project, and no further analysis of this issue is required.

[3] *U.S. Fish and Wildlife Service, National Wetlands Inventory, Wetlands layer: http://www.fws.gov/wetlands/Data/Mapper.html, accessed October 2017.*

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

The Project is located in an area that has been previously developed in a heavily urbanized area of the City. Due to the highly urbanized surroundings, there are no wildlife corridors or native wildlife nursery sites in the Project vicinity. Therefore, the Project would not interfere with the movement of any resident or migratory fish or wildlife species.

Due to the developed history of the Project Site and lack of native or substantial vegetation, the likelihood of a migratory species being on-site is negligible. In addition, no bodies of water exist on-site to provide habitat for fish. As such, Project implementation would neither interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors nor impede the use of native wildlife nursery sites. Therefore, no impact would occur, and no further analysis of this issue is required.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?

The Project Site is located in an urbanized area of the City. The Project Site is completely developed, and vegetation on-site is limited to trees and landscaped areas between buildings, along walkways, and around the perimeter of parking areas. The Project would be confined to the previously developed site. Local ordinances protecting biological resources are limited to the City's Tree Preservation Ordinance, codified in Section 23.87 of the AMC. The AMC provides guidelines for the protection of the following species present on the Project Site:

- Coast Live Oak (*Quercus agrifolia*)
- Western Sycamore (*Platanus racemosa*)
- White Alder (*Alnus rhombifolia*)

As noted above, the Project Site currently contains four White Alder, 11 California Sycamore, and three Coast Live Oak trees. Two of the White Alder trees and three of the California Sycamore trees that are located in the area between existing Buildings A0 and A1 on the boundary between the Office Plan Area and the South Plan Area are proposed for removal as part of Project development. These trees would be removed and replaced in accordance with the requirements of AMC Section 23.87. Therefore, the

Project would not conflict with any tree preservation policy or ordinance. As such, no impacts would occur, and no further analysis of this issue is required.

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

The Project Site is located in an urbanized area of Alhambra and is currently developed with multiple buildings and surface parking lots. The Project Site is not located in or adjacent to an existing County Significant Ecological Area.[4] Additionally, there is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan that applies to the Project Site. Implementation of the Project would not conflict with any habitat conservation plans. Therefore, no impact would occur, and no further analysis of this issue is required.

MINERAL RESOURCES

a) Would the project 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?

The Project Site is not located within a designated oil field or oil drilling area, and no active or historic oil wells are located either on or in the vicinity of the Site.[5] Additionally, the Project Site is located within an identified Mineral Resource Zone 3 (MRZ-3), as designated by the State Mining and Geology Board.[6] Areas designated MRZ-3 are considered to contain mineral deposits for which the significance cannot be determined from available data. The nearest oil production areas to the Project Site are the Boyle Heights Oil Field to the southwest (approximately four miles from the site) and the Montebello Oil field to the southeast (approximately 3.5 miles from the site). Therefore, the Project would have no impact with respect to loss of availability of a known regionally-important mineral resource and further evaluation is not required.

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[4] *County of Los Angeles, Department of Regional Planning, Significant Ecological Areas and Coastal Resource Areas Policy Map, February 2015: http://planning.lacounty.gov/site/sea/maps/, accessed November 8, 2018.*

[5] *State of California, Department of Conservation, Division of Oil, Gas & Geothermal Resources Well Finder: http://maps.conservation.ca.gov/doggr/index.html#close, accessed January 26, 2016.*

[6] *State of California, California Geological Survey, Open File Report 94-14: Update of Mineral Land Classification of Portland Cement Concrete Aggregate in Ventura, Los Angeles, and Orange Counties, California: Part II, Los Angeles County, R.V. Miller, 1994.*

b) Would the project 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?

The State Mining and Reclamation Act of 1975 (SMARA) requires that the State Mining and Geology Board (SMGB) map areas throughout the State of California that contain regionally significant mineral resources. Aggregate mineral resources within the state are classified by the SMGB through application of the MRZ system. The MRZ system is used to map all mineral commodities within identified jurisdictional boundaries. The MRZ system classifies lands that contain mineral deposits and identifies the presence or absence of substantial sand and gravel deposits and crushed rock source areas (i.e., commodities used as, or in the production of, construction materials). The Project Site is located within an area classified as MRZ-3, which are considered to contain mineral deposits for which the significance cannot be determined from available data.

However, the Project Site is not designated as a locally important mineral resource recovery site delineated on the Alhambra General Plan, a specific plan, or other land use plan. Should any future mineral resource be discovered on or near the Project Site, development of the Project would not alter the potential utility of any minerals located beneath the Project Site. Therefore, no impact associated with the loss of availability of a locally important mineral resource recovery site would occur.

The Project would be developed on a site that is already fully developed, and therefore, would not represent a new barrier to future mineral extraction. Thus, the Project would not 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 impacts related to this issue would occur, and no further analysis is required.

WILDFIRE

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

There are no wildlands located in the vicinity of the Project Site. The Project Site is not located within a City-designated Very High Fire Hazard Severity Zone, nor is it located within a City-designated fire buffer zone. Therefore, the Project Site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. No impacts regarding wildfire risks would occur, and no mitigation measures are required. No further evaluation of this topic in an EIR is required.

b) Would the project, 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?

There are no wildlands located in the vicinity of the Project Site. The Project Site is not located within a City-designated Very High Fire Hazard Severity Zone, nor is it located within a City-designated fire buffer zone. There are no appreciable slopes on the Project Site. Therefore, the Project Site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. No impacts regarding wildfire risks would occur, and no mitigation measures are required. No further evaluation of this topic in an EIR is required.

c) Would the project 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?

There are no wildlands located in the vicinity of the Project Site. Thus, the Project would not require the installation of any wildland fire protection infrastructure beyond normal fire suppression requirements of the AMC. No impacts regarding wildfire fighting infrastructure would occur, and no mitigation measures are required. No further evaluation of this topic in an EIR is required.

d) Would the project 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?

There are no appreciable slopes on the Project Site, nor would the Project result in more than minor alterations to on-site drainage patterns. Landslide risks do not exist on the Project Site. There are no wildlands located in the vicinity of the Project Site. No impacts regarding wildland fires would occur, and no mitigation measures are required. No further evaluation of this topic in an EIR is required.

IV. Environmental Impact Analysis

B. Aesthetics

1. Introduction

This section evaluates the potential impacts of the proposed Project on aesthetics, views and vistas, visual character, and light and glare in the Project area. Aesthetics generally refers to visual resources and the quality of what can be seen, or overall visual perception of the environment, and may include such characteristics as building height and mass, development density and design, building condition (i.e., blight), ambient lighting and illumination, landscaping, and open space. Views and vistas refer to visual access and obstruction of prominent visual features, including both specific visual landmarks and panoramic vistas. Visual character includes the different elements of the urban landscape that include the area's land use density, its mixed-use nature, building heights, lights, streetscapes, and the historic resources within the locale. Light and glare address the effects of nighttime illumination and daytime glare on adjacent land uses.

In 2013, the State of California enacted Senate Bill 743 (SB 743). Among other things, SB 743 adds Public Resources Code (PRC) Section 21099, which provides that "aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area (TPA) shall not be considered significant impacts on the environment." PRC Section 21099 defines a TPA as an area within one-half mile of a major transit stop that is "existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." PRC Section 21064.3 defines "major transit stop" as "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." PRC Section 21099 defines an infill site as a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses.

As discussed in detail in **Section II, Project Description**, of the Draft EIR, the Project includes the redevelopment of portions of the Project Site resulting in the addition of

1,061 residential units and associated open space, landscaping, and vehicle/pedestrian circulation areas to accompany the existing 902,001 square-feet of office space that would be retained within the Office Plan Area. Also, up to 4,347 parking spaces would be provided as part of the Proposed Project to serve both the new residential and existing office uses at the Project Site. Existing surface parking lots, warehouse/storage buildings, maintenance structures, and one office building would be removed to make way for the Project.

Although the Project Site is located in an urban area on a lot currently developed with existing buildings and surface parking uses, the Project Site does not meet the TPA definition in PRC Section 21099 because it is not located within 0.5 mile of the intersection of two bus routes having a frequency interval of 15 minutes or less during peak commuting hours. Therefore, in accordance with PRC 21064.3, Project impacts to visual resources, aesthetic character, light and glare, and scenic vistas or any other aesthetic impact associated with the Project are evaluated in this section.

2. Environmental Setting

a) Regulatory Framework

(1) City of Alhambra General Plan

The City adopted its General Plan update in August 2019. A draft of the updated General Plan (Draft General Plan) had been released in July 2018 for public review and a revised draft released in early 2019. The General Plan retains the previous land use designation of Office Professional for the Project Site. The General Plan contains the following policies and goals related to visual resources, aesthetics, and light/glare that are relevant to the Project or Project Site:

- **Goal LU-3** A high quality overall community appearance and identity.
    - **Policy LU-1D** Encourage land use patterns that minimize incompatibility between uses.
    - **Policy LU-2A** Promote the use of high-quality design, materials, landscaping, and pedestrian connections.
    - **Policy LU-2C** Design parking and loading areas as an integral part of the total project design. Locate parking and loading areas so that the visual impacts of these areas on adjacent development and the public right-of-way are minimized, and screen them attractively using a combination of fencing and landscaping.

- **Policy LU-3A** Foster new development that is consistent with the established land use type, intensity, character, and scale of the area.
- **Policy LU-3D** Incorporate streetscape design improvements for important corridors, such as Atlantic, Fremont, Valley, Main, and Garfield.
- **Policy LU-6B** Enhance streetscapes and building elements to promote pedestrian activity by providing well-articulated building facades with quality materials and workmanship, and featuring high-quality street furnishings and design.
- **Policy LU-8A** Continue to implement the parkway tree planting plan to promote pedestrian activity by establishing well-designed streetscapes, active ground floor uses, and tree-canopied sidewalks that are unique to the neighborhood.
- **Policy LU-8B** Ensure that signs, lighting, and other potential nuisances are sensitive to existing residential neighbors.
- **Policy LU-8C** Enhance the open space network around corridors and activity nodes by providing paseos, courtyards, plazas, larger parkways, and landscaped setbacks.

The land use changes envisioned under the General Plan may affect the aesthetic character of various areas in Alhambra and the entire City. While all land uses are required to adhere to the design, density, and height guidelines applicable to particular land use designations, the General Plan also establishes goals and policies that would help define and guide the desired visual character and quality of specific districts, activity centers, and corridors in the community.

As envisioned in the General Plan, development would occur in key “focus areas” around Alhambra. These have been identified as areas that offer unique characteristics, and may provide opportunities to transition over time with adjustments in land use, beautification, and place-making. These areas include the Fremont and Mission regional commercial/industrial hubs in which the Project Site is located. The visual character of the Fremont Corridor would be improved with streetscape themes and varying tree palettes, providing an overarching design theme and consistent crosswalk and sidewalk treatments.

(2) City of Alhambra Municipal Code (AMC)

Title 23 of the AMC, *Zoning*, includes the City’s zoning regulations and standards. The purpose of Title 23 is to designate, regulate, and control the location, use, height, and alterations of buildings, structures, and land for residence, commerce, trade and

industry, or other purposes. The City is divided into various zones, with standards for each zone regulating these qualities. Such regulations are deemed necessary to encourage the most appropriate use of land and preserve the aesthetic qualities of the City. Examples include requiring development to provide adequate open spaces for light and air, limiting the density of development, and implementing landscaping standards. The Project Site is zoned PO (Professional Office). The standards and guidelines addressed in the AMC include: 1) build-to line and lot coverage standards; 2) height, massing and bulk; 3) yard setbacks; 4) signage standards and guidelines; 5) structured and surface parking standards and guidelines; and 6) on-site open space standards.

Existing AMC design standards, listed in Section 23.44.030, *General Design Standards*, state that development must have stationary lighting located along vehicular access ways, major walkways, and all covered and enclosed parking areas. The light must be deflected away from adjacent properties. In addition, all development is reviewed by the Design Review Board for consistency with the City's standards.

Additional regulations affecting the aesthetic character of Alhambra are contained in AMC Chapter 17.50, *Hazardous Waste Facilities,* which describes the prohibition of these facilities in areas of recreational, cultural, or aesthetic value. The City has also adopted a sign ordinance to control the size and location of signs in Alhambra.

b) Existing Conditions

(1) Visual Character

(a) Project Site

The Project Site is located at 1000 South Fremont Avenue; 2215 West Mission Road; and 629, 635, 701, 825 and 1003 South Date Avenue, in the City of Alhambra (the City), approximately one mile southwest of the Alhambra Civic Center. As stated in **Section III, Environmental Setting**, the Project Site is approximately 0.7 mile east of the City of Los Angeles boundary at Lowell Avenue. The Project Site consists of the entire block bounded by Fremont Avenue on the west, Mission Road on the south, Date Avenue on the east, and Orange Street on the north. The total area that composes the Project Site is approximately 1,671,725 square-feet (or 38.38 acres). The Project Site is zoned PO (Professional Office) and is designated for Office Professional uses in the City's General Plan.

The Project Site is fully developed with office, warehouse, storage, utility substation, and surface parking lot uses. The visual character of the Project Site is predominately urban, with the existing office buildings within the Office Plan Area being the most dominant features of the Project Site as viewed from adjacent public streets. The tallest of these buildings rises to six stories. Views available from Fremont Avenue into the

Project Site's interior are limited, and the observer would perceive a relatively dense development from this vantage point. Views available from Orange Street and Date Avenue on the north and east, respectively, provide a more direct line-of-sight into the Project Site's interior and, from these locations, it would be perceived as developed, but to a less dense degree than when viewed from Fremont Avenue. Views from the north and east are largely comprised of warehouse, maintenance, and storage sheds and other similar infrastructure-oriented facilities, as well as surface parking lots. Views into the Project Site from Mission Road on the south are limited and largely consist of surface parking lots and the existing two-story office building at the site's southeast corner.

The existing uses within each of the five defined plan areas comprising the Project Site are described below and the locations of the buildings are illustrated on Figure IV.D-2.

(i) Office Plan Area

The 17.76-acre Office Plan Area is located on the western and northwestern side of the Project Site and contains the following existing uses:

- 902,001 total square feet of office space in 9 buildings ranging from one to six stories in height (Buildings A1-A11, A13, B1, and B6)
- 50,558 square foot LA Fitness gym
- 746 space, three-story parking garage (Building B2)
- 1,032 space, five-story parking garage (Building B7)
- 22-space surface parking lot
- Utility area
- Guard gate

(ii) North Plan Area

The 10.88-acre North Plan Area is located on the northern and northeastern side of the Project Site and contains the following existing uses:

- Two-story, 11,144 square foot vacant office/warehouse building (Building A12)
- 20,876 total square feet of warehouse/workshop/storage space in three one-story buildings, including two metal structures and one concrete block building. (Buildings B14, B15, and B16)

- 2,370 square-foot, one-story cooling tower
- Asphalt surface parking lots containing approximately 550 spaces
- Guard gate

(iii) East Plan Area

The 1.75-acre East Plan Area is located on the east-central side of the Project Site and contains the following existing uses:

- 21,700 square feet of warehouse/shipping and receiving space in two one-story buildings, one metal and one concrete block. (Buildings B12 and B13)
- Southern California Edison utility substation
- Asphalt surface parking lots containing approximately 306 spaces

(iv) South Plan Area

The 5.86-acre South Plan Area is located on the southern and southwestern side of the Project Site and contains the following existing uses:

- 10,145-square foot one-story office building (Building A0)
- 8,300 square feet of maintenance space in a one-story metal and brick building (Building B11)
- Asphalt surface parking lots containing approximately 503 spaces

(v) Corner Plan Area

The 2.13-acre Corner Plan Area is located on the southeastern side of the Project Site and contains the following existing uses:

- 42,222 square feet of vacant office space in a two-story concrete building (Corner Building)
- Asphalt surface parking lots containing approximately 281 spaces

(b) Surrounding Area

To the west across Fremont Avenue, from north to south, are (i) a two-story business park/office building and surface parking; (ii) a one-story towing service building and attached parking lot; (iii) a vacant parcel; (iv) a one-story retail/commercial complex featuring fast-food restaurants and a café (with a pedestrian bridge over Fremont

Avenue connecting to the Project Site); and (v) a Kohl's department store with associated surface parking lot. The first four uses are on properties zoned IPD (Industrial Planned Development), while the Kohl's store is on a property zoned CPD (Commercial Planned Development).

To the east across Date Avenue, from north to south, are (i) a one-story warehouse/shipping and receiving center with associated surface parking; (ii) a one-story Carpet King warehouse/office with associated surface parking; (iii) a one-story office/warehouse building; (iv) a one-story office complex with carport; (v) a two-story printing/copying center with associated surface parking (on the north side of Chestnut Street); (vi) a two-story office building (on the south side of Chestnut Street); (vii) a one-story concrete office/warehouse complex with associated surface parking; (viii) a two-story stucco office building with associated surface parking; and (ix) a three-story concrete office development with associated surface parking. All of these properties are zoned IPD (Industrial Planned Development).

To the north across Orange Street, from west to east, are (i) asphalt surface parking lots and (ii) the approximately 25-story Los Angeles County Public Works office building and associated surface parking lots. These properties are zoned PO (Professional Office).

To the south across Mission Road are (i) the below-grade, dual Union Pacific Railroad tracks and (ii) a one-story storage and moving supplies business, located between Mission Road and the railroad corridor across from the Project Site's southeastern frontage. The rail corridor is zoned OS (Open Space), while the other property is zoned IPD (Industrial Planned Development).

The nearest existing residential uses to the Project Site are the single-family homes to the south along Front Street, across the railroad tracks from Mission Road, each approximately 200 feet away from the edge of the Site.

(2) Scenic Vistas/Resources

Scenic resources are typically identified as striking or unusual natural features; the Pacific Ocean; the Santa Monica and San Gabriel Mountains; and unique urban or historic features as seen from designated scenic highways. Views of the distant San Gabriel Mountains are available from intermittent viewpoints within the Project area. No officially designated or eligible State-designated scenic highways are located adjacent to, or within view of, the Project Site.[1] In addition, the Project Site does not contain any rock outcroppings. The Project Site does contain an identified Historic District (the CF Braun Company Historic District) that consists of 10 buildings within the Office Plan

[1] *California Scenic Highway Mapping System, Los Angeles County, website: http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm, accessed April 2018.*

Area (see **Section IV.D, Cultural Resources**). No recognized scenic resources are present within the immediate area of the Project Site.

(a) Viewsheds

Viewsheds refer to the visual qualities of a geographical area that are defined by the horizon, topography, and other natural features that give an area its visual boundary and context. Viewsheds may also be defined by development that has become a prominent visual component of the area. In the area surrounding the Project Site, existing viewsheds are defined primarily by the adjacent commercial, residential, and transportation-oriented (streets, railroad corridor) land uses along Mission Road and Fremont Avenue.

Public views are those which can be seen from vantage points that are publicly accessible, such as streets, freeways, parks, and vista points. These views are generally available to a greater number of persons than are private views. Private views are those that can be seen from vantage points located on private property. The protection of public views is emphasized under CEQA.

(b) Views from the Project Site

The Project Site and surrounding areas are characterized by dense urban development, with obstructed views of the distant San Gabriel Mountains toward the north generally available only from the street corridors. The topography of the Project Site and surrounding area is relatively flat. As a result, the Project Site provides limited views of the surrounding low- to high-rise industrial, office, and commercial land uses.

(c) Views of and Toward the Project Site

Public views of and toward the Project Site are available from Mission Road, Fremont Avenue and Date Avenue. Vehicles and pedestrians traveling along these roadways have views of the Project Site, but views into the interior of the Project Site from Fremont Avenue are generally limited due to the configuration of the existing development, which consists of buildings and a surface vehicle storage/parking area along most of the frontage roadway. The views consist of working areas for the businesses present on the Project Site. The existing features and visual elements on the Project Site do not substantially contribute to the character or image of the surrounding area. A photo location map is provided in Figure III-3 and views of the Project Site are shown in Figures III-4 through III-9 while views of surrounding areas are provided in Figures III-10 through III-15.

(d) Scenic Vistas

Panoramic views or vistas provide visual access to a large geographic area, for which the field of view can be wide and extend into the distance. Panoramic views are usually associated with vantage points looking out over a section of urban or natural area, which provide a geographical orientation not commonly available. Examples of panoramic views might include an urban skyline, valley, mountain range, the ocean, or other water bodies. As discussed in greater detail below, there are no scenic vistas or scenic vista viewpoints located to the north, east, south, or west of the Project Site.

(3) Light and Glare

(a) Nighttime Light

Nighttime light is common throughout the City and urbanized areas in general. Artificial light may be directly generated from sources or indirect sources of reflected light. Typical light-sensitive uses include, but are not limited to, residences, some commercial and institutional uses, and natural areas. Nighttime lighting is typically generated from interior lighting in buildings, exterior security and street lighting, and headlights from vehicles either traveling along the adjacent streets or parking on surrounding streets.

Relatively high levels of nighttime lighting exist in the Project area, generated from vehicle headlights, traffic signal lights, streetlights, architectural lighting, security lighting, and building illumination (light emanating from the interior of structures through windows) from both on-site and surrounding commercial and industrial uses. In addition, nighttime lighting sources on the Project Site include lighting of the surface parking areas and exterior security and architectural lighting.

(b) Daytime Glare

Daytime glare is generally caused by reflection of sunlight or artificial light by polished surfaces on buildings, particularly multi-level buildings with glass windows or other reflective lighting. Glare in the Project area is generated by reflective materials on the surrounding buildings and glare from vehicles passing along surrounding streets. In addition, glare is generated from the Project Site by cars parked on-site and off-site in the existing surface parking areas.

3. Project Impacts

a) Methodology

The analysis of aesthetics identifies the uses in the surrounding area as well as any views in the Project vicinity. The analysis describes the ways in which the Project would

alter the existing visual character of the surrounding area, and the extent to which the Project would block any public views or scenic vistas in the vicinity. The discussion includes an analysis of the Project's height, massing, and design components.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with the State CEQA Guidelines Appendix G (Appendix G), except as provided in Public Resources Code Section 21099, a project would have a significant impact related to aesthetics if it would do the following:

a) Have a substantial adverse effect on a scenic vista; or

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

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 points); if the project is in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality; or

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

In assessing impacts related to aesthetics in this section, the City will use Appendix G as the thresholds of significance.

c) Project Design Features

The following Project Design Features are proposed as part of the Project:

- **AES-PDF-1**: All mechanical and electrical equipment that is located on the rooftops will be screened from public view.
- **AES-PDF-2**: Utility equipment will be placed underground, screened from public view, or incorporated into the design of the Project.
- **AES-PDF-3**: The Project will include security lighting. Lighting associated with the Project will be directed downward or toward the interior of the Project Site. All exterior residential lighting will be designed with internal and/or external glare control and will be designed, arranged, directed, or shielded to contain direct

illumination on-site, thereby preventing excessive illumination and light spillover onto adjacent land uses and/or roadways.

- **AES-PDF-4**: The exterior of the proposed structures will be constructed of materials such as, but not limited to, high-performance and/or non-reflective tinted glass (no mirror-like tints or films), brick, and metal to minimize glare and reflected heat. The exterior artwork on the residential portion of the Project will not utilize highly reflective materials.
- **AES-PDF-5**: Project signage will not include blinking, flashing, or oscillating lights.

d) Analysis of Project Impacts

Threshold a) Would the project have a substantial adverse effect on a scenic vista?

(1) Impact Analysis

(a) Construction

Construction activities associated with the Project would not substantially affect existing scenic vistas of the distant San Gabriel Mountains. The Project Site and surrounding area are characterized by urban development, and the construction activities associated with development of the Project would not be of a scale, height, or density to substantially alter existing views available in the area. Impacts with respect to scenic vistas would be **less than significant**.

(b) Operation

Within the Office Plan Area, the existing seven-story, 91-foot tall office building in the center of the Project Site (Building A9) would remain, as would the existing six-story, 86-foot tall office building adjacent to it (Building A9 East). All of the other buildings, including all of the proposed new construction, would be lower than the code-allowed 75 feet in height for new structures in a Professional Office (PO) zoning designation. The new five-story residential buildings in the North Plan Area would be a maximum of 60 feet in height above street grade, while the new five-story residential buildings in the Corner Plan Area would be a maximum of 62 feet in height above street grade. The new six-story residential buildings in the South Plan Area would be a maximum of nearly 67 feet in height above street grade, while the new five-level parking structure in the East Plan Area would be approximately 40 feet in height above street grade. The Project would not increase building heights on the Project Site when compared to the tallest existing building on the site and would not affect any existing scenic vistas as there are

no dominant scenic features that would be obstructed by development of the Project when viewed from surrounding publicly accessible vantage points.

Additionally, several large multi-story industrial/commercial structures are situated in and surrounding the Project area. Given the presence of these structures on the north, east, and west sides of the Project Site, development of the Project would not introduce a building of unusual height and mass to the location. As noted previously, the Project Site and surrounding area are characterized by dense urban development, including residential uses to the south of the Project Site across Mission Road and the below-grade railroad corridor.

Typically, a significant impact would occur if a proposed project introduces incompatible visual elements within a field of view containing a scenic vista or substantially blocks a scenic vista. Views are usually associated with vantage points looking out over a section of urban or natural area, which provide a geographical orientation not commonly available. Examples of panoramic views might include an urban skyline, valley, mountain range, the ocean, or other water bodies. The Project Site is in an urbanized portion of Alhambra, and topographically relatively flat. Near the Project Site, ground-floor views are primarily limited to those of highly urban land uses, including restaurant, commercial, and multi-family residential, in addition to roadways, signage, and other utility infrastructure. Distant views of the San Gabriel Mountains from the streets surrounding the Project Site would not be affected by Project development. Also, the Project Site is not a component of any scenic views. Thus, the Project would not have a substantial adverse effect on a scenic vista and potential impacts would be considered **less than significant**.

(2) Mitigation Measures

No significant impact to scenic vistas would occur with development of the Project. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Without mitigation, no significant impact to scenic vistas would occur with development of the Project.

Threshold b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

(1) Impact Analysis

The Project Site does not contain any rock outcroppings, nor are any recognized scenic resources present within the immediate area. No designated scenic highways are

located within the City.[2] The Project would not alter or remove any of the historic buildings within the Office Plan Area comprising the CF Braun Company Historic District (see **Section IV.D, Cultural Resources**). Therefore, the Project would not substantially damage scenic resources, including historic buildings within a state scenic highway. Additionally, the Project incorporates design features that would serve to buffer the Project from adjacent uses and would incorporate landscaped spaces within the Project Site. Thus, the Project would not substantially damage scenic resources or other locally recognized desirable aesthetic features within a state-designated scenic highway and impacts would be **less than significant**.

(2) Mitigation Measures

No significant impact to scenic resources within a state scenic highway would occur with development of the Project. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Without mitigation, no significant impact to scenic resources within a state scenic highway would occur with development of the Project.

Threshold c) ***Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?***

(1) Impact Analysis

(a) Construction

Construction activities at the Project Site would be mostly visible from the surrounding land uses and are estimated to occur intermittently over a period of approximately eight years. Construction of the Project would involve three basic activities: (1) demolition, (2) excavation and grading, and (3) building construction. Construction activity would vary on a weekly basis, depending largely on the number of workers and construction trucks needed for the activities during each time period. Temporary fencing would be installed around the Project Site during construction, which would partially shield views of construction activities and equipment. During the Project's construction period, the Project Site would undergo considerable changes with respect to the aesthetic character of the site and surrounding area. These construction activities could create unsightly debris and soils stockpiles, staged building materials and supplies, and the presence of construction equipment, all of which could occupy the field of view of

[2] *City of Alhambra, Alhambra General Plan Draft Environmental Impact Report, July 2018, p. 65.*

passing motorists, pedestrians, and neighboring properties. Thus, the existing visual character of the portions of the Project Site to be redeveloped under the Project would temporarily change from warehouse/industrial buildings and urban surface parking lots to construction-related activities. This temporary change in visual character of the Project Site would be visible to occupants of the on-site Office Plan Area and to the surrounding neighborhood, which could detract from existing visual quality.

To minimize construction-related visual effects, construction activities on the Project Site would be properly managed and maintained in appearance consistent with applicable provisions of the AMC. Specifically, the City's Building Code calls for the Project Applicant to enclose or visually shield construction equipment, debris, and stockpiled equipment from being visible at the ground level of neighboring properties. Such barricades or enclosures shall be maintained in appearance throughout the construction period. In addition, any graffiti shall be removed immediately upon discovery.

Overall, although construction activities under the Project would be visible from adjacent public and private vantage points, these changes to the appearance of the Project Site would be temporary in nature. The Project's construction activities would be temporary, would occur in compliance with applicable code provisions governing scenic quality, and would not rise to the level of a change that would substantially degrade the existing visual character and potential construction impacts would be **less than significant**.

(b) Operation

Aesthetic impact assessments should generally address the issue of visual contrast, or the degree to which elements of the environment differ visually. Visual contrast concerns elements such as form, line, color, and texture. The introduction of contrasting features or development into aesthetically valued urban areas can overpower familiar features, eliminate context or associations with history, or create visual discord where there have been apparent efforts to maintain or promote a thematic or consistent character.

Overall, the visual character of the Project Site and area is that of a typical urbanized area of the City. Development in the area is comprised of various land uses (commercial, retail, industrial, entertainment, and residential), building heights, build dates, and architecture, including new construction in a contemporary design as well as buildings that are decades older and represent the architectural styles of former times. Other prominent features in the Project area include signage, building and street lighting, and transportation and utility infrastructure.

The Project would be required to conform to applicable General Plan standards. The Project would also be subject to existing building and development standards specified

in the AMC. Thus, while the visual character of this area of the City would change following development of the Project, compliance with these established standards would result in a development that complements and enhances the City's existing visual character and quality.

The paragraphs below discuss the changes to the visual character of the Project Site as a result of the Project as compared to the existing characteristics of the Project Site and the surrounding area.

(i) Loss of Aesthetic Features

The Project would not result in the loss, or alteration, of any existing urban features that contribute to the aesthetic character of the Project Site or surrounding area. The Project Site contains mostly surface parking spaces, warehouses, minimal commercial building space, and office space uses, as noted above. As proposed, most of the existing office space would be retained and would be an existing feature of the Project Site that would remain intact and contribute architecturally to the overall aesthetic of the Project. As discussed in **Section II, Project Description**, the Project seeks to respect, respond to, and preserve the urban character of Mission Road and Fremont Avenue. The structures that would be removed from the site due to Project development do not contribute in any substantial way to the visual quality of the site and its surroundings.

(ii) Height and Massing

The existing visual character at and around the Project Site is one of an urban landscape with a mixed-use nature containing a variety of different building heights and massing. As noted above, there is minimal thematic or consistent visual character that defines either the Project Site or the surrounding aesthetic environment. Instead, the area is characterized by a variety of commercial, industrial, and mixed-use urban structures that range from mid-rise buildings to warehouses, storage areas, and surface parking lots. The Project would redevelop large portions of the site with a landscaped residential community consisting of a variety of housing unit types, as illustrated in Figures II-4 through II-41.

In particular, the maximum height of the newly proposed structures of the Project would be five stories and approximately 62 feet. The PO zoning classification allows a maximum height of 75 feet (six stories) for new structures of urban residential form. Since the Project would not increase building heights on the Project Site when compared to the tallest existing on-site building, it would continue to be in proportion with respect to the other structures in the general vicinity.

Specifically, the massing of the Project would feature varying façade relief, articulation, and windows, as compared to the solid concrete exterior of the existing structures on

the Project Site. In addition, the perimeter would include the planting of vegetation and landscaping as further discussed below. Therefore, the Project would not substantially degrade the existing visual character or quality of the site or its surroundings due to changes in height or massing.

(iii) Design/Exterior Building Treatments

Conceptually, the proposed Project buildings are envisioned as an urban environment, utilizing landscaping as a key component within its structural grid to create the perception of a built environment that is consistent with neighboring land uses, including those within the on-site Office Plan Area. The design of the Project pays close attention to the existing historic and contemporary building scale, massing, and style present at The Alhambra while, at the same time encouraging innovative architectural design that expresses the campus identity. The design principles shown on Figures II-4 through II-41 depict the approach chosen for creating this proposed urban community. The Project would accommodate active uses along street frontages to avoid blank walls, visible parking, and visible "back of house" uses. Residential units and common areas with transparent windows are strongly encouraged while parking would not be visible from off-site locations.

The Project would comply with the City's Design Standards identified in the AMC by utilizing a variety of building materials, colors, elements, and various wall planes. These elements would help to break up the building facades along the Date Avenue, Orange Street, and Mission Road frontages and meet the intent of the City's Design Standards to provide interesting articulated walls. Therefore, the Project would not substantially degrade the existing visual character or quality of the site or its surroundings due to its design.

(iv) Landscaping and Open Space

As noted in **Section II, Project Description**, most of the existing trees within the Office Plan Area would be retained. Trees within the remaining portions of the Project Site would be removed and replaced during Project construction in accordance with the requirements of the City's Tree Preservation Ordinance (AMC Section 23.87). The Project proposes 864 new trees on the site. Preliminary landscape plans and examples are illustrated on Figures II-39 through II-41. The intent of the landscape design is to provide lush, tree-shaded pedestrian corridors, paseos, and courtyards throughout the proposed residential community. Neither the existing development on the Project Site nor the surrounding developments along Mission Road, Date Avenue, and Fremont Avenue provide comparable amounts of landscaping and open space as would be provided by the Project. As such, the proposed landscaping and open space would

complement the visual character of the Project Site and surrounding area, and no adverse impacts would occur.

(c) Consistency with Applicable Policies

Section IV.J, Land Use and Planning, of the Draft EIR contains a consistency analysis of the Project with applicable land use policies and regulations that are also relevant to this analysis. The Project would be consistent with the applicable policies related to visual resources, community design, and aesthetics as presented in the General Plan. Specifically, the Project would contain land use patterns that minimize incompatibility between uses both on-site and with respect to surrounding off-site properties (Policy LU-1D). The Project would incorporate high-quality design, materials, landscaping, and pedestrian connections (Policy LU-2A). Parking and loading areas would represent an integral part of the total project design and would be attractively screened with landscaping to minimize off-site visual impacts (Policy LU-2C). The Project's proposed redevelopment would be largely consistent with the established land uses, character, and scale of the area (Policy LU-3A). The Project would promote pedestrian activity through enhanced streetscapes and building elements and would include high-quality design (Policy LU-6B). Project signs lighting, and other potential nuisances would be sensitive to existing neighbors (Policy LU-8B). The Project would incorporate landscaped setbacks, paseos, plazas, and courtyards (Policy LU-8C). As such, the Project would be consistent with applicable City policies and municipal code provisions governing scenic quality.

(d) Impact Conclusion

Considering the Project's impacts with respect to visual character and policy consistency as described above, the Project would not substantially degrade the existing visual character or quality of the site and its surroundings and would not conflict with applicable zoning and other regulations governing scenic quality, and would, therefore, have a **less-than-significant** impact.

(2) Mitigation Measures

Impacts related to visual character or quality would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to visual character or quality would be less than significant without mitigation.

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

(1) Impact Analysis

As discussed previously, the Project Site is located in a highly urbanized area of the City. Land uses in the immediate Project Site area include warehouses, office, retail, commercial, light industrial, and transportation infrastructure, in addition to surface parking lots. Many of these land uses produce nighttime light and daytime glare (e.g., indoor/outdoor lighting, windows, light-colored surfaces, etc.) typical of such uses in an urban area.

Spillover of light onto adjacent properties has the potential to interfere with certain activities including vision, sleep, privacy, and general enjoyment of the natural nighttime condition. The closest light-sensitive uses to the Project Site are the single-family residences along Front Street, across Mission Road and the railroad corridor (approximately 200 feet south of the Project Site's southern boundary). No other properties within the immediate vicinity of the Project Site are considered to be light-sensitive.

(a) Nighttime Light

(i) Construction

Lighting needed during construction of the Project has the potential to generate light spillover to off-site sensitive land uses. However, construction activities would occur in accordance with the provision of AMC Section 18.02, which limits construction hours to between 7:00 A.M. and 7:00 P.M. on weekdays and Saturdays with no construction permitted on Sundays or federal holidays. Therefore, construction activities for the Project would primarily occur during the daylight hours, and construction lighting would only be used for the duration needed if construction were to occur in the evening hours during the winter season when daylight is no longer sufficient. In addition, construction-related illumination would be used for safety and security purposes only. Therefore, Project construction would not significantly impact off-site light-sensitive uses, substantially alter the character of off-site areas surrounding the Project Site, adversely impact day or nighttime views in the area, or substantially interfere with the performance of an off-site activity.

(ii) Operation

The Project would retain office space and parking uses in the new Office Plan Area while constructing new residential units in the North Plan Area, South Plan Area, and Corner Plan Area. The new East Plan Area would contain a five-story parking structure

to serve existing office uses on the Project Site. The Project would include interior and exterior lighting that complies with the City provisions requiring that the effects of new sources of lighting be minimized with respect to off-site visibility. By proposing a Project design with minimal street lighting, interior parking, and no commercial land uses that could produce significant nighttime lighting or signage, no substantial changes in nighttime illumination would occur that would adversely affect nighttime views in the area and produce spillover lighting.

Per Project Design Feature AES-PDF-3, the Project would include security lighting that is either directed downward or toward the interior of the Project Site. All exterior residential lighting would be designed with internal and/or external glare control and designed, arranged, directed, or shielded to contain direct illumination on-site, thereby preventing excessive illumination and light spillover onto adjacent land uses and/or roadways. Per Project Design Feature AES-PDF-4, the exterior of the proposed structures will be constructed of materials such as, but not limited to, high-performance and/or non-reflective tinted glass (no mirror-like tints or films), brick, and metal to minimize glare and reflected heat.

Nighttime illumination in the Project vicinity would not be significantly increased by the Project, and the Project's nighttime illumination would not adversely affect views.

(b) Daytime Glare

(i) Construction

Daytime and nighttime glare could potentially occur during construction activities if reflective construction materials were positioned in highly visible locations where the reflection of sunlight or nighttime light sources could occur. However, any glare generated within the Project Site during construction would be highly transitory and short-term given the movement of construction equipment and materials within the construction area and the temporary nature of construction activities. Furthermore, large, flat surfaces that are generally required to generate substantial glare are typically not an element of construction activities. As a result, light and glare associated with the construction of the Project would not substantially alter the character of off-site areas surrounding the Project Site or adversely impact day or nighttime views in the area and impacts would be less than significant.

(ii) Operation

As shown in Figures II-11, II-19, II-30, II-31, and II-38 (in **Section II, Project Description**), the Project's architectural features and façades would not be constructed of highly reflective materials. Per Project Design Feature AES-PDF-4, the exterior of the proposed building would be articulated and constructed of materials, such as brick,

metal, and glass with low-reflectivity, which would not be expected to produce a substantial amount of daytime glare. The sources of glare that would be introduced into the area by the Project would not result in hazardous conditions to motorists or result in substantial glare due to the various features designed to minimize glare-related impacts.

In summary, the Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area, and impacts would be **less than significant**.

(2) Mitigation Measures

Impacts related to light and glare would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to light and glare would be less than significant without mitigation.

e) Cumulative Impacts

(1) Impact Analysis

Generally, a “cumulative impact” refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects (CEQA Guidelines, §15355). An environmental impact report must discuss the cumulative impacts of a project when the project's incremental impacts are cumulatively considerable. An impact is considered “cumulatively considerable” when the incremental impacts of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. When the lead agency is examining a project with an incremental effect that is not “cumulatively considerable,” the lead agency need not consider that effect significant but must briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

An adequate discussion of a project’s significant cumulative impact, in combination with other closely related projects, can be based on either (1) a list of past, present, and probable future projects producing related impacts; or (2) a summary of projections contained in an adopted local, regional, statewide plan, or related planning document that describes conditions contributing to the cumulative effect. The lead agency may also blend the “list” and “plan” approaches to analyze the severity of impacts and their likelihood of occurrence. Accordingly, the analysis below is based on a list-based approach to determine the Project’s contributing effect on potential cumulative impact

upon existing views and the general aesthetic character of the Project Site and its surroundings.

(a) Visual Character and Views

The geographic context for the analysis of cumulative impacts related to visual character of the surrounding area and its aesthetic image would include the cumulative development projects located within view of the Project Site. Projects located in such a position that they would not be visible from the Project Site or to which the Project would not be visible will not normally have a potential to combine with the Project to create a cumulative impact on visual character.

As previously stated in **Section III, Environmental Setting**, there are nine cumulative development projects within the general vicinity of the Project Site. Most of these projects would not be visible from the Project Site following development due to both distance and intervening structures, as the closest such project is located approximately 0.2 mile to the north at the intersection of Date Avenue and Commonwealth Avenue. However, as with the Project, the cumulative projects are subject to applicable development standards and environmental review. Development of the cumulative projects is expected to occur in accordance with adopted plans and regulations, which would result in individual review of the visual character of each project, to ensure consistency with applicable design standards and compatibility with neighboring land uses. In addition, similar to the Project, the cumulative projects would be required to submit a landscape plan to the City for review and approval. Therefore, although development of the Project in combination with these cumulative projects would result in a general intensification of land uses in an already urbanized area of the City, the cumulative projects would not combine with the proposed Project to generate a significant cumulative impact with respect to scenic vistas, views, or visual character.

(b) Light and Glare

The geographic context for the analysis of cumulative impacts related to light and glare would include the cumulative development projects located in such a position so as to create potential light and glare impacts at the same properties as the Project. As noted previously, the closest cumulative project to the Project Site is located approximately 0.2 mile to the north at the intersection of Date Avenue and Commonwealth Avenue, which is too far away to be considered a contributor to a cumulative light and glare impact with the Project. However, from a more general standpoint, development of the Project in combination with the cumulative projects would result in an intensification of land uses in an already urbanized area of the City that currently maintains an elevated level of ambient light and glare. Due to its scale in relation to existing development in the area, light generated from the interior of the Project could potentially be seen from

more distant areas around the Project Site. As such, the Project and cumulative projects would contribute to ambient light levels within the surrounding area. However, as discussed above, this is an urbanized area and the presence of additional nighttime illumination resulting from the proposed developments would not represent an alteration to the existing nighttime visual environment. Additionally, the potential increase in nighttime light resulting from the Project would not be bright enough to substantially affect nearby sensitive uses, which include mostly residential land uses to the south across Mission Road and the railroad trench. Therefore, although development of the Project in combination with these cumulative projects would result in a general intensification of land uses in an already urbanized area of the City, the cumulative projects would not combine with the Project to generate a significant cumulative impact with respect to light or glare.

(c) Cumulative Impact Conclusion

Considering the analysis above concerning the Project's contribution to cumulative levels of light or glare and changes to views and/or the existing visual character of the Project Site and its surroundings, the Project would not make a considerable contribution to the cumulative aesthetic impacts resulting from proposed development within the area and impacts would be **less than significant**.

(2) Mitigation Measures

No significant cumulative impacts related to aesthetics have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative aesthetics impacts would be less than significant.

IV. Environmental Impact Analysis

C. Air Quality

1. Introduction

This section examines the direct and indirect air quality impacts of the Project. Both short-term construction emissions occurring from activities, such as grading and haul truck trips, as well as long-term effects related to the ongoing operation of the Project are discussed in this section. The analysis focuses on air pollution from two perspectives: daily emissions and pollutant concentrations.[1] "Emissions" refer to the actual quantity of pollutant measured in pounds per day (ppd). "Concentrations" refer to the amount of pollutant material per volumetric unit of air and are measured in parts per million (ppm), parts per billion (ppb), or micrograms per cubic meter ($\mu g/m^3$).

The potential for the Project to conflict with or obstruct implementation of the applicable air quality plan, to result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment, to expose sensitive receptors to substantial pollutant concentrations, or to result in other emissions (such as those leading to odors) adversely affecting a substantial number of people are also discussed. Air quality data generated for this analysis and utilized in the preparation of this section is included as **Appendix D** of the Draft EIR.

2. Environmental Setting

a) Pollutants and Effects

(1) Criteria Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards for outdoor concentrations. The federal and state standards have been set at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. The criteria air pollutants that are most relevant to current air quality planning and regulation include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), respirable particulate matter (PM_{10}), fine

[1] *Note that while this section does discuss air pollutant concentrations, the following analysis does not estimate Project specific pollutant concentrations and instead relies on the mass daily emission estimates for the significance determinations.*

particulate matter ($PM_{2.5}$), sulfur dioxide (SO_2), and lead (Pb). The characteristics of each of these pollutants are briefly described below.

- Ozone (O_3) is a highly reactive and unstable gas that is formed when reactive organic gases (ROGs), sometimes referred to as volatile organic compounds (VOC), and nitrogen oxides (NO_x), byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. VOCs are organic compounds that can evaporate into an organic gas. VOCs can either be reactive or non-reactive. VOC emissions often result from the evaporation of solvents in architectural coatings. ROGs are organic gases that undergo a photochemical reaction, thus are reactive. ROG emissions are generated from the exhaust of mobile sources. Both VOCs and ROGs are precursors to O_3 and the terms can be used interchangeably. O_3 is not a primary pollutant; rather, it is a secondary pollutant formed by complex interactions of these two pollutants directly emitted into the atmosphere. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant. Short-term exposure (lasting for a few hours) to O_3 at levels typically observed in southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes.

- Carbon Monoxide (CO) is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike O_3, motor vehicles operating at slow speeds are the primary source of CO. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections. CO is a health concern because it competes with oxygen, often replacing it in the blood and reducing the blood's ability to transport oxygen to vital organs. Excess CO exposure can lead to dizziness, fatigue, and impair central nervous system functions.

- Nitrogen Dioxide (NO_2) is a nitrogen oxide compound that is produced by the combustion of fossil fuels, such as in internal combustion engines (both gasoline and diesel powered), as well as point sources, especially power plants. NO_2 is not directly emitted into the atmosphere, but is formed by an atmospheric chemical reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO_2 are collectively referred to as NO_x and are major contributors to O_3 formation. Of the seven types of NO_x compounds, NO_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy

traffic may be exposed to higher concentrations of NO_2 than those indicated by regional monitors. High concentrations of NO_2 can cause breathing difficulties and result in a brownish-red cast to the atmosphere with reduced visibility. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase of bronchitis in children (2 to 3 years old) has been observed at concentrations below 0.3 ppm.

- Particulate Matter (PM) consists of small liquid and solid particles floating in the air, including smoke, soot, dust, salts, acids, and metals and can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. Fine particulate matter, or $PM_{2.5}$, is roughly 1/28 the diameter of a human hair and results from fuel combustion (e.g. motor vehicles, power generation, industrial facilities), residential fireplaces, and wood stoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as SO_2, NO_x, and VOC. Inhalable particulate matter, or PM_{10}, is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

  $PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, they can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances, such as lead, sulfates, and nitrates can cause lung damage directly. These substances can be absorbed into the blood stream and cause damage elsewhere in the body. These substances can transport absorbed gases, such as chlorides or ammonium, into the lungs and cause injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle, as well as produce haze and reduce regional visibility.

- Sulfur Dioxide (SO_2) is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms sulfates (SO_4). Collectively, these pollutants are referred to as sulfur oxides (SO_x). Generally, the highest levels of SO_2 are found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary

source emissions of SO_2 and limits on the sulfur content of fuels. SO_2 is an irritant gas that attacks the throat and lungs. It can cause acute respiratory symptoms and diminished ventilator function in children. SO_2 can also yellow plant leaves and erode iron and steel.

- Lead (Pb) occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne Pb. The use of leaded gasoline is no longer permitted for on-road motor vehicles, so the majority of such combustion emissions are associated with off-road vehicles, such as racecars. However, because leaded gasoline was emitted in large amounts from vehicles when leaded gasoline was used for on-road motor vehicles, Pb is present in many urban soils and can be re-suspended in the air. Other sources of Pb include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and the use of secondary lead smelters.

  Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth.

The health effects of criteria pollutants (i.e., O_3, CO, PM_{10} and $PM_{2.5}$, NO_2, SO_2, and Pb) are summarized in Table IV.C-1.

Table IV.C-1
Summary of Health Effects of Criteria Pollutants

Pollutants	Primary Health and Welfare Effects
Ozone (O_3)	• Respiratory Effects • Cardiovascular Effects • Central Nervous System Effects • Effects on Liver and Xenobiotic Metabolism • Effects on Cutaneous and Ocular Tissues • Mortality • Reproductive and Developmental Effects • Cancer
Carbon Monoxide (CO)	• Cardiovascular Morbidity • Central Nervous System Effects • Respiratory Morbidity • Mortality • Birth Outcomes and Developmental Effects
Nitrogen Dioxide (NO_2)	• Respiratory Effects • Cardiovascular and Related Metabolic Effects • Mortality • Reproductive and Developmental Effects • Cancer
Respirable and Fine Particulate Matter (PM_{10} and $PM_{2.5}$)	• Cardiovascular Effects • Respiratory Effects • Mortality • Reproductive and Developmental Effects
Sulfur Dioxide (SO_2)	• Respiratory Morbidity • Cardiovascular Morbidity • Mortality • Carcinogenic Effects • Prenatal and Neonatal Outcomes • Mortality
Lead (Pb)	• Nervous System Effects • Cardiovascular Effects • Renal Effects • Immune System Effects • Hematologic Effects • Reproductive and Developmental Effects • Cancer
Source: South Coast Air Quality Management District, Air Quality Management Plan Appendix I website: https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/appendix-i.pdf?sfvrsn=14, accessed: August 2019.	

(2) Toxic Air Contaminants

There are also pollutants of concern for which there are no health-based standards. Toxic Air Contaminants (TACs) refer to a diverse group of air pollutants that are capable of causing chronic (i.e., of long duration) and acute (i.e., severe but of short duration) adverse effects on human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. TACs are different than "criteria" pollutants in that ambient air quality standards have not been established for them, largely because there are hundreds of air toxics and their effects on health tend to be felt on a local scale rather than on a regional basis. TACs include over 700 chemical compounds that are identified by State and federal agencies based on a review of available scientific evidence. In California, TACs are identified through a two-step process established in 1983 that includes risk identification and risk management.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about two-thirds of the cancer risk from TACs (based on the statewide average). According to the California Air Resources Board (CARB), diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the State's Proposition 65 or under the federal Hazardous Air Pollutants programs. The United States Environmental Protection Agency (U.S. EPA) has adopted Ultra Low Sulfur Diesel (ULSD) fuel standards that went into effect in June 2006 in an effort to reduce diesel particulate matter substantially. As of June 1, 2006, refiners and importers nationwide have been required by the U.S. EPA to ensure that at least 80 percent of the volume of the highway diesel fuel they produce or import would be ULSD-compliant. As of December 10, 2010, only ULSD fuel was available for highway use nationwide. In California, which was an early adopter of ULSD fuel and engine technologies, 100 percent of the diesel fuel sold – downstream from refineries, up to and including fuel terminals that store diesel fuel – was ULSD fuel since July 15, 2006. Since September 1, 2006, all diesel fuel offered for sale at retail outlets in California has been ULSD fuel.

b) Regulatory Framework

(1) Federal

Air quality in the United States is governed by the Federal Clean Air Act (CAA). At the federal level, the CAA is administered by the U.S. EPA. The U.S. EPA is also responsible for establishing the National Ambient Air Quality Standards (NAAQS). The NAAQS are

required under the 1977 CAA and subsequent amendments. The U.S. EPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. It has jurisdiction over emission sources outside state waters (e.g., beyond the outer continental shelf) and establishes emission standards, including those for vehicles sold in states other than California, where automobiles must meet stricter emission standards set by the state.

As required by the CAA, the NAAQS have been established for seven major air pollutants: CO, NO_2, O_3, $PM_{2.5}$, PM_{10}, SO_2, and Pb. The CAA requires the U.S. EPA to designate areas as attainment, non-attainment, or maintenance for each criteria pollutant based on whether the NAAQS have been achieved. The U.S. EPA has classified the Los Angeles County portion of the South Coast Air Basin (Basin) as non-attainment for O_3, $PM_{2.5}$, and Pb, attainment for PM_{10}, and attainment/unclassified for CO and NO_2. As part of its enforcement responsibilities, the U.S. EPA requires each state with non-attainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs within the timeframe identified in the SIP.

(2) State

In addition to being subject to the requirements of the CAA, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). In California, the CCAA is administered by CARB at the state level and by the Air Quality Management Districts at the regional and local levels. The CCAA requires all areas of the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practicable date. The CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and State air pollution control programs within California. In this capacity, the CARB conducts research, sets the CAAQS, compiles emission inventories, develops suggested control measures, provides oversight of local programs, and prepares the SIP. The CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hair spray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. The CCAA, as amended in 1992, requires all air districts in the state to achieve and maintain the CAAQS, which are generally more stringent than the federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

The CCAA requires CARB to designate areas within California as either attainment or non-attainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as non-attainment for a pollutant if air

quality data shows that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a state standard and are not used as a basis for designating areas as non-attainment.

Under the CCAA, the Los Angeles County portion of the Basin is designated as a non-attainment area for O_3, $PM_{2.5}$, and PM_{10}, and is designated as an attainment area for CO, NO_2, Pb and SO_2.[2]

(3) Regional and Local

(a) South Coast Air Quality Management District

The 1977 Lewis Air Quality Management Act merged four air pollution control districts to create the South Coast Air Quality Management District (SCAQMD) to coordinate air quality planning efforts throughout Orange County and portions of Los Angeles, Riverside, and San Bernardino Counties. It is responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain state and federal ambient air quality standards. Programs include air quality rules and regulations that regulate stationary sources, area sources, point sources, and certain mobile source emissions. The SCAQMD is also responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases.

The SCAQMD monitors air quality over its jurisdiction of 10,743 square miles, including the Basin, which covers 6,745 square miles and is bounded by the Pacific Ocean to the west, the San Gabriel, San Bernardino and San Jacinto mountains to the north and east, and San Diego County to the south. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The SCAQMD also regulates the Riverside County portion of the Salton Sea Air Basin and Mojave Desert Air Basin.

All areas designated as non-attainment under the CCAA are required to prepare plans showing how they will meet the air quality standards. The SCAQMD regularly prepares an Air Quality Management Plan (AQMP) to address CAA and CCAA requirements by identifying policies and control measures. On March 3, 2017, the SCAQMD adopted the 2016 AQMP, which includes strategies to meet the NAAQS for the 8-hour ozone standard by 2032, the annual $PM_{2.5}$ standard by 2021-2025, the 1-hour ozone standard by 2023, and the 24-hour $PM_{2.5}$ standard by 2019.

[2] *CARB, Area Designation Maps, available at http://www.arb.ca.gov/desig/adm/adm.htm, accessed August 2019.*

The Southern California Association of Governments (SCAG) assists in air quality planning efforts by preparing the transportation portion of the AQMP through the adoption of its Regional Transportation Plan (RTP). This includes the preparation of a Sustainable Communities Strategy (SCS) that responds to planning requirements of Senate Bill (SB) 375 and demonstrates the region's ability to attain greenhouse gas reduction targets set forth in State law. In April 2016, SCAG adopted its 2016-2040 RTP/SCS, a plan to invest $556.5 billion in transportation systems over a six-county region.

The future air quality levels projected in the 2016 AQMP are based on several assumptions. For example, the SCAQMD assumes that general new development within the Basin will occur in accordance with population growth and transportation projections identified by SCAG in the RTP/SCS. The 2016 AQMP also assumes that general development projects will include strategies to reduce emissions generated during construction and operation in accordance with SCAQMD and local jurisdiction regulations which are designed to address air quality impacts and pollution control measures.

Although SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate the air quality issues associated with plans and new development projects within its jurisdiction. Instead, SCAQMD has used its expertise and prepared the *CEQA Air Quality Handbook* and newer thresholds of significance to indirectly address these issues in accordance with the projections and programs of the AQMPs. The purpose of the *CEQA Air Quality Handbook* and newer thresholds of significance is to assist lead agencies, as well as consultants, project proponents, and other interested parties, in evaluating potential air quality impacts of projects and plans proposed in the Basin.

(b) City of Alhambra

Local jurisdictions, such as the City of Alhambra, have the authority and responsibility to reduce air pollution through their police power and decision-making authority. Specifically, the City is responsible for the assessment and mitigation of air pollutant emissions resulting from its land use decisions. The City is also responsible for the implementation of transportation control measures as outlined in the AQMP. Examples of such measures include bus turnouts, energy-efficient streetlights, and synchronized traffic signals.

The City recently adopted an updated General Plan in August 2019. The updated General Plan was designed to help manage growth expectations of the City for the next 20 years through the year 2040. By providing updated goals and policies, the General Plan will help guide development of the City. The General Plan is intended to allow land use and policy determinations to be made within a comprehensive framework that incorporates public health, safety, and qualities of life considerations. The General Plan consists of seven elements, including a Resources Element which addresses air quality goals and

policies. With regard to air quality, the General Plan's Resources Chapter would establish the following goals and policies:

Goal R-3: Minimization of energy use and its associated impacts to air quality and climate change.

- **Policy R-3A** Work with energy providers to ensure adequate, dependable energy supplies to support existing and future land uses.
- **Policy R-3B** Encourage the use of energy saving designs, systems, and innovations in public and private building construction.
- **Policy R-3C** Promote using renewable energy, such as solar panels and biomethane.

Goal R-4: Minimization of Alhambra's contribution to regional air pollution and local exposure to elevated air pollution concentrations.

- **Policy R-4A** Coordinate as appropriate with SCAQMD to ensure compliance with applicable emissions standards.
- **Policy R-4B** Through land use decisions, minimize to the degree feasible the generation of air pollution and exposure of sensitive populations to elevated air pollution concentrations.
- **Policy R-4C** Use SCAQMD recommended methodologies to analyze and mitigate the air quality impacts of individual development projects.

In accordance with CEQA requirements and the CEQA review process, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation. The City uses the SCAQMD *CEQA Air Quality Handbook* as the guidance document for the environmental review of plans and development proposals within its jurisdiction. The City does not, however, have the specific technical expertise to develop plans, programs, procedures, and methodologies to ensure that air quality within the county and region will meet federal and State standards. Instead, the City relies upon the expertise of the SCAQMD, uses the *CEQA Air Quality Handbook*, and SCAQMD-recommended thresholds of significance as the guidance for the environmental review of plans and development proposals.

c) Existing Conditions

(1) Air Pollutant Climatology

The Project Site is located within the Los Angeles County non-desert portion of the Basin. The Basin is in an area of high air pollution potential due to its climate and topography. The region lies in the semi-permanent high pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The Basin experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The Basin is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the west and high mountains around the rest of its perimeter. The mountains and hills within the area contribute to the variation of rainfall, temperature, and winds throughout the region.

The Basin experiences frequent temperature inversions that contribute to the formation of smog. While temperature typically decreases with height, it actually increases under inversion conditions as altitude increases, thereby preventing air close to the ground from mixing with the air above. As a result, air pollutants are trapped near the ground. During the summer, air quality problems are created due to the interaction between the ocean surface and the lower layer of the atmosphere. This interaction creates a moist marine layer. An upper layer of warm air mass forms over the cool marine layer, preventing air pollutants from dispersing upward. Additionally, hydrocarbons and NO_2 react under strong sunlight, creating smog. Light daytime winds, predominantly from the west, further aggravate the condition by driving air pollutants inland toward the mountains.

Air quality problems also occur during the fall and winter, when CO and NO_2 emissions tend to be higher. CO concentrations are generally worse in the morning and late evening (around 10:00 p.m.) when temperatures are cooler. High CO levels during the late evenings result from stagnant atmospheric conditions trapping CO. Since CO emissions are produced almost entirely from automobiles; the highest CO concentrations in the Basin are associated with heavy traffic. NO_2 concentrations are also generally higher during fall and winter days.

Air pollutant emissions within the Basin are generated by area, energy, and mobile sources. Area sources are widely distributed and produce many small emissions. Examples of area sources include residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and consumer products, such as barbeque lighter fluid and hair spray. Energy sources are emissions from activities that consume energy in the form of natural gas and electricity. Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, race cars, and self-propelled

construction equipment. Air pollutants can also be generated by the natural environment, such as when fine dust particles are pulled off the ground surface and suspended in the air during high winds.

Ambient air quality is determined primarily by the type and amount of pollutants emitted into the atmosphere, as well as the size, topography, and meteorological conditions of a geographic area. The Basin has low mixing heights and light winds, which help to accumulate air pollutants. Exhaust emissions from mobile sources generate the majority of ROG, CO, NO_x, and SO_x both in the Basin generally and specifically the Los Angeles County portion of the Basin. Area-wide sources generate the most airborne particulates (i.e., PM_{10} and $PM_{2.5}$) in both the Basin and Los Angeles County. Measurements of ambient concentrations of the criteria pollutants are used by the U.S. EPA and the CARB to assess and classify the air quality of each air basin, county, or, in some cases, a specific urbanized area. The classification is determined by comparing actual monitoring data with national and State standards. If a pollutant concentration in an area is lower than the standard, the area is classified as being in "attainment." If the pollutant exceeds the standard, the area is classified as a "non-attainment" area. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated "unclassified."

The U.S. EPA and the CARB use different standards for determining whether the Basin is in attainment. Federal and State standards are summarized in Table IV.C-2. The attainment status for the Los Angeles County portion of the Basin with regard to the NAAQS and CAAQS is shown in Table IV.C-3.

Table IV.C-2
Ambient Air Quality Standards

Air Pollutant	Averaging Time	State Standard	Federal Standard
Ozone (O_3)	1 Hour	0.09 ppm	--
	8 Hour	0.07 ppm	0.07 ppm
Carbon Monoxide (CO)	1 Hour	20.0 ppm	35.0 ppm
	8 Hour	9.0 ppm	9.0 ppm
Nitrogen Dioxide (NO_2)	1 Hour	180 ppb	100 ppb
	Annual	30 ppb	53 ppb
Sulfur Dioxide (SO_2)	1 Hour	250 ppb	75 ppb
	24 Hour	40 ppb	--
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m^3	150 µg/m^3
	Annual	20 µg/m^3	--
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	--	35 µg/m^3
	Annual Arithmetic Mean	12 µg/m^3	12 µg/m^3 (primary) 15 µg/m^3 (secondary)
Lead	30 Day Average	1.5 µg/m^3	--
	Rolling 3-Month Average	--	0.15 µg/m^3
Sulfates	24 Hour	25 µg/m^3	--

Notes:
ppm = parts per million
ppb = parts per billion
µg/m^3 = microgram per cubic meter
Source: South Coast Air Quality Management District, Air Quality Management Plan Appendix II website: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/appendix-ii.pdf?sfvrsn=4, accessed: December 2018.

Table IV.C-3
Attainment Status for the South Coast Air Basin

Pollutant	Attainment Status	
	NAAQS	CAAQS
Ozone (1-Hour)	Non-Attainment (Extreme)	Non-Attainment
Ozone (8-Hour)	Pending – Expect Non-Attainment (Extreme)	Non-Attainment
Carbon Monoxide (1- & 8-hour)	Attainment (Maintenance)	Attainment
Nitrogen Dioxide (1-Hour)	Unclassifiable/Attainment	Attainment
Nitrogen Dioxide (Annual)	Attainment (Maintenance)	Attainment
Sulfur Dioxide (1-Hour)	Designations Pending (expect Unclassified/Attainment)	Attainment
Sulfur Dioxide (24-Hour & Annual)	Unclassified/Attainment	Attainment
PM_{10} (24-Hour)	Attainment (Maintenance)	Non-Attainment
PM_{10} (Annual)	N/A	Non-Attainment
$PM_{2.5}$ (24-Hour)	Non-Attainment (Serious)	N/A
$PM_{2.5}$ (Annual)	Non-Attainment (Moderate)	Non-Attainment
Lead	Non-Attainment (Partial)	Attainment

Source: SCAQMD, Air Quality Management Plan Appendix II website: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/appendix-ii.pdf?sfvrsn=4, accessed: December 2018.

(2) Air Monitoring Data for Project Vicinity

The SCAQMD divides the Basin into 38 source receptor areas (SRAs), wherein 38 monitoring stations operate to monitor the various concentrations of air pollutants in the region. The Project Site is located within SRA 8 covering the West San Gabriel Valley area. SCAQMD Station No. 088 collects ambient air quality data for SRA 8. As of data year 2016, this station monitors emission levels of O_3, CO, NO_2, and $PM_{2.5}$. As this station does not currently monitor for PM_{10}, SO_2, sulfates, and Pb, ambient air quality data for these pollutants is based on data from neighboring SRA 1 which covers the Central Los Angeles area (SCAQMD Station No. 087). Table IV.C-4 identifies the federal and State ambient air quality standards for the relevant air pollutants, along with the ambient pollutant concentrations that were measured in SRA 8 and SRA 1 between 2015 and 2017.[3]

According to the air quality data from SCAQMD Station No. 088 shown in Table IV.C-4, the previous national 1-hour ozone standard was exceeded three times between 2015 and 2017 and the State 1-hour ozone standard was exceeded 42 days between 2015 and 2017. The national 8-hour ozone standard was exceeded on 72 days from 2015 to

[3] *Most current air quality data available.*

2017 and the State 8-hour ozone standard was exceeded on 73 days during that time period. The State 24-hour PM_{10} standard was exceeded 85 days from 2015 to 2017. For $PM_{2.5}$, the national 24-hour standard was exceeded on one day from 2015 to 2017. No national or State standards for CO, NO_2, SO_2, sulfates, or lead were exceeded from 2015 to 2017.

Table IV.C-4
Summary of Ambient Air Quality in the Project Vicinity

Air Pollutants Monitored Within SRA 8 (West San Gabriel Valley Area)	Year		
	2015	2016	2017
Ozone (O_3)			
Maximum 1-hour concentration measured	0.111 ppm	0.126 ppm	0.139 ppm
Number of days exceeding previous national 0.124 ppm 1-hour standard	0	1	2
Number of days exceeding State 0.09 ppm 1-hour standard	12	12	18
Maximum 8-hour concentration measured	0.084 ppm	0.090 ppm	0.100 ppm
Number of days exceeding national 0.07 ppm 8-hour standard	18	18	36
Number of days exceeding State 0.07 ppm 8-hour standard	18	19	36
Carbon Monoxide (CO)			
Maximum 1-hour concentration measured	2.6	1.5	2.2
Days exceeding national 35.0 ppm 1-hour standard	0	0	0
Days exceeding State 20.0 ppm 1-hour standard	0	0	0
Maximum 8-hour concentration measured	1.6 ppm	1.0 ppm	1.7 ppm
Number of days exceeding national 9.0 ppm 8-hour standard	0	0	0
Number of days exceeding State 9.0 ppm 8-hour standard	0	0	0
Nitrogen Dioxide (NO_2)			
Maximum 1-hour concentration measured	74.9 ppb	71.9 ppb	72.3 ppb
Number of days exceeding State 180 ppb 1-hour standard	0	0	0
Annual average	15.3 ppb	15.4 ppb	15.3 ppb
Does measured annual average exceed national 100 ppb annual average standard?	No	No	No
Does measured annual average exceed State 30 ppb annual average standard?	No	No	No
Fine Particulates ($PM_{2.5}$)			
Maximum 24-hour concentration measured	48.5 µg/m^3	29.21 µg/m^3	22.8 µg/m^3
Number of days exceeding national 35.0 µg/m^3 24-hour standard	1	0	0
Annual Arithmetic Mean (AAM)	9.57 µg/m^3	9.59 µg/m^3	9.68 µg/m^3
Does measured AAM exceed national 15 µg/m^3 AAM standard?	No	No	No
Does measured AAM exceed State 12 µg/m^3 AAM standard?	No	No	No

Table IV.C-4
Summary of Ambient Air Quality in the Project Vicinity

Air Pollutants Monitored Within SRA 8 (West San Gabriel Valley Area)	Year		
	2015	2016	2017
Air Pollutants Monitored Within SRA 1 - Central Los Angeles (SCAQMD Station No. 087)			
Suspended Particulates (PM_{10})			
Maximum 24-hour concentration measured	88.0 µg/m^3	67.0 µg/m^3	96.0 µg/m^3
Number of days exceeding national 150 µg/m^3 24-hour standard	0	0	0
Number of days exceeding State 50 µg/m^3 24-hour standard	26	18	41
Annual Arithmetic Mean (AAM)	33.1 µg/m^3	32.4 µg/m^3	34.4 µg/m^3
Does measured AAM exceed national 150 µg/m^3 AAM standard?	No	No	No
Does measured AAM exceed State 20 µg/m^3 AAM standard?	Yes	Yes	Yes
Sulfur Dioxide (SO_2)			
Maximum 1-hour concentration measured	12.6 ppb	13.4 ppb	5.7 ppb
Number of days exceeding national 75 ppb 1-hour standard	0	0	0
Number of days exceeding state 40 ppb 24-hour standard	0	0	0
Sulfates			
Maximum 24-hour concentration measured	6.1 µg/m^3	5.8 µg/m^3	5.1 µg/m^3
Number of days exceeding state 25 µg/m^3 24-hour standard	0	0	0
Lead			
Maximum monthly average concentration measured	0.01 µg/m^3	0.02 µg/m^3	0.017 µg/m^3
Number of days exceeding state 1.5 µg/m^3 30 day standard	0	0	0
Maximum 3-month rolling average measured	0.01 µg/m^3	0.01 µg/m^3	0.01 µg/m^3
Number of days exceeding national 0.15 µg/m^3 3-month rolling average standard	0	0	0

ppm = parts by volume per million of air
ppb = parts by volume per billion of air
µg/m^3=micrograms per cubic meter
n/a = data not available or not collected by the District
Source: SCAQMD Historical Data by Year, website: https://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year, accessed: June 2019.

(3) Toxic Air Pollution

According to the SCAQMD's Multiple Air Toxics Exposure Study IV (MATES IV), the incidence of cancer over a lifetime in the US population is about 1 in 3, which translates into a risk of about 300,000 in 1 million. One study, the *Harvard Report on Cancer Prevention*, estimated that, of cancers associated with known risk factors, about 30 percent were related to tobacco, 30 percent were related to diet and obesity, and about two percent were associated with environmental pollution related exposures. The potential cancer risk for a given substance is expressed as the incremental number of

potential excess cancer cases per million people over a 70-year lifetime exposure at a constant annual average pollutant concentration. The risks are usually presented in chances per million. For example, if the cancer risks were estimated to be 100 per million, this would predict an additional 100 excess cases of cancer in a population of 1 million people over a 70-year lifetime.

In late 1997, the SCAQMD undertook a series of air toxics studies (i.e., MATES studies) for the Basin, the most recent of which is the MATES IV study, adopted in May 2015. The MATES IV study was based on monitored data throughout the Basin and included a monitoring program, an updated emissions inventory of TACs, and a modeling effort to characterize carcinogenic risk across the Basin from exposure to TACs. The study concluded that the average of the modeled air toxics concentrations measured at monitoring stations in the Basin equates to a background cancer risk of approximately 897 in one million primarily due to diesel exhaust particulate matter (DPM). The Project Site itself has an estimated ambient background risk of over 1,200 in one million.[4]

Using the MATES IV methodology, about 94 percent of cancer risk is attributed to emissions associated with mobile sources, and about six percent of risk is attributed to toxics emitted from stationary sources, (e.g., industries, dry cleaners and chrome plating operations). The MATES IV study found lower ambient concentrations of most of the measured air toxics, as compared to the levels measured in the previous MATES III study finalized in September 2008.

(4) Existing Project Site Emissions

Under the proposed Project, approximately 104,242 square feet of existing industrial and office uses on the Project Site would be demolished or repurposed. Though some of the existing uses to be removed are not currently operational, the Project involves repurposing approximately 10,145 square feet of operational office space into residential amenity space. Consistent with the Project's Traffic Impact Analysis (see **Appendix E** of the Draft EIR), this analysis accounts for the emissions currently generated by the 10,145 square feet of office space to be repurposed. Moreover, mobile emissions were analyzed with the weekday trip generation calculations detailed within the Traffic Impact Analysis. The average daily emissions generated by the existing office space to be repurposed have been estimated utilizing the California Emissions Estimator Model (CalEEMod) 2016.3.2 recommended by the SCAQMD and are summarized in Table IV.C-5.

[4] *South Coast Air Quality Management District, MATES IV Carcinogenic Risk Interactive Map, http://www3.aqmd.gov/webappl/OI.Web/OI.aspx?jurisdictionID=AQMD.gov&shareID=73f55d6b-82cc-4c41-b779-4c48c9a8b15b, accessed June 24, 2019.*

Table IV.C-5
Existing Daily Operational Emissions at Project Site

Emissions Source	Emissions in Pounds per Day					
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Summertime (Smog Season) Emissions						
Area Sources	0.23	<0.01	<0.01	0.00	0.00	0.00
Energy Demand	<0.01	0.03	0.03	<0.01	<0.01	<0.01
Mobile (Motor Vehicles)	0.28	1.22	3.73	0.01	0.78	0.22
Total Existing Emissions	**0.51**	**1.26**	**3.76**	**0.01**	**0.78**	**0.22**
Wintertime (Non-Smog Season) Emissions						
Area Sources	0.23	<0.01	<0.01	0.00	0.00	0.00
Energy Demand	<0.01	0.03	0.03	<0.01	<0.01	<0.01
Mobile (Motor Vehicles)	0.27	1.26	3.56	0.01	0.78	0.22
Total Existing Emissions	**0.50**	**1.29**	**3.59**	**0.01**	**0.78**	**0.22**

Calculation data provided in Appendix D of the Draft EIR. Column totals may not add due to rounding from the model results.

(5) Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. CARB has identified the following typical groups who are most likely to be affected by air pollution: children under 14 years of age; the elderly over 65 years of age; athletes; and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

The Project Site is located within a neighborhood largely made up of office, retail, and light industrial land uses. The nearest sensitive receptors to the Project Site are the single-family residences located adjacent to Front Street, approximately 220 feet south of the Project Site and across both Mission Road and the Union Pacific Railroad corridor.

3. Project Impacts

a) Methodology

This analysis focuses on the nature and magnitude of the change in the air quality environment due to implementation of the Project. Air pollutant emissions associated with the Project would result from Project operations and vehicle travel induced by the Project. Construction activities would also generate air pollutant emissions at the Project Site and on roadways resulting from construction traffic. The net increase in Project Site emissions generated by these activities and other secondary sources (including but not limited to

landscaping equipment, cleaning supplies, consumer products, and the reapplication of architectural coatings) have been quantitatively estimated and compared to thresholds of significance recommended by SCAQMD. All data used in this section has been included as **Appendix D** of the Draft EIR.

(1) Construction

The regional construction emissions associated with the Project were calculated using CalEEMod 2016.3.2 as recommended by the SCAQMD. CalEEMod was developed in collaboration with the air districts of California as a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. Construction activities associated with demolition, site preparation, grading/excavation, and building construction would generate pollutant emissions. Specifically, these construction activities would temporarily create emissions of dusts, fumes, equipment exhaust, and other air contaminants. These construction emissions were compared to the regional thresholds established by the SCAQMD.

In addition to the SCAQMD's regional significance thresholds, the SCAQMD has established localized significance criteria in the form of ambient air quality standards for criteria pollutants. To minimize the need for detailed air quality modeling to assess localized impacts, SCAQMD developed mass-based localized significance thresholds (LSTs) that are the amount of pounds of emissions per day that can be generated by a project that would cause or contribute to adverse localized air quality impacts.

These LSTs, which are found in the mass rate look-up tables in the "Final Localized Significance Threshold Methodology" document prepared by SCAQMD,[5] apply to daily construction areas that are less than or equal to five acres in size and are only applicable to the following criteria pollutants: NO_x, CO, PM_{10}, and $PM_{2.5}$. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards, and are developed based on the ambient concentrations of that pollutant for each SRA. Although the Project Site is significantly larger than five acres, the use of the LST methodology represents a conservative approach which illustrates that, despite the larger Project Site, the emissions generated by the Project would be below localized thresholds aimed at much smaller sites. Additionally, the LSTs for grading are based on the amount of acreage the construction equipment can cover in a day.

[5] *SCAQMD, Final Localized Significance Threshold Methodology, June 2003, Revised July 2008.*

In terms of NO_x emissions, the two principal species of NO_x are nitric oxide (NO) and NO_2, with the vast majority (95 percent) of the NO_x emissions being comprised of NO. However, because adverse health effects are associated with NO_2, the analysis of localized air quality impacts associated with NOx emissions is focused on NO_2 levels. NO is converted to NO_2 by several processes, the two most important of which are (1) the reaction of NO with ozone and (2) the photochemical reaction of NO with hydrocarbons.

For PM_{10} LSTs, the thresholds were derived based on requirements in SCAQMD Rule 403 — Fugitive Dust. For $PM_{2.5}$ LSTs, the thresholds were derived based on a general ratio of $PM_{2.5}$ to PM_{10} for both fugitive dust and combustion emissions. As described in more detail below, the resulting on-site construction emissions generated for each construction phase were analyzed against the applicable LST for each phase.

Thus, according to SCAQMD, the LSTs for PM_{10} and $PM_{2.5}$, which are based on a 24-hour averaging period, would be appropriate to evaluate the localized air quality impacts of a project on nearby sensitive receptors. Additionally, since nearby sensitive receptors are considered to remain close to the Project Site for 24 hours, LSTs based on shorter averaging times, such as the one-hour NO_2 or the one-hour and eight-hour CO ambient air quality standards, would also apply when evaluating localized air quality impacts on sensitive receptors. However, LSTs based on shorter averaging periods, such as the NO_2 and CO LSTs, are applied to receptors such as industrial or commercial facilities since it is reasonable to assume that workers at these sites could be present for periods of one to eight hours.[6] Therefore, this analysis evaluates localized air quality impacts from construction activities associated with the Project on sensitive receptors for NO_2, CO, PM_{10}, and $PM_{2.5}$, and on "non-sensitive" receptors (e.g., industrial or commercial facilities) for NO_2 and CO.

(2) Operation

Emissions associated with Project operation were also calculated using CalEEMod 2016.3.2 and the information provided in the Traffic Impact Analysis prepared for the Project (see **Appendix E** of the Draft EIR). Specifically, mobile emissions were analyzed using the trip generation calculations detailed within the Traffic Impact Analysis which accounts for trip reductions due to drive ratio (i.e. residential trips completed by public transit, biking, or walking), and internal capture due to multiple land uses on the Project Site. Operational emissions associated with the Project would be comprised of mobile source emissions, energy demand, and other area source emissions. Mobile source emissions are generated by the increase in motor vehicle trips to and from the Project Site associated with operation of the Project. Area source emissions are generated by natural gas consumption for space and water heating, landscape maintenance

[6] *Ibid.*

equipment, reapplication of architectural coatings, and consumer products. To determine if a regional air quality impact would occur, the increase in emissions is compared with SCAQMD's recommended regional thresholds for operational emissions.

As discussed above, the SCAQMD has developed LSTs that are based on the amount of pounds of emissions per day that can be generated by a project that would cause or contribute to adverse localized air quality impacts. However, because the LST methodology is applicable to projects where emission sources occupy a fixed location (such as warehouse/transfer facilities),[7] LST methodology would typically not apply to the operational phase of the Project because the Project's emissions are primarily generated by mobile sources traveling on local roadways over potentially large distances or areas. As the Project would consist of residential uses, an operational analysis against the LST methodology is not applicable and, thus, has not been included in this analysis.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with the State CEQA Guidelines Appendix G (Appendix G), a project would normally be deemed to have a significant adverse environmental impact on air quality if it would result in any of the following:

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

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; or

c) Expose sensitive receptors to substantial pollutant concentrations; or

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

(2) SCAQMD's CEQA Air Quality Handbook

The SCAQMD's *CEQA Air Quality Handbook* and newer thresholds of significance provide direction on how to evaluate potential air quality impacts, how to determine whether these impacts are significant, and how to mitigate these impacts. SCAQMD intends that by providing this guidance, the air quality impacts of plans and development proposals will be analyzed accurately and consistently throughout the region, and

[7] *SCAQMD, Sample Construction Scenarios for Projects Less than Five Acres in Size, February 2005, page 1-3.*

adverse impacts will be minimized. To assist with addressing the Appendix G threshold questions and thresholds provided by the SCAQMD, the City uses the SCAQMD's *CEQA Air Quality Handbook* and the thresholds of significance below to guide the environmental review of projects under CEQA. Table IV.C-6 summarizes currently recommended thresholds that are intended to translate CEQA Guidelines thresholds into numerical values or performance standards.

(a) Construction Emissions

Based on guidance from the SCAQMD, a project could have a significant impact if the project would result in any of the following:

- Generation of daily regional construction emissions that exceed SCAQMD construction emissions thresholds for VOC, NO_x, CO, SO_x, $PM_{2.5}$, or PM_{10}, as presented in Table IV.C-6;

- Generation of on-site localized construction emissions that exceed SCAQMD LSTs that could exceed the most stringent ambient air quality standards for CO (20 ppm [23,000 µg/m^3] over a 1-hour period or 9.0 ppm [10,350 µg/m^3] averaged over an 8-hour period) and NO_2 (0.18 ppm [338.4 µg/m^3] over a 1-hour period, 0.1 ppm [188 µg/m^3] over a three-year average of the 98th percentile of the daily maximum 1-hour average, or 0.03 ppm [56.4 µg/m^3] average over an annual period);

- Generation of (maximum) on-site localized $PM_{2.5}$ or PM_{10} emissions during construction that exceed the applicable LSTs that could exceed ambient concentrations in the vicinity of the Project that exceed the incremental 24-hour threshold of 10.4 µg/m^3 or 1.0 µg/m^3 PM_{10} averaged over an annual period; or

- Generation of on-site localized construction emissions that exceed SCAQMD LSTs for CO, NO_2, $PM_{2.5}$ or PM_{10} for a project within a specific SRA. As stated previously, the Project is located within SRA 8. The appropriate LSTs for the Project are presented in Table IV.C-7.

Table IV.C-6
SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds[a]		
Pollutant	**Construction**	**Operation**
NO_x	100 pounds/day	55 pounds/day
VOC[b]	75 pounds/day	55 pounds/day
PM_{10}	150 pounds/day	150 pounds/day
$PM_{2.5}$	55 pounds/day	55 pounds/day
SO_x	150 pounds/day	150 pounds/day
CO	550 pounds/day	550 pounds/day
Lead	3 pounds/day	3 pounds/day
Toxic Air Contaminants and Odor Thresholds		
Toxic Air Contaminants (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality for Criteria Pollutants[c]		
NO_2 1-hour average Annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
PM_{10} 24-hour average Annual average	10.4 µg/m^3 (construction)[e] & 2.5 µg/m^3 (operation) 1.0 µg/m^3	
$PM_{2.5}$ 24-hour average	10.4 µg/m^3 (construction)[e] & 2.5 µg/m^3 (operation)	
Sulfate 24-hour average	25 µg/m^3 (state)	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Lead 30-day average Rolling 3-month average	1.5 µg/m^3 (state) 0.15 µg/m^3 (federal)	

Notes: ppm = parts per million by volume; µg/m^3 = micrograms per cubic meter

[a] *Source: SCAQMD CEQA Handbook (SCAQMD, 1993).*
[b] *The definition of VOC includes ROG compounds and additional organic compounds not included in the definition of ROG. However, for the purposes of this evaluation, VOC and ROG will be considered synonymous.*
[c] *Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, table A-2 unless otherwise stated.*
[e] *Ambient air quality threshold based on SCAQMD Rule 403.*

Source: SCAQMD CEQA Handbook (SCAQMD, 1993), SCAQMD Air Quality Significance Thresholds, website: http://aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2, revised April 2019 and accessed August 2019.

Table IV.C-7
SCAQMD SRA 8 Localized Significance Thresholds (LSTs)

Construction Phase [a]	Total On-Site Emissions (Pounds per Day)			
	NO_x [b]	CO	PM_{10}	$PM_{2.5}$
Grading	*124.85*	*1,649.77*	*30.85*	*7.69*
Demolition/Building Construction	*141.00*	*1921.00*	*37.00*	*9.00*

[a] Based on the Project's construction assumptions outlined below, the applicable LST for grading is 4.0 acres, and demolition and building construction is 5.0 acres. The localized thresholds for each phase are based on a receptor distance of 50 meters (164 feet) in SCAQMD's SRA 8. Where necessary, LST calculated per SCAQMD Linear Regression Methodology.
[b] The localized thresholds listed for NO_x in this table takes into consideration the gradual conversion of NO_x to NO_2, and are provided in the mass rate look-up tables in the "Final Localized Significance Threshold Methodology" document prepared by the SCAQMD.

(b) Operational Emissions

Based on SCAQMD guidance, a project could have a significant impact if the project would result in the following:

- Generation of daily regional operational emissions that exceed SCAQMD operational thresholds as presented in Table IV.C-6;
- Generation of daily localized operational emissions that exceed SCAQMD LSTs that could lead to exceedances near the Project Site of AAQS for CO (20 ppm over a 1-hour period or 9 ppm over an 8-hour period) and NO_2 (0.18 ppm over a 1-hour period, 0.1 ppm over a 3-year average of the 98th percentile of the daily maximum 1-hour average, or 0.03 ppm averaged over an annual period);
- Generation of (maximum) on-site localized $PM_{2.5}$ or PM_{10} emissions during operations that exceed the applicable LSTs that could exceed ambient concentrations in the vicinity of the Project of 2.5 $\mu g/m^3$ or 1.0 $\mu g/m^3$ PM_{10} averaged over an annual period;
- Causing or contributing to an exceedance of the California 1-hour or 8-hour CO standards of 20 ppm and 9.0 ppm, respectively; or
- Creating an odor nuisance pursuant to SCAQMD Rule 402.

(c) Toxic Air Contaminants

Based on the criteria set forth in the SCAQMD's *CEQA Air Quality Handbook*, a project may have a significant impact on toxic air pollution if the project emits carcinogenic or toxic air contaminants that exceed the maximum, incremental cancer risk listed in Table IV.C-6.

(d) Air Quality Plan Consistency

Section 15125 of the CEQA Guidelines requires an analysis of project consistency with applicable plans and policies, including plans applicable to air quality and attainment. The following criteria were used to evaluate the Project's consistency with the SCAQMD and SCAG AQMP:

- Criterion 1: Will the Project result in any of the following:
    - An increase in the frequency or severity of existing air quality violations;
    - Cause or contribute to new air quality violations; or
    - Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP?
- Criterion 2: Will the Project exceed the assumptions utilized in preparing the AQMP?
    - Is the Project consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based;
    - Does the Project include air quality mitigation measures; or
    - To what extent is Project development consistent with the AQMP land use policies?

In assessing impacts related to air quality in this section, the City will use Appendix G and the SCAQMD emissions thresholds shown in Table IV.C-6 as the thresholds of significance.

c) Project Design Features

The Project would incorporate various design features to support and promote environmental sustainability, as discussed in **Section IV.G, Greenhouse Gas Emissions**, of the Draft EIR. While these features are designed primarily to reduce GHG emissions, they would also serve to reduce the Project's criteria air pollutant emissions discussed herein. Additionally, the Project would implement the following Project Design Feature with relevance to air quality impacts during construction:

- **AQ-PDF-1**: As part of its compliance with SCAQMD Rule 403 - Fugitive Dust, the Project shall apply water to exposed earth areas 3 times per day during Project construction activities to prevent the generation of visible dust plumes.

d) Analysis of Project Impacts

Threshold a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

(1) Impact Analysis

(a) SCAQMD Air Quality Management Plan

The discussion below addresses the Project's consistency with applicable SCAQMD and SCAG policies, including the SCAQMD's 2016 AQMP and growth projections within the SCAG 2016–2040 RTP/SCS. In accordance with the procedures established in the SCAQMD's *CEQA Air Quality Handbook*, the following criteria are required to be addressed in order to determine the Project's consistency with applicable SCAQMD and SCAG policies:

- Criterion 1: Would the project result in any of the following:
    - An increase in the frequency or severity of existing air quality violations; or
    - Cause or contribute to new air quality violations; or
    - Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
- Criterion 2: Would the project exceed the assumptions utilized in preparing the AQMP?
    - Is the Project consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based;
    - Does the Project include air quality mitigation measures; or
    - To what extent is Project development consistent with the AQMP land use policies?

(i) Criterion 1

With respect to the first criterion, the proposed residential land use would neither conflict with the SCAQMD's 2016 AQMP nor jeopardize the region's long-term attainment of air quality standards.

As discussed in this section, the Project would not exceed the SCAQMD's screening thresholds for criteria pollutants (NO_2 as NO_x, CO, PM_{10} and $PM_{2.5}$) during either construction or operation, which are an indicator of potential exceedances of ambient air quality standards. Since VOCs are not a criteria pollutant, there is no ambient air quality

standard or localized threshold for them. The Project would, however, temporarily exceed SCAQMD significance thresholds for ROG during the period when construction work on Phase II overlaps with the operation of Phase I under Buildout Scenario 2. These exceedances would be limited to the periods of active construction work on Phase II and would disappear once Phase II becomes operational.

Because particulate matter is the primary pollutant of concern during the construction phase, the analysis evaluated PM_{10} and $PM_{2.5}$ emissions to assess potential effects on localized concentrations and determine if there is potential to cause an exceedance of ambient air quality standards. As shown in Tables IV.C-14 and IV.C-15 presented later in this section, increases in PM_{10} and $PM_{2.5}$ emissions would not exceed the SCAQMD's significance thresholds at sensitive receptors near the Project Site.

Similarly, construction emissions of CO would not exceed the SCAQMD's significance thresholds and would not impact the region's ability to meet ambient air quality standards. As with ROG, construction emissions of NO_x would be exceeded under Buildout Scenario 2 during the period when construction work on Phase II overlaps with the operation of Phase I. These exceedances would be limited to the periods of active construction work on Phase II and would disappear once Phase II becomes operational.

Therefore, construction activities would not exceed the regional or localized significance thresholds for any criteria pollutants except on an intermittent and temporary basis under Buildout Scenario 2. As such, the Project's localized construction emissions impact would be **less than significant**.

Similarly, Project operations would not produce regional or localized emissions that exceed the SCAQMD's screening thresholds for criteria pollutants, largely because of the absence of major on-site stationary sources. As for off-site impacts, Project-related traffic would not result in CO hotspots where ambient air quality standards could be exceeded near roadways affected by Project traffic. As noted in the analysis of Threshold (c) below, CO hotspots are extremely rare and only occur in the presence of unusual atmospheric conditions and extremely cold conditions, neither of which applies to the Project Site area. In addition, auto-related emissions of CO continue to decline, because of advances in fuel combustion technology in the vehicle fleet.

As shown in Tables IV.C-10 and IV.C-11 presented later in this section, operational impacts would be **less than significant**. Thus, the Project would not increase the frequency or severity of any existing violation or cause or contribute to new violations for criteria pollutants. As the Project would not exceed any State and federal standards, the Project would not delay attainment of air quality standards or interim emission reductions specified in the AQMP. As such, the Project meets this AQMP consistency criterion.

(ii) Criterion 2

With respect to the second criterion, determining whether or not a project exceeds the assumptions reflected in the AQMP (based on assumptions in SCAG's 2016-2040 RTP/SCS for population, housing, and employment growth) involves the evaluation of three criteria: (1) consistency with applicable population, housing, and employment growth projections; (2) Project mitigation measures; and (3) appropriate incorporation of AQMP land use planning strategies. The following discussion provides an analysis with respect to each of these criteria.

- Is the project consistent with the population, housing, and employment growth projections upon which AQMP forecasted emission levels are based?

A Project is consistent with the AQMP, in part, if it is consistent with the population, housing, and employment assumptions used in the development of the AQMP. Regarding the 2016 AQMP, two sources form the basis for the projections: City of Alhambra General Plan and SCAG's 2016 RTP/SCS.

The 2016 AQMP, discussed previously, was prepared to accommodate growth, to reduce the high levels of pollutants within the areas under the jurisdiction of SCAQMD, to return clean air to the region, and to minimize the impact of pollution control on the economy. Projects that are considered to be consistent with the AQMP would not interfere with attainment of the AQMP's goals. Therefore, projects, uses, and activities that are consistent with the applicable assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD's recommended daily emissions thresholds.

The AQMP focuses on achieving clean air standards while accommodating population growth forecasts by the SCAG. Specifically, SCAG's growth forecasts from the 2016-2040 RTP/SCS are largely built off local growth forecasts from local governments, such as the City. As discussed in detail in **Section IV.L, Population and Housing**, of the Draft EIR, the Project would include residential uses thus increasing the number of dwelling units and residents on-site. On January 1, 2017, the City's population was estimated at 86,922 people with 31,653 housing units within the City, an average of 2.74 persons per household.[8] SCAG estimates that Alhambra's population will slowly, but steadily, increase into 2040. During the next 25 years, the City's population is expected to increase by 3,258 people, for an average annual growth of about 0.25 percent.[9] Based on current trends,

[8] *Calfornia Department of Finance. 2017. Report E-1: Population Estimates for Cities, Counties, and the State January 1, 2016 and 2017. Sacramento, CA. May 2017. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-1/.*

[9] *City of Alhambra, General Plan Update Community Profile Report, November 2016.*

SCAG estimates that Alhambra will add another 2,346 households by 2040 to reach a total of 31,876 households, or an average annual growth of 0.53 percent.

Upon the completion and full occupation of the proposed Project, and based on an average density of 2.38 persons per multi-family Project residential household, the Project would add a residential population of approximately 2,525 people to the Project Site. This total would represent approximately 78 percent of SCAG's 2040 growth forecast for the City. The Project's housing unit total of 1,061 new dwelling units would represent approximately 45 percent of forecasted housing unit growth in the City between 2015 and 2040. Thus, the Project's population and housing unit growth would fall within forecasted levels of growth for the City that were assumed in SCAG's 2016 RTP/SCS and, therefore, the 2016 AQMP.

Because the AQMP accommodates growth forecasts for local jurisdictions, such as the City, the emissions associated with the Project have been accounted for and mitigated in the 2016 AQMP. As such, the Project would not obstruct implementation of the AQMP.

- Does the project implement feasible air quality mitigation measures?

Mitigation Measure AQ-MM-1, presented later in this section, requires the utilization of feasible lower-emission off-road construction equipment.

- To what extent is project development consistent with the land use policies set forth in the AQMP?

With regard to land use developments such as the Project, the AQMP's air quality policies focus on the reduction of vehicle trips and vehicle miles traveled (VMT). The Project would be designed and constructed to support and promote environmental sustainability. The Project represents an infill development within an existing urbanized area that would concentrate new residential uses adjacent to existing and continuing office uses and retail commercial uses and proximate to public transit.

The Project is also consistent with the California Air Pollution Control Officers Association (CAPCOA) guidance document "Quantifying Greenhouse Gas Mitigation Measures," which identifies VMT and vehicle trip reductions relative to the standard trip and VMT rates in CalEEMod, which corresponds to reducing GHG emissions. Measures applicable to the Project include the following:

- **Increase Density (CAPCOA Measure LUT-1):** Increased density, measured in terms of persons, jobs, or dwelling units per unit area, reduces emissions associated with transportation as it reduces the distance people travel for work or services and provides a foundation for the implementation of other strategies, such as enhanced transit services. The Project would increase the Project Site's density from zero residential units to 1,061 residential units.

- **Increase Diversity of Urban and Suburban Developments (Mixed-Uses) (CAPCOA Measure LUT-3)**: The Project would introduce new residential uses on the Project Site. The Project would co-locate complementary residential, office, and fitness center uses in proximity to other existing off-site office, light industrial, and commercial uses. The increases in land use diversity and mix of uses on the Project Site would reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation (i.e., walking and biking), resulting in corresponding reductions in transportation-related emissions.

- **Increase Transit Accessibility (CAPCOA Measure LUT-5):** The Alhambra Community Transit (ACT) shuttle bus provides bus service to the Project Site. Fremont Avenue carries both the Green and Blue Lines, providing service to most portions of the City, including the downtown area and Civic Center. The Los Angeles County Metropolitan Transportation Authority (Metro) provides bus service to the Project Site. Fremont Avenue carries Metro Express bus line 485, connecting Union Station in downtown Los Angeles with Altadena, and Metro Limited bus line 258, connecting downtown Alhambra with Monterey Park, East Los Angeles, Commerce, Bell Gardens, South Gate, and Paramount. Both Metro lines stop at Fremont/Mission and Fremont/Orange, adjacent to the Project Site. Additionally, Metro Limited bus line 258 provides a direct connection to the Metro Gold Line Lake Station in Pasadena and, via transfers, to other Gold Line stations in South Pasadena and Pasadena. The Project Site is located approximately 1.8 miles northeast of the Southern California Regional Rail Authority's Cal State L.A. Metrolink commuter rail station on its San Bernardino Line, connecting downtown Los Angeles to San Bernardino. Separate shuttle services also provide transportation from the Project Site to both Cal State L.A. and the University of Southern California.

- **Improve Design of Development (CAPCOA Measure LUT-9):** The Project would enhance the pedestrian environment by developing an improved streetscape and internal pathways connecting the new residential units with the existing office campus, which would enhance walkability in the Project Site vicinity.

In sum, the Project would be consistent with the AQMP, including its growth projections and land use policies. As such, the Project meets this AQMP consistency criterion. It should also be noted that the Project would comply with all SCAQMD rules and regulations that are in effect at the time of development.

(b) City of Alhambra Policies

With regard to air quality, the City's General Plan Resources Chapter establishes several relevant goals and policies, as presented earlier in this section. The Project would incorporate energy saving designs and systems into the construction of the proposed

residences on the Project Site (General Plan Policy R-3B), including compliance with applicable "green building" requirements of the Alhambra Municipal Code (AMC). The Project would not expose sensitive populations to elevated air pollution concentrations on a long-term basis and represents a portion of the growth that has been accounted for in the 2016 AQMP (General Plan Policy R-4B). Lastly, this analysis utilizes SCAQMD recommended methodologies to study the air quality impact of the Project (General Plan Policy R-4C). As such, the Project would be generally consistent with, and would help to implement some of, the relevant goals and policies of the City's General Plan.

(c) Impact Conclusion

As discussed above, the Project would not conflict with the 2016 AQMP and, as such, would not jeopardize attainment of State and national ambient air quality standards in the area under the jurisdiction of the SCAQMD. Additionally, the Project would be generally consistent with, and would help to implement some of, the relevant goals and policies of the City's General Plan regarding air quality. Based on the above, Project impacts related to consistency with the 2016 AQMP would be **less than significant**.

(2) Mitigation Measures

Impacts related to air quality plan consistency would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to air quality plan consistency would be less than significant without mitigation.

Threshold b) Would the project 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?

(1) Impact Analysis

Because the Basin is currently in non-attainment for O_3, PM_{10}, and $PM_{2.5}$, cumulative development projects could cause an exceedance in an air quality standard or contribute to an existing or projected air quality exceedance. With respect to determining the significance of the Project contribution, the SCAQMD neither recommends quantified analyses of construction and/or operational emissions from multiple development projects nor provides methodologies or thresholds of significance to be used to assess the cumulative emissions generated by multiple cumulative projects. Instead, the SCAQMD recommends that a project's potential contribution to cumulative impacts be assessed utilizing the same significance criteria as those for project-specific impacts. According to the SCAQMD, individual projects that exceed the SCAQMD's recommended daily

thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment.

(a) Construction

The Project involves the demolition of 104,242 square feet of existing uses and the construction of 36 townhomes, 480 condominiums, 545 apartments, and 2,547 new parking spaces provided in parking garages. For purposes of analyzing impacts associated with air quality, this analysis assumes a total construction schedule of approximately 36 months, with construction beginning in 2020. This assumption is conservative and yields the maximum daily impacts. Construction activities associated with the Project would be undertaken in three main steps: (1) demolition, (2) grading/foundation preparation and (3) building construction, including architectural coating and paving.

As discussed in **Section II, Project Description** of the Draft EIR, two different Project buildout scenarios are being considered. Under Buildout Scenario 1, the Project would be developed as a single entity with completion projected for 2028. Under this scenario, demolition would occur for approximately 3 months and would require the demolition and removal of 104,242 square feet of existing uses. Grading/soil export and foundation preparation would occur for approximately 7 months and 120,000 cubic yards of soil export would be required. Building construction would occur for approximately 26 months and would include the construction of the proposed structures, connection of utilities, laying irrigation for landscaping, architectural coatings, paving, and landscaping the Project Site. Due to the eight-year buildout period, the 36 months of construction activities would not occur continuously but would be episodic across the entire buildout period. Table IV.C-8 below identifies daily emissions that are estimated to occur on peak construction days for each construction phase under Buildout Scenario 1.

Under Buildout Scenario 2, the Project would be phased. Phase I involves the demolition of 42,576 square feet of existing uses, and the construction of 480 condominium and 36 townhouse units, and 1,625 parking spaces, built by 2024. Under this phase, demolition would occur for approximately 1 month. Grading/soil export and foundation preparation would occur for approximately 3.5 months and 60,000 cubic yards of soil export would be required. Building construction would occur for approximately 13 months. Phase II would involve the demolition of 61,666 square feet of existing uses, and the construction of 545 apartment units and 922 parking spaces, built by 2028. Under this phase, demolition would occur for approximately 2 months. Grading/soil import and foundation preparation would occur for approximately 3.5 months and 60,000 cubic yards of soil export would be required. Building construction would occur for approximately 13 months. Table IV.C-9 below identifies daily emissions that are estimated to occur on peak construction days for each construction phase under Buildout Scenario 2.

These construction activities would temporarily create emissions of dusts, fumes, equipment exhaust, and other air contaminants. Construction activities involving grading and site preparation would primarily generate $PM_{2.5}$ and PM_{10} emissions. Mobile sources (such as diesel-fueled equipment on-site and traveling to and from the Project Site) would primarily generate NO_x emissions. The application of architectural coatings would primarily result in the release of ROG emissions. The amount of emissions generated on a daily basis would vary, depending on the amount and types of construction activities occurring at the same time. The analysis of daily construction emissions has been prepared utilizing CalEEMod 2016.3.2 recommended by the SCAQMD. Due to the construction time frame and the normal day-to-day variability in construction activities, it is difficult, if not impossible, to precisely quantify the daily emissions associated with each phase of the proposed construction activities.

Table IV.C-8
Buildout Scenario 1 - Estimated Peak Daily Construction Emissions

Emissions Source	Emissions in Pounds per Day					
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Demolition Phase						
Fugitive Dust	--	--	--	--	1.55	0.24
Off-Road Diesel Equipment	3.31	33.20	21.75	0.04	1.66	1.54
On-Road Diesel (Hauling)	0.06	2.09	0.49	0.01	0.13	0.04
Worker Trips	0.08	0.05	0.60	0.01	0.17	0.05
Total Emissions	***3.45***	***35.34***	***22.84***	***0.06***	***3.51***	***1.87***
SCAQMD Thresholds	75.00	100.00	550.00	150.00	150.00	55.00
Significant Impact?	No	No	No	No	No	No
Grading/Excavation/Foundation Preparation Phase						
Fugitive Dust	--	--	--	--	6.25	3.34
Off-Road Diesel Equipment	4.45	50.20	31.96	0.06	2.17	2.00
On-Road Diesel (Hauling)	0.87	28.37	6.60	0.08	1.79	0.55
Worker Trips	0.10	0.07	0.80	0.01	0.23	0.06
Total Emissions	***5.42***	***78.64***	***39.36***	***0.15***	***10.44***	***5.95***
SCAQMD Thresholds	75.00	100.00	550.00	150.00	150.00	55.00
Significant Impact?	No	No	No	No	No	No
Building Construction Phase						
Building Construction Off-Road Diesel Equipment	2.12	19.19	16.85	0.03	1.12	1.05
Building Construction Vendor Trips	1.04	29.78	8.61	0.07	1.94	0.65
Building Construction Worker Trips	6.09	4.32	47.80	0.13	13.44	3.64
Paving Off-Road Diesel Equipment	1.10	11.12	14.58	0.02	0.57	0.52
Paving Worker Trips	0.07	0.04	0.51	0.01	0.17	0.05
Architectural Coatings	56.08	--	--	--	--	--
Architectural Coating Off-Road Diesel Equipment	0.20	1.41	1.81	0.01	0.08	0.08
Architectural Coatings Worker Trips	1.07	0.70	8.07	0.02	2.68	0.72
Total Emissions	***67.77***	***66.56***	***98.23***	***0.29***	***20.00***	***6.71***
SCAQMD Thresholds	75.00	100.00	550.00	150.00	150.00	55.00

Table IV.C-8
Buildout Scenario 1 - Estimated Peak Daily Construction Emissions

Significant Impact?	No	No	No	No	No	No
Note: Calculations assume compliance with SCAQMD Rule 403 – Fugitive Dust. Calculation sheets are provided in Appendix D of the Draft EIR.						

These calculations assume that appropriate dust control measures would be implemented as part of the Project during each phase of development, as required by SCAQMD Rule 403 - Fugitive Dust. Specific Rule 403 control requirements include, but are not limited to, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the Project Site, and maintaining effective cover over exposed areas. As the Project involves the export of approximately 120,000 cubic yards of soil, the Project would be complaint with Rule 403 requirements for a large operation, including applying water 3 times per day to prevent the generation of visible dust plumes (as per Project Design Feature AQ-PDF-1). As shown in Tables IV.C-8 and IV.C-9, construction-related daily emissions associated with the Project would not exceed any regional SCAQMD significance thresholds for criteria pollutants during the construction phases of Buildout Scenario 1 or Buildout Scenario 2. Therefore, regional construction-period emission impacts are considered to be **less than significant**.

Table IV.C-9
Buildout Scenario 2 - Estimated Peak Daily Construction Emissions

Emissions Source	Emissions in Pounds per Day					
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Phase I						
Demolition Phase						
Fugitive Dust	--	--	--	--	0.74	0.11
Off-Road Diesel Equipment	3.31	33.20	21.75	0.04	1.66	1.54
On-Road Diesel (Hauling)	0.08	2.57	0.60	0.01	0.16	0.05
Worker Trips	0.08	0.05	0.60	0.01	0.17	0.05
Total Emissions	***3.47***	***35.82***	***22.95***	***0.06***	***2.73***	***1.75***
SCAQMD Thresholds	75.00	100.00	550.00	150.00	150.00	55.00
Significant Impact?	No	No	No	No	No	No
Grading/Excavation/Foundation Preparation Phase						
Fugitive Dust	--	--	--	--	2.45	1.30
Off-Road Diesel Equipment	4.45	50.20	31.96	0.06	2.17	2.00
On-Road Diesel (Hauling)	0.87	28.37	6.60	0.08	1.79	0.55
Worker Trips	0.10	0.07	0.80	0.01	0.23	0.06
Total Emissions	***5.42***	***78.64***	***39.36***	***0.15***	***6.64***	***3.91***
SCAQMD Thresholds	75.00	100.00	550.00	150.00	150.00	55.00
Significant Impact?	No	No	No	No	No	No
Building Construction Phase						
Building Construction Off-Road Diesel Equipment	2.12	19.19	16.85	0.03	1.12	1.05
Building Construction Vendor Trips	0.60	17.23	4.98	0.04	1.12	0.38

Table IV.C-9
Buildout Scenario 2 - Estimated Peak Daily Construction Emissions

Building Construction Worker Trips	3.30	2.34	25.87	0.07	7.27	1.97
Paving Off-Road Diesel Equipment	1.26	12.92	14.65	0.02	0.68	0.62
Paving Worker Trips	0.07	0.05	0.55	0.01	0.17	0.05
Architectural Coatings	60.63	--	--	--	--	--
Architectural Coating Off-Road Diesel Equipment	0.22	1.53	1.82	0.01	0.09	0.09
Architectural Coatings Worker Trips	0.62	0.42	4.75	0.01	1.45	0.39
Total Emissions	***68.82***	***53.68***	***69.47***	***0.19***	***11.90***	***4.55***
SCAQMD Thresholds	75.00	100.00	550.00	150.00	150.00	55.00
Significant Impact?	No	No	No	No	No	No
Phase II						
Demolition Phase						
Fugitive Dust	--	--	--	--	0.54	0.08
Off-Road Diesel Equipment	3.17	31.44	21.57	0.04	1.55	1.44
On-Road Diesel (Hauling)	0.05	1.73	0.42	0.01	0.12	0.04
Worker Trips	0.07	0.05	0.55	0.01	0.17	0.05
Total Emissions	***3.29***	***33.22***	***22.54***	***0.06***	***2.38***	***1.61***
SCAQMD Thresholds	75.00	100.00	550.00	150.00	150.00	55.00
Significant Impact?	No	No	No	No	No	No
Grading/Excavation/Foundation Preparation Phase						
Fugitive Dust	--	--	--	--	2.43	1.30
Off-Road Diesel Equipment	4.19	46.40	30.88	0.06	1.99	1.83
On-Road Diesel (Hauling)	0.83	26.45	6.50	0.07	1.78	0.54
Worker Trips	0.10	0.07	0.74	0.01	0.23	0.06
Total Emissions	***5.12***	***72.92***	***38.12***	***0.14***	***6.43***	***3.73***
SCAQMD Thresholds	75.00	100.00	550.00	150.00	150.00	55.00
Significant Impact?	No	No	No	No	No	No
Building Construction Phase						
Building Construction Off-Road Diesel Equipment	1.90	17.43	16.58	0.03	0.96	0.90
Building Construction Vendor Trips	0.38	11.53	3.34	0.03	0.79	0.24
Building Construction Worker Trips	2.61	1.78	20.14	0.06	6.16	1.67
Paving Off-Road Diesel Equipment	1.10	11.12	14.58	0.02	0.57	0.52
Paving Worker Trips	0.07	0.04	0.51	0.01	0.17	0.05
Architectural Coatings	51.53	--	--	--	--	--
Architectural Coating Off-Road Diesel Equipment	0.20	1.41	1.81	0.01	0.08	0.08
Architectural Coatings Worker Trips	0.49	0.32	3.70	0.01	1.23	0.33
Total Emissions	***58.28***	***43.63***	***60.66***	***0.17***	***9.96***	***3.79***
SCAQMD Thresholds	75.00	100.00	550.00	150.00	150.00	55.00
Significant Impact?	No	No	No	No	No	No

Note: Calculations assume compliance with SCAQMD Rule 403 – Fugitive Dust.
Calculation sheets are provided in Appendix D of the Draft EIR.

(b) Operation

Once constructed and in operation, the Project would also produce long-term pollutant emissions in the region, primarily from motor vehicles associated with the Project. Operational emissions generated by area sources, motor vehicles and energy demand would result from normal day-to-day activities of the Project. The analysis of daily operational emissions associated with the Project has been prepared utilizing CalEEMod 2016.3.2 as recommended by the SCAQMD. The results of these calculations are presented in Table IV.C-10 and Table IV.C-11 for Buildout Scenarios 1 and 2, respectively.

Table IV.C-10
Buildout Scenario 1- Estimated Daily Operational Emissions

Emissions Source	Emissions in Pounds per Day					
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Sources	34.11	16.85	94.45	0.11	1.77	1.77
Energy Demand	0.48	4.08	1.74	0.03	0.33	0.33
Mobile (Motor Vehicles)	6.94	32.38	79.41	0.34	31.77	8.65
Total Project Emissions	***41.30***	***53.32***	***172.42***	***0.45***	***33.86***	***10.75***
Less Existing Site Emissions	0.50	1.29	3.59	0.01	0.78	0.22
Net Increase Project Emissions	**40.80**	**52.03**	**168.83**	**0.44**	**33.08**	**10.53**
SCAQMD Thresholds	55.00	55.00	550.00	150.00	150.00	55.00
Potentially Significant Impact?	No	No	No	No	No	No

Note: Column totals may not add due to rounding from the model results. Assumes all hearth would be natural gas. Calculation sheets provided in Appendix D of the Draft EIR.

Table IV.C-11
Buildout Scenario 2 - Estimated Daily Operational Emissions

Emissions Source	Emissions in Pounds per Day					
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Phase I						
Area Sources	18.19	8.20	46.00	0.05	0.86	0.86
Energy Demand	0.26	2.24	0.95	0.01	0.18	0.18
Mobile (Motor Vehicles)	4.46	18.51	52.43	0.20	16.98	4.64
Total Phase I Emissions	**22.91**	**28.95**	**99.38**	**0.26**	**18.02**	**5.68**
SCAQMD Thresholds	55.00	55.00	550.00	150.00	150.00	55.00
Potentially Significant Impact?	No	No	No	No	No	No

Table IV.C-11
Buildout Scenario 2 - Estimated Daily Operational Emissions

Emissions Source	Emissions in Pounds per Day					
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Phase II						
Area Sources	15.92	8.65	48.48	0.05	0.91	0.91
Energy Demand	0.22	1.84	0.78	0.01	0.15	0.15
Mobile (Motor Vehicles)	3.25	15.14	37.13	0.16	14.85	4.05
Total Phase II Emissions	**19.39**	**25.63**	**86.39**	**0.22**	**15.91**	**5.10**
SCAQMD Thresholds	55.00	55.00	550.00	150.00	150.00	55.00
Potentially Significant Impact?	No	No	No	No	No	No
Total Project Emissions						
Total Phase I Emissions	22.91	28.95	99.38	0.26	18.02	5.68
Total Phase II Emissions	19.39	25.63	86.39	0.22	15.91	5.10
Total Project Emissions	**42.3**	**54.58**	**185.77**	**0.48**	**33.93**	**10.78**
Less Existing Site Emissions	0.50	1.29	3.59	0.01	0.78	0.22
Net Increase Project Emissions	**41.80**	**53.29**	**182.18**	**0.47**	**33.15**	**10.56**
SCAQMD Thresholds	55.00	55.00	550.00	150.00	150.00	55.00
Potentially Significant Impact?	No	No	No	No	No	No

Note: Column totals may not add due to rounding from the model results. Assumes all hearth would be natural gas. Calculation sheets provided in Appendix D of the Draft EIR.

As shown, the operational emissions generated by the Project would not exceed the regional thresholds of significance set by the SCAQMD. Therefore, impacts associated with regional operational emissions from the Project would be **less than significant**.

(c) Buildout Scenario 2: Construction/Operation Overlap

As Project development would occur over two phases under Buildout Scenario 2, the buildings constructed during Phase I could become operational during the construction phases of Phase II. Therefore, the Project could result in daily operational and construction emissions during the same time frame. As such, impacts associated with overlapping Project construction and operational emissions were analyzed and are shown in Table IV.C-12. It should be noted that this analysis has conservatively applied the SCAQMD operational thresholds of significance to this scenario, which are lower than the construction thresholds of significance.

Table IV.C-12
Buildout Scenario 2 - Construction & Operation Overlapping Emissions

Emissions Source [a]	Emissions in Pounds per Day					
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Phase II Demolition Phase	3.29	33.22	22.54	0.06	2.38	1.61
Phase I Operational Emissions	22.77	29.26	97.22	0.26	18.02	5.68
Total Emissions	**26.06**	**62.48**	**119.76**	**0.32**	**20.40**	**7.29**
SCAQMD Thresholds [b]	55.00	55.00	550.00	150.00	150.00	55.00
Potentially Significant Impact?	No	**Yes**	No	No	No	No
Phase II Grading Phase	5.12	72.92	38.12	0.14	6.43	3.73
Phase I Operational Emissions	22.77	29.26	97.22	0.26	18.02	5.68
Total Emissions	**27.89**	**102.18**	**135.34**	**0.40**	**24.45**	**9.41**
SCAQMD Thresholds [b]	55.00	55.00	550.00	150.00	150.00	55.00
Potentially Significant Impact?	No	**Yes**	No	No	No	No
Phase II Building Construction Phase	58.28	43.63	60.66	0.17	9.96	3.79
Phase I Operational Emissions	22.77	29.26	97.22	0.26	18.02	5.68
Total Emissions	**81.05**	**72.89**	**157.88**	**0.43**	**27.98**	**9.47**
SCAQMD Thresholds [b]	55.00	55.00	550.00	150.00	150.00	55.00
Potentially Significant Impact?	**Yes**	**Yes**	No	No	No	No

Calculation data provided in Appendix D of the Draft EIR. Column totals may not add due to rounding from the model results.
[a] See Table IV.C-9 above for Phase II construction emissions and Table IV.C-11 above for Phase I operational emissions.
[b] SCAQMD thresholds for operational emissions are utilized here as they are more conservative than construction thresholds.

As shown in Table IV.C-12, an exceedance in the ROG and NO_x SCAQMD daily regional thresholds of significance may occur under Buildout Scenario 2 after Phase I becomes operational and while Phase II is under active construction. As such, regional air quality

impacts during the period of active construction and operation overlap under Buildout Scenario 2 would be **significant**.

(2) Mitigation Measures

The following mitigation measure has been identified to reduce off-road construction emission impacts:

- **AQ-MM-1**: If the Project Applicant elects to construct the Project under the phased approach identified as Buildout Scenario 2 in the Draft EIR, off-road equipment meeting the EPA's Tier 3 construction equipment emissions standards shall be used. Additionally, only haul trucks with a model year of 2007 or newer shall be used for the on-road transport of materials to and from the Project Site.

(3) Level of Significance After Mitigation

Project impacts related to regional air emissions during Project construction under Buildout Scenario 2 would exceed the SCAQMD's thresholds of significance for NO_x and ROG during the potential construction and operation overlapping period. These emissions are primarily associated with off-road construction equipment. As such, Mitigation Measure AQ-MM-1 would reduce these impacts. Table IV.C-13 shows the combined construction and operation emissions that would occur during this overlapping period under Buildout Scenario 2 with the application of Mitigation Measure AQ-MM-1. As is shown, while the ROG and NO_x emissions are reduced by between 3 and 27 percent, total emissions during the overlapping construction and operation activities would still exceed the applicable SCAQMD significance thresholds. These exceedances would be temporary and would cease upon the completion of Phase II construction activities. Long-term operational impacts under either of the two Buildout Scenarios would be less than significant, as discussed above. Nonetheless, regional construction air quality impacts during the overlapping Project construction and operation period under Buildout Scenario 2 would be **significant and unavoidable** (regional construction air quality impacts under Buildout Scenario 1 would be less than significant).

Table IV.C-13
Buildout Scenario 2 - Construction & Operation Overlapping Emissions (Mitigated)

Emissions Source [a]	Emissions in Pounds per Day					
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Phase II Demolition Phase	1.04	20.09	25.64	0.06	1.69	1.03
Phase I Operational Emissions	22.77	29.26	97.22	0.26	18.02	5.68
Total Emissions	**23.81**	**49.35**	**122.86**	**0.32**	**19.71**	**6.71**
SCAQMD Thresholds [b]	55.00	55.00	550.00	150.00	150.00	55.00
Potentially Significant Impact?	No	No	No	No	No	No
Phase II Grading Phase	2.46	45.62	42.36	0.14	4.59	3.12
Phase I Operational Emissions	22.77	29.26	97.22	0.26	18.02	5.68
Total Emissions	**25.23**	**74.88**	**139.58**	**0.40**	**22.61**	**8.80**
SCAQMD Thresholds [b]	55.00	55.00	550.00	150.00	150.00	55.00
Potentially Significant Impact?	No	**Yes**	No	No	No	No
Phase II Building Construction Phase	56.37	40.56	64.69	0.17	9.96	3.90
Phase I Operational Emissions	22.77	29.26	97.22	0.26	18.02	5.68
Total Emissions	**79.14**	**69.82**	**161.91**	**0.43**	**27.98**	**9.58**
SCAQMD Thresholds [b]	55.00	55.00	550.00	150.00	150.00	55.00
Potentially Significant Impact?	**Yes**	**Yes**	No	No	No	No

Calculation data provided in Appendix D of the Draft EIR. Column totals may not add due to rounding from the model results.
[a] See Table IV.C-9 above for Phase II construction emissions and Table IV.C-11 above for Phase I operational emissions.
[b] SCAQMD thresholds for operational emissions are utilized here as they are more conservative than construction thresholds.

Threshold c) Would the project expose sensitive receptors to substantial pollutant concentrations?

(1) Impact Analysis

(a) Construction

(i) Localized On-Site Daily Emission Impacts

The nearest sensitive receptors to the Project Site are residential uses to the south along Front Street (approximately 220 feet from the Project Site, across Mission Road and the Union Pacific Railroad trench). Emissions from construction activities have the potential to generate localized emissions that may expose sensitive receptors to harmful pollutant concentrations. SCAQMD has developed LST look-up tables for project sites that are one, two, and five acres in size to simplify the evaluation of localized emissions at small sites. LSTs are provided for each SRA and various distances from the source of emissions. Based on the Project's construction assumptions outlined previously,

approximately 4.0 acres per day would be disturbed during the site preparation/grading/foundations phase. With respect to demolition and building construction, the 5.0-acre LST in SRA 8 with sensitive receptors located within 50 meters has conservatively been utilized to address the potential localized NO_x, CO, PM_{10}, and $PM_{2.5}$ impacts. The application of a 5.0-acre threshold for building construction activities on a 38.38-acre site would be conservative as physical building construction emissions would likely be spread out more evenly compared to the condensed 5-acre threshold applied in this analysis. The LSTs for a 4.0-acre site in SRA 8 with sensitive receptors located within 50 meters were calculated per SCAQMD Linear Regression Methodology (refer to **Appendix D** for more details). As shown in Table IV.C-14 and Table IV.C-15, peak daily emissions generated within the Project Site during construction activities for each phase during both Buildout Scenario 1 and Buildout Scenario 2 would not exceed the applicable construction LSTs for a site in SRA 8. Therefore, localized air quality impacts from Project construction activities on the off-site sensitive receptors would be **less than significant**.

Table IV.C-14
Buildout Scenario 1- Localized On-Site Peak Daily Construction Emissions

Construction Phase [a]	Total On-Site Emissions (Pounds per Day)			
	NO_x [b]	CO	PM_{10}	$PM_{2.5}$
Demolition Emissions	**33.20**	**21.75**	**3.21**	**1.78**
SCAQMD Localized Thresholds	*141.00*	*1921.00*	*37.00*	*9.00*
Potentially Significant Impact?	No	No	No	No
Grading/Excavation/Foundation Preparation Emissions	**50.20**	**31.96**	**8.43**	**5.34**
SCAQMD Localized Thresholds	*124.85*	*1,649.77*	*30.85*	*7.69*
Potentially Significant Impact?	No	No	No	No
Building Construction Emissions	**31.72**	**33.24**	**1.77**	**1.65**
SCAQMD Localized Thresholds	*141.00*	*1921.00*	*37.00*	*9.00*
Potentially Significant Impact?	No	No	No	No

Note: Calculations assume compliance with SCAQMD Rule 403 – Fugitive Dust. Building construction emissions include paving and architectural coatings.

[a] Based on the Project's construction assumptions outlined previously, the applicable LST for grading is 4.0 acres, and demolition and building construction is 5.0 acres. The localized thresholds for each phase are based on a receptor distance of 50 meters (164 feet) in SCAQMD's SRA 8. Where necessary, LST calculated per SCAQMD Linear Regression Methodology.

[b] The localized thresholds listed for NO_x in this table takes into consideration the gradual conversion of NO_x to NO_2, and are provided in the mass rate look-up tables in the "Final Localized Significance Threshold Methodology" document prepared by the SCAQMD. As discussed previously, the analysis of localized air quality impacts associated with NO_x emissions is focused on NO_2 levels as they are associated with adverse health effects.

Calculation sheets are provided in Appendix D of the Draft EIR.

Table IV.C-15
Buildout Scenario 2 - Localized On-Site Peak Daily Construction Emissions

Construction Phase [a]	Total On-Site Emissions (Pounds per Day)			
	NO_x [b]	CO	PM_{10}	$PM_{2.5}$
Phase I				
Demolition Emissions	**33.20**	**21.75**	**2.40**	**1.65**
SCAQMD Localized Thresholds	*141.00*	*1921.00*	*37.00*	*9.00*
Potentially Significant Impact?	No	No	No	No
Grading/Excavation/Foundation Preparation Emissions	**50.20**	**31.96**	**4.63**	**3.30**
SCAQMD Localized Thresholds	*124.85*	*1,649.77*	*30.85*	*7.69*
Potentially Significant Impact?	No	No	No	No
Building Construction Emissions	**33.64**	**33.32**	**1.89**	**1.76**
SCAQMD Localized Thresholds	*141.00*	*1921.00*	*37.00*	*9.00*
Potentially Significant Impact?	No	No	No	No
Phase II				
Demolition Emissions	**31.44**	**21.57**	**2.09**	**1.52**
SCAQMD Localized Thresholds	*141.00*	*1921.00*	*37.00*	*9.00*
Potentially Significant Impact?	No	No	No	No
Grading/Excavation/Foundation Preparation Emissions	**46.40**	**30.88**	**4.41**	**3.13**
SCAQMD Localized Thresholds	*124.85*	*1,649.77*	*30.85*	*7.69*
Potentially Significant Impact?	No	No	No	No
Building Construction Emissions	**29.96**	**32.97**	**1.61**	**1.50**
SCAQMD Localized Thresholds	*141.00*	*1921.00*	*37.00*	*9.00*
Potentially Significant Impact?	No	No	No	No

Note: Calculations assume compliance with SCAQMD Rule 403 – Fugitive Dust. Building construction emissions include paving and architectural coatings.

[a] Based on the Project's construction assumptions outlined previously, the applicable LST for grading is 4.0 acres, and demolition and building construction is 5.0 acres. The localized thresholds for each phase are based on a receptor distance of 50 meters (164 feet) in SCAQMD's SRA 8. Where necessary, LST calculated per SCAQMD Linear Regression Methodology.

[b] The localized thresholds listed for NO_x in this table takes into consideration the gradual conversion of NO_x to NO_2, and are provided in the mass rate look-up tables in the "Final Localized Significance Threshold Methodology" document prepared by the SCAQMD. As discussed previously, the analysis of localized air quality impacts associated with NO_x emissions is focused on NO_2 levels as they are associated with adverse health effects.

Calculation sheets are provided in Appendix D of the Draft EIR.

(ii) Toxic Air Contaminants

The Project would not result in any substantial emissions of TACs during the construction phase. During construction, the primary TAC emissions would be associated with the combustion of diesel fuels, which produce exhaust-related particulate matter that is

considered a TAC by CARB based on chronic exposure to these emissions.[10] Based on SCAQMD guidance, health effects from TACs are usually described in terms of individual cancer risk, which is the likelihood that a person exposed to TACs over a 70-year lifetime will contract cancer. Because of the relatively short period of time that diesel-fueled construction equipment would operate, the Project would not result in a substantial, long-term (70-year) source of TACs. It should be noted that SCAQMD CEQA *Air Quality* Handbook and supplemental online guidance/information do not require a Health Risk Assessment analysis for short-term construction activities.

The construction activities associated with the Project would be similar to other development projects in the City, and would be subject to the regulations and laws relating to toxic air pollutants at the regional, state, and federal level that would protect sensitive receptors from substantial concentrations of these emissions. For example, truck idling would be limited to 5 minutes and would only occur during haul hours rather than on a 24/7/365 basis such as is the case with many industrial facilities. Construction activities in general would occur on a limited number of days over the course of the total Project buildout. In addition, Project construction activity would not result in long-term substantial sources of TAC emissions (i.e., 30 or 70 years). Thus, TAC emissions from Project construction would be considered **less than significant**.

(b) Operation

(i) Localized Carbon Monoxide Impacts

It has long been recognized that CO exceedances (hot spots) are caused by vehicular emissions, primarily when idling at intersections. “Hot spots” are areas where a population’s exposure to pollution and estimated health risks are high. The Project would not result in potentially significant CO “hot spots” and a Project-specific CO hotspots analysis is not required to reach this conclusion. Vehicle emissions standards have become increasingly more stringent in the last twenty years. With the turnover of older vehicles, introduction of cleaner fuels and implementation of control technology on industrial facilities, CO concentrations for the Project vicinity have historically met state and federal attainment status for the air quality standards. As noted previously the Project Site is located within in SRA 8. The maximum 8-hour CO concentration between 2015 and 2017 was 1.7 ppm in 2017, and the maximum 1-hour CO concentration was 2.6 ppm in 2015.[11] Based on these measured concentrations, CO concentrations in SRA 8 are substantially below the California one-hour or eight-hour CO standards of 20 or 9.0 ppm,

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[10] *California Office of Environmental Health Hazard Assessment. Health Effects of Diesel Exhaust, http://oehha.ca.gov/public_info/facts/dieselfacts.html.*

[11] *SCAQMD Historical Data by Year, website: https://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year, accessed: October 2018.*

respectively. Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard. Therefore, the Project would not have the potential to cause or contribute to an exceedance of the California one-hour or eight-hour CO standards of 20 or 9.0 ppm, respectively. Therefore, impacts with respect to localized CO concentrations would be **less than significant**.

(ii) Toxic Air Contaminants

As the Project would consist of the development of residential uses, and would not include any industrial or other land uses involving the use, storage, or processing of carcinogenic or non-carcinogenic toxic chemicals or air contaminants, or the generation of high levels of diesel truck activity, no toxic airborne emissions would result from its implementation. In addition, operational activities associated with the Project would be typical of other residential developments in the City, and would be subject to the regulations and laws relating to toxic air pollutants at the regional, State, and federal level that would protect sensitive receptors from substantial concentrations of these emissions. Household products such as cleaning supplies and aerosol cans would not represent a significant source of toxic air contaminants. Therefore, impacts to sensitive receptors associated with the release of TACs from the Project Site would be **less than significant**.

In summary, the Project would not expose sensitive receptors to substantial air pollutant concentrations, and Project impacts would be **less than significant**.

(2) Mitigation Measures

Impacts related to the exposure of sensitive receptors to substantial air pollutant concentrations would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to the exposure of sensitive receptors to substantial air pollutant concentrations would be less than significant.

Threshold d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The Project would comply with SCAQMD Rule 1113 – Architectural Coatings and Rule 1108 – Cutback Asphalt, which would reduce the Project's VOC emissions. Moreover, appropriate dust control measures would be implemented as part of the Project during each phase of development as required by SCAQMD Rule 403 – Fugitive Dust. In addition, required compliance with SCAQMD Rule 402 – Nuisance, and SCAQMD Best Available Control Technology Guidelines would limit potential objectionable odor impacts during the Project's long-term operations phase.

As discussed in the Initial Study (**Appendix A** of the Draft EIR), the Project would not result in activities that are known to create objectionable odors. Therefore, the Project would have a **less-than-significant** impact with respect to Threshold (d). No further analysis is required.

e) Cumulative Impacts

(1) Impact Analysis

(a) Construction

Because the Los Angeles County portion of the Basin is currently in non-attainment for O_3, PM_{10}, and $PM_{2.5}$, cumulative development could violate an air quality standard or contribute to an existing or projected air quality violation. This would be considered a significant cumulative impact. According to SCAQMD, individual construction projects that exceed the SCAQMD recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in non-attainment. As previously discussed, emissions associated with the Project under Buildout Scenario 2 would exceed the SCAQMD's thresholds of significance for NO_x and ROG during construction and operation overlapping phases. NO_x and ROG are considered O_3 precursors and the Basin is in non-attainment for O_3. Therefore, the cumulative impact of the Project's construction emissions would be considered **significant**.

With respect to TACs, the greatest potential for TAC emissions at related projects would involve diesel particulate emissions associated with trucks and heavy equipment. The construction activities associated with the Project and the cumulative projects would be similar to other development projects in the City, and would be subject to the regulations and laws relating to toxic air pollutants at the regional, State, and federal level that would protect sensitive receptors from substantial concentrations of these emissions. In addition, and similar to the Project, the cumulative projects' construction activity would not result in long-term substantial sources of TAC emissions (i.e., 9, 30 or 70 years) and would not combine with the Project to generate ongoing TAC emissions. Therefore, cumulative TAC emissions from the Project and cumulative projects would be **less than significant**.

With respect to cumulative odor impacts, potential sources that may emit odors during construction activities at each cumulative project location include the use of architectural coatings and solvents. SCAQMD Rules 1108 and 1113 limit the amount of volatile organic compounds from cutback asphalt and architectural coatings and solvents, respectively. Based on mandatory compliance with SCAQMD Rules, it is anticipated that construction activities and materials used in the construction of the Project and cumulative projects

would not combine to create objectionable odors. Therefore, cumulative odor impacts would be **less than significant**.

(b) Operation

Due to the non-attainment status of O_3, PM_{10}, and $PM_{2.5}$ in the Basin, the generation of daily operational emissions associated with cumulative development would result in a cumulative significant impact associated with the cumulative net increase of any criteria pollutant for which the region is in non-attainment. With respect to operational emissions, SCAQMD has indicated that if an individual project results in air emissions of criteria pollutants (CO, ROG, NO_x, SO_x, PM_{10}, and $PM_{2.5}$) that exceed the SCAQMD-recommended daily thresholds for project-specific impacts, then it would also result in a cumulatively considerable net increase of these criteria pollutants for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.

As previously discussed, the operational emissions associated with the Project would not exceed the established SCAQMD thresholds of significance. However, as noted above, Buildout Scenario 2 would temporarily exceed the SCAQMD's thresholds of significance for NO_x and ROG during construction and operation overlapping phases. Once Project construction is complete, full buildout operational emissions would not exceed established SCAQMD thresholds of significance. Therefore, the long-term cumulative impact of the project's operational emissions would be **less than significant**.

(2) Mitigation Measures

Implementation of Mitigation Measure AQ-MM-1 (see above discussion under Threshold (b)) would reduce construction-related ROG and NO_x emissions during the overlapping construction and operation period under Buildout Scenario 2.

(3) Level of Significance After Mitigation

Project impacts related to cumulative air pollutant emissions during Project implementation under Buildout Scenario 2 would exceed the SCAQMD's thresholds of significance for NO_x and ROG during the potential construction and operation overlapping period when compared to the SCAQMD operational emissions thresholds. These emissions are primarily associated with off-road construction equipment. As such, Mitigation Measure AQ-MM-1 would reduce these impacts to the extent feasible; however, the emissions would still exceed the applicable SCAQMD regional thresholds. These exceedances would be temporary and would cease upon the completion of Phase II construction activities. Nonetheless, the Project's contribution to cumulative regional construction air quality impacts during the overlapping Project construction and operation period under Buildout Scenario 2 would be **significant and unavoidable** (cumulative

regional construction air quality impacts under Buildout Scenario 1 would be less than significant).

IV. Environmental Impact Analysis

D. Cultural Resources

1. Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts on cultural resources, including historic and archaeological resources. This section is based in part on the following reports, included in **Appendices F-1** and **F-2** of the Draft EIR:

F-1 1000 S. Fremont Avenue, Alhambra, California, Historic Resources Technical Report, GPA Consulting (GPA), January 2018.

F-2 Archaeological and Tribal Cultural Resources Assessment for the Villages At The Alhambra Project, Alhambra, Los Angeles County, California, SWCA Environmental Consultants, April 2019.

The analyses of potential impacts to archaeological resources are also based on a records search included as **Appendix F-4** of the Draft EIR, as well as a review of previous, existing, and proposed on-site conditions.

F-4 Sacred Lands File Search, Dr. Gayle Totton, California Native American Heritage Commission, April 17, 2018.

2. Environmental Setting

a) Regulatory Framework

(1) Historic Resources

Historic resources fall within the jurisdiction of several levels of government. The framework for the identification and, in certain instances, protection of historic resources is established at the federal level, while the identification, documentation, and protection of such resources are often undertaken by state and local governments. As described below, the principal federal, state, and local laws governing and influencing the preservation of historic resources of national, state, regional, and local significance include the California Environmental Quality Act (CEQA); National Historic Preservation Act (NHPA) of 1966, as amended; the California Register of Historical Resources

(California Register); and relevant provisions of the Alhambra Municipal Code (AMC), all of which are summarized below.

(a) National Register of Historic Places

The National Register of Historic Places (National Register) was established by the NHPA as "an authoritative guide to be used by federal, state, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment."[1] The National Register recognizes properties that are significant at the national, state, and/or local levels.

(i) Criteria

To be eligible for listing in the National Register, a property must be significant in American history, architecture, archaeology, engineering, or culture. Four criteria for evaluation have been established to determine the potential significance of a property:

A. It is associated with events that have made a significant contribution to the broad patterns of our history; or

B. It is associated with the lives of persons significant in our past; or

C. It embodies the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. It yields, or may be likely to yield, information important in prehistory or history.[2]

(ii) Context

To be eligible for listing in the National Register, a property must be significant within a historic context. *National Register Bulletin #15* states that the significance of a historic property can be judged only when it is evaluated within its historic context. Historic contexts are "those patterns, themes, or trends in history by which a specific...property or site is understood and its meaning...is made clear."[3] A property must represent an

[1] *Title 36 Code of Federal Regulations 60, Part 60.2.*

[2] *Title 36 Code of Federal Regulations 60, Part 60.4.*

[3] *National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation (Washington D.C.: National Park Service, Department of the Interior, 1997), 7-8.*

important aspect of the area's history or prehistory and possess the requisite integrity to qualify for the National Register.

(iii) Integrity

In addition to possessing significance within a historic context, to be eligible for listing in the National Register, a property must have integrity. Integrity is defined in *National Register Bulletin #15* as "the ability of a property to convey its significance."[4] Within the concept of integrity, the National Register recognizes the following seven aspects or qualities that in various combinations define integrity: feeling, association, workmanship, location, design, setting, and materials. Integrity is based on significance: why, where, and when a property is important. Thus, the significance of the property must be fully established before the integrity is analyzed.

(iv) Historic Districts

The National Register includes significant properties, which are classified as buildings, sites, districts, structures, or objects. A historic district "derives its importance from being a unified entity, even though it is often composed of a variety of resources. The identity of a district results from the interrelationship of its resources, which can be an arrangement of historically or functionally related properties."[5]

A district is defined as a geographically definable area of land containing a significant concentration of buildings, sites, structures, or objects united by past events or aesthetically by plan or physical development.[6] A district's significance and historic integrity should help determine the boundaries. Other factors include:

- Visual barriers that mark a change in the historic character of the area or that break the continuity of the district, such as new construction, highways, or development of a different character;
- Visual changes in the character of the area due to different architectural styles, types, or periods, or to a decline in the concentration of contributing resources;
- Boundaries at a specific time in history, such as the original city limits or the legally recorded boundaries of a housing subdivision, estate, or ranch; and

[4] *National Register Bulletin #15, 44-45.*

[5] *Id., p. 5.*

[6] *Title 36 Code of Federal Regulations Part 60.3(d).*

- Clearly differentiated patterns of historical development, such as commercial versus residential or industrial.[7]

Within historic districts, properties are identified as contributing and noncontributing. A contributing building, site, structure, or object adds to the historic associations, historic architectural qualities, or archeological values for which a district is significant because:

- It was present during the period of significance, relates to the significance of the district, and retains its physical integrity; or
- It independently meets the criterion for listing in the National Register.[8]

(b) California Register of Historical Resources

The California Register is similar to the National Register program. The California Register was enacted in 1992, and its regulations became official on January 1, 1998. The California Register is administered by the State Office of Historic Preservation (SOHP).

The California Register is an authoritative guide used by state and local agencies, private groups, and citizens to identify historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change.[9]

The California Register consists of properties that are listed automatically as well as those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed in the National Register and those formally Determined Eligible for the National Register;
- State Historical Landmarks from No. 770 onward; and
- Those California Points of Historical Interest that have been evaluated by the SOHP and have been recommended to the State Historical Resources Commission for inclusion on the California Register.[10]

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7 *National Register Bulletin #21: Defining Boundaries for National Register Properties Form (Washington D.C.: U.S. Department of the Interior, 1997), 12.*

8 *National Register Bulletin #16: How to Complete the National Register Registration Form (Washington D.C.: U.S. Department of the Interior, 1997), 16.*

9 *California Public Resources Code, Section 5024.1(a).*

10 *California Public Resources Code, Section 5024.1(d).*

(i) Criteria and Integrity

For those properties not automatically listed, the criteria for eligibility of listing in the California Register are based upon National Register criteria but are identified as 1-4 instead of A-D. To be eligible for listing in the California Register, a property generally must be at least 50 years of age and must possess significance at the local, state, and national level, under one or more of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States; or

2. It is associated with the lives of persons important to local, California, or national history; or

3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or

4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Properties eligible for listing in the California Register may include buildings, sites, structures, objects, and historic districts. A property that is less than 50 years of age may be eligible if it can be demonstrated that sufficient time has passed to understand its historical importance. While the enabling legislation for the California Register is less rigorous with regard to the issue of integrity, there is the expectation that properties reflect their appearance during their period of significance.[11]

The California Register may also include properties identified during historic resource surveys. However, the survey must meet all of the following criteria:[12]

1. The survey has been or will be included in the State Historic Resources Inventory;

2. The survey and the survey documentation were prepared in accordance with office [SOHP] procedures and requirements;

3. The resource is evaluated and determined by the office [SOHP] to have a significance rating of Category 1 to 5 on a DPR Form 523; and

[11] *California Public Resources Code, Section 4852.*

[12] *California Public Resources Code, Section 5024.1.*

4. If the survey is five or more years old at the time of its nomination for inclusion in the California Register, the survey is updated to identify historical resources which have become eligible or ineligible due to changed circumstances or further documentation and those which have been demolished or altered in a manner that substantially diminishes the significance of the resource.

(c) California Environmental Quality Act

For purposes of CEQA, Public Resources Code Section 21084.1 defines an historical resource as:

> *[A] resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources. Historical resources included in a local register of historical resources as defined in subdivision (k) of Section 5020.1, or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1, are presumed to be historically or culturally significant for purposes of this section, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant. The fact that a resource is not listed in, or determined to be eligible for listing in, the California Register of Historical Resources, not included in a local register of historical resources, or not deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1 shall not preclude a lead agency from determining whether the resource may be an historical resource.*

CEQA Guidelines Section 15064.5(a)(3) also provides additional guidance on this subject:

> *[A]ny object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources.*

(d) City of Alhambra

The City of Alhambra does not have a historic preservation ordinance for the designation of landmarks or historic districts. Chapter 23.44 of the AMC does stipulate that areas designated as having historic and cultural significance in the City's Historic and Cultural Resources Survey shall be designed and constructed to reflect the

neighborhood theme. The Project Site is not included in this survey and, to date, the City has not designated any historic districts or properties.

(i) General Plan

The City recently adopted an updated General Plan in August 2019. A draft of the updated General Plan (Draft General Plan) had been released in July 2018 for public review and a revised draft released in early 2019. The updated General Plan consists of seven elements, including a Land Use Element, Circulation Element, and Open Space Element. Each element addresses its respective subject and the City's 20-year vision for the future. With regard to cultural resources, the General Plan's Resources Chapter establishes the following goals and policies:

- **Goal R-6:** Preservation of the cultural identity of Alhambra as a diverse residential and commercial city with distinct single-family neighborhoods.
    - **Policy R-6A:** Promote and encourage the preservation of Alhambra's significant historic, architectural, cultural, archaeological, and paleontological resources.
    - **Policy R-6C:** Promote and maintain the unique history and architectural character of individual neighborhoods.
    - **Policy R-6E:** Enforce applicable historic preservation laws to preserve state or federally designated historic resources and other resources (e.g., archaeological and paleontological) eligible for such designation.
    - **Policy R-6F:** Investigate the possible establishment of a local regulatory framework for the designation and protection of significant historic and cultural resources.

(2) Archaeological Resources

Federal, state, and local governments have developed laws and regulations designed to protect significant cultural resources that may be affected by actions that they undertake or regulate. The National Environmental Policy Act (NEPA), NHPA, and CEQA are the basic federal and state laws governing the preservation of historic and archaeological resources of national, regional, state, and local significance. As archaeological resources are also considered historic resources, regulations applicable to historic resources are also applicable to archaeological resources. Whereas federal agencies must follow federal archaeological regulations, most projects by private developers and landowners do not require this level of compliance. Thus, as the Project would not

require a federal permit and would not use federal money, federal archaeological regulations are not applicable to the Project.

(a) California Environmental Quality Act

State archaeological regulations affecting the Project include the statutes and guidelines contained in CEQA (Public Resources Code (PRC) Section 21083.2 and Section 21084.1) and the CEQA Guidelines (California Code of Regulations (CCR), Title 14, Section 15064.5). CEQA requires lead agencies to carefully consider the potential effects of a project on archaeological resources. Several agency publications, such as the series produced by the Governor's Office of Planning and Research (OPR), provide guidance regarding procedures to identify such resources, evaluate their importance, and estimate potential effects.

CEQA recognizes that archaeological resources are part of the environment, and a project that "may cause a substantial adverse change in the significance of an historical resource [including archaeological resources] is a project that may have a significant effect on the environment" (PRC Section 21084.1). For purposes of CEQA, a historical resource is any object, building, structure, site, area, place, record, or manuscript listed in or eligible for listing in the California Register (PRC Section 21084.1). Please refer to the previous discussion in this section regarding the California Register for a list of the criteria used to determine whether a resource is eligible for listing in the California Register and is, therefore, considered a historical resource under CEQA.

Archaeologists assess sites based on all four criteria but usually focus on the fourth criterion previously provided, which is whether the resource "[h]as yielded, or may be likely to yield, information important in prehistory or history." The CCR also provides that cultural resources of local significance are eligible for listing in the California Register (CCR, Title 14, Section 4852).

In addition to historical resources, CEQA considers project impacts to unique archaeological resources, defined as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person [PRC Section 21083.2(g)].

In addition to having significance in accordance with the applicable criteria, resources must have integrity for the period of significance. The period of significance is the date or span of time within which notable events transpired at a site, or the period that notable individuals made their important contributions to a site. Integrity is the ability of that property to convey its significance.

With regard to human remains, CEQA Guidelines Section 15064.5 addresses consultation requirements if an initial study identifies the existence of, or the probable likelihood of Native American human remains within the project site. This section of the CEQA Guidelines as well as Health and Safety Code Section 7050.5 and PRC Section 5097.9 also address treatment of human remains in the event of accidental discovery.

For a discussion of tribal cultural resources, see **Section IV.O, Tribal Cultural Resources**, of the Draft EIR.

b) Existing Conditions

(1) History and Description of the Project Site

(a) History of Project Site

The block that makes up the Project Site was the site of the CF Braun & Company, Alhambra Plant. Historically, only the west portion of the block was owned by the company, as shown in Figure IV.D-1. The east portion of the block was separated from the west by train tracks and was not acquired by the company until the 1970s. The Project Site has a particularly complicated construction history (refer to the series of Figures 4-20 in **Appendix F-1** for a pictorial history of the Project Site's evolution). The configuration of the CF Braun & Company plant was constantly evolving as new buildings were constructed and older buildings were moved and altered to reflect the changing needs of the quickly growing company. Altering and expanding existing buildings was a common practice of industrial plants at that time.[13] For this reason, in addition to the lack of documented evidence, the dates of construction for buildings at the Project Site are unclear and vary according to different sources. However, the development of the site can be grouped into four distinct phases of development: original construction and founding of the CF Braun & Company plant in the early 1920s, a plant-wide improvement program from the late 1920s to mid-1930s, construction of new administration and office buildings in the 1940s, and major additions and alterations to the administration and office buildings in the early 1950s.

[13] *"Millions for Expansion," Los Angeles Times, October 19, 1924, E11.*

CF Braun & Company first occupied the west portion of the block in 1922 and constructed its own facilities, which consisted of an office building, research laboratory, fabricating shop, and construction tool center.[14] There are no surviving building permits to indicate who the architects were, if any, for each of these early buildings. However, an article in the *Los Angeles Times* from 1925 provides evidence that the buildings may have been constructed by the Union Iron Works, stating "The contract for the new addition [1925] to the plant of the C.F. Braun Company, Alhambra… awarded to the Union Iron Works…calls for the erection of a 40 by 140-foot addition to…the machine shop… 27' high and of the Westype style to conform with other sections of the plant, all of which was built by the Union Iron Works."[15]

In 1926, a *Los Angeles Times* article reported that a new administration building, containing 55,000 square feet of office space, was planned for construction in 1927. It was to be an office building "designed in the Italian architectural motif" and would be "one of the finest industrial office buildings of the West."[16] The administration building was one of the first phases of a $1,000,000 improvement program that also consisted of additions to the existing shop building and research laboratory. New construction included a steel foundry located at the northeast corner of the site, an engineering and drafting building located northeast of the administration building, a club building located north of the administration building, and an administration garage toward the northwest corner of the site.[17]

There are no surviving permits for the buildings constructed in the 1920s, however, there is reason to believe that they were designed by the architecture firm of Marston & Maybury. According to the Original Job Records of the firm, located at the Pasadena Historical Museum, Marston & Maybury listed a number of projects for the client CF Braun, including the construction of an office building, laboratory, powerhouse, and gate in 1929.[18] In 1935, projects listed included a club building, administration building, drafting building, garage building, yard improvements, and a project for alterations and/or additions to an unspecified existing structure.[19] However, these buildings appear in the historic aerials from 1927-1928, so the Original Job Records is not a completely reliable source. The only building not present before 1928 is the powerhouse, which is

[14] *CF Braun & Co., "The Story of a Modern Engineering Establishment," Alhambra, CA, c.1953, 16.*

[15] *"Award Contract for New Unit of Braun Plant," Los Angeles Times, September 27, 1925, E13.*

[16] *"Millions for Expansion," Los Angeles Times, October 19, 1924, E11.*

[17] *"Additional Structures Being Raised by Plant," Los Angeles Times, June 12, 1927, E7.*

[18] *Kathleen Tuttle, Sylvanus Marston: Pasadena's Quintessential Architect, (Santa Monica, CA: Hennessey + Ingalls, 2001), 135-136.*

[19] *Tuttle, Sylvanus Marston, 138.*

first depicted in an aerial photo taken in 1938. In the book *Studies of a Modern Manufacturing Plant* published by CF Braun & Company sometime between 1928 and 1938, these specific buildings were documented in photographs.

Figure IV.D-1
Location of CF Braun & Company, 1920s-1960s

Source: GPA Consultants, 2018.

Between 1938 and 1944, the plant once again went through major improvements. Originally housed in two separate buildings, the plant was reconfigured to include the entire manufacturing operations in a single building at the eastern portion of the site along Date Avenue. The western portion of the plant, along S. Fremont Avenue, began to resemble what it looks like today with the construction of additional administration and office buildings aligned with one another oriented north-south and running east-west in length. At the center of the site, between the offices and manufacturing buildings, smaller buildings were constructed. These buildings were oriented east-west and ran north-south in length.

With the lack of evidence between 1938 and 1948, when much of the construction and alterations of the administration and office buildings took place, some of the chronology of construction history is uncertain. Looking at the historic aerial photos from 1938 and photographs and site plans from 1944, it appears that the existing administration building (Building A1), was either demolished and reconstructed in 1942 or significantly altered. By 1944, the engineering and drafting building, constructed northeast of the administration building circa 1927, was either demolished or moved while the one-story club building remained. North of the club building, six new one and two-story buildings were constructed: a two-story purchasing and accounting building (Building A3), a one-story office building for design demolished and replaced by a two-story building in 1946 (Building A4), a two-story design production building constructed in 1941 and 1943 (Building A5), a one-story drafting office building demolished and replaced by a four-story building circa 1948 (Building A6), a two-story drafting office building, a two-story engineering office building constructed circa 1947 (Building A8), and a restaurant constructed in 1944 (Building B1). South of the administration building (Building A1), a one-story gatehouse was constructed in 1944 and later altered for offices with a second-story added in 1947 (Building A0).

Based on the 1948 aerial photo, the office and administration buildings began to reflect those that are there today, however, with the exception of Building A6, the buildings ranged from one to two stories in height and were individual buildings, externally connected by covered walkways that extended from the adjacent entrances between each building.

The buildings underwent further change in the 1950s, as evidenced by the building permits that date as far back as 1950 and include permits for new construction, demolition, alterations and additions. A permit from 1952 even indicates that a building was moved. However, the building numbering system appears to have changed at some point and it is unclear exactly which buildings the permits are referring to. For example, a permit from 1955 states that Building A9 was former Building A2, but does not indicate if the building was moved or re-numbered. Documented photographic evidence does suggest that by 1952, the one-story club building north of the

administration building (Building A1), was demolished along with the one-story drafting building south of the restaurant (Building B1). Building B1 was altered at this time with various additions on its north elevation. Also, by 1952, a new research lab (demolished) was constructed, located immediately north of the administration garage (demolished). In 1953, a four-story engineering building (Building A7) was constructed as an addition to the north of Building A6 with connections on the west and east ends of the buildings, as they appear today. The last of the buildings to be constructed is Building A2, which was completed in 1956. Like Building A7, Building A2 was constructed as an addition off the south elevation of Building A3 with connections on its west and east ends. Also, in 1956, an addition was constructed on Building A4, connecting the second floor with Building A5 as evident in the 1960 aerial photograph.[20]

By 1964, the large manufacturing building on the east half of the plant site was demolished. In 1966, an addition was constructed on the west half of the restaurant (Building B1) and more additions were constructed to connect the office buildings, including west additions connecting Building A3 with Building A4, Building A4 with Building A5, and Building A5 with A6.[21] By 1968, the office buildings looked as they do today.

(b) Description of the Project Site

Today, there are a total of 29 buildings on the block that was the CF Braun & Company headquarters and now comprises the Project Site. After the demolition of the large manufacturing buildings, much of the eastern half of the block was converted to surface parking, as depicted in the aerial photograph taken in 1968 and has largely remained as such up through today. The western half of the block, however, retains its density of pedestrian-oriented buildings with the CF Braun & Company historic district as the anchor. In the 1970s, improvements were completed on the "Braun Mall," which is the pedestrian walkway running north-south immediately east of Buildings A0-A9. This included the demolition of some of the remaining north-south oriented utility buildings (historically situated between the office buildings and manufacturing plant building) to widen the walkway and create more greenspace. Although the area was heavily re-hardscaped and landscaped, the general circulation of the site was kept much the same since the early 1960s when the office buildings were additionally oriented toward the east via main entries on the connective additions. Also starting in the 1970s was the construction of the larger two- to six-story office buildings that are located east of the pedestrian walkway, or Braun Mall. With the exception of Building A9 East and Building

[20] *City of Alhambra Building Permit, 54468, August 7, 1956.*

[21] *City of Alhambra Building Permit, 42959, May 19, 1966; City of Alhambra Building Permit, A44822, May 19, 1966.*

B7, new construction and site improvements have been concentrated along the pedestrian-oriented west half of the block, while the east half remains parking with a few small warehouses and shop buildings left over from the area's industrial development. Figure IV.D-2 provides a map of the current buildings located on the Project Site. Table IV.D-1 provides details concerning the current buildings on the Project Site.

Table IV.D-1
Buildings at the Project Site

Map Key	Assessor's Parcel Number	Address	Year Built[22]	Affected by Proposed Project
A0	5342-001-021	1000 S. Fremont Avenue	1944 (first floor) / 1947 (second floor)	X
A1	5342-001-021	1000 S. Fremont Avenue	1942 (first and second floors) / 1953 (lower level)	
A2	5342-001-021	1000 S. Fremont Avenue	1956 (main building and connections) / 1966	
A3	5342-001-021	1000 S. Fremont Avenue	1946 / 1953 (lower level) / 1966 (connections)	
A4	5342-001-021	1000 S. Fremont Avenue	1946 / 1951 (lower level) / 1956 (E. connection on second floor) / 1966 (E. connection on first floor and W. connection)	
A5	5342-001-021	1000 S. Fremont Avenue	1941 (W. half) / 1943 (E. half) / 1951 (lower level) / 1966 (connections)	
A6	5342-001-021	1000 S. Fremont Avenue	1948 / 1953-54 (connections)	
A7	5342-001-021	1000 S. Fremont Avenue	c. 1953[23] / 1966 (connections)	
A8	5342-001-021	1000 S. Fremont Avenue	1947 / 1952 (lower level and N. addition)	
A9 East	5342-001-021	1000 S. Fremont Avenue	1981-1982	
A9 West	5342-001-021	1000 S. Fremont Avenue	1974	
A10 North	5342-001-021	1000 S. Fremont Avenue	1973	
A10 Central	5342-001-021	1000 S. Fremont Avenue	1973	
A10 South	5342-001-021	1000 S. Fremont Avenue	1946 (first floor) / 1948 (second floor) / 1970 (lower level)	

[22] *CB Commercial, 1000 South Fremont Alhambra, California, Santa Fe International Facilities Plot Plan and Building Plans.*

[23] *Historic aerials 1952-1953.*

Map Key	Assessor's Parcel Number	Address	Year Built[22]	Affected by Proposed Project
A11	5342-001-021	1000 S. Fremont Avenue	1952 / 1967 (remodel and E. addition) / 1974 (lower level and N. addition) / 1975 (E. entrance wing addition)	
A12	5342-001-025	1000 S. Fremont Avenue	1927 / 1964 (moved) / 1974 (remodel)	X
A13	5342-001-021	1000 S. Fremont Avenue	1975	
B1	5342-001-021	1000 S. Fremont Avenue	1944 / 1952 (N. addition) / 1955 (N. addition) / 1967 (W. addition)	
B2	5342-001-021	1000 S. Fremont Avenue	2009	
B6	5342-001-021	1000 S. Fremont Avenue	1948 / 1968	
B7	5342-001-021	1000 S. Fremont Avenue	1981	
B11	5342-001-021	1000 S. Fremont Avenue	1955	X
B12	5342-001-024	1000 S. Fremont Avenue	1974	X
B13	5342-001-023	1000 S. Fremont Avenue	1954 / 1973[24] (remodel)	X
B14	5342-001-023	1000 S. Fremont Avenue	1952 / 1973[25]	X
B15	5342-001-022	1000 S. Fremont Avenue	1956 / 1969[26] / 1972	X
B16	5342-001-022	1000 S. Fremont Avenue	1954 / 1969[27]	X
LA Fitness	5342-001-021	1000 S. Fremont Avenue	2009	
Corner Office	5342-001-019	2215 W. Mission Road	1968	X
Source: GPA Consulting, 2018.				

[24] *Date purchased by CF Braun & Co.*

[25] *Id.*

[26] *Id.*

[27] *Id.*

Figure IV.D-2
Current Buildings on the Project Site

Source: GPA Consultants, 2018.

(2) Historic Resources

(a) Previous Evaluation and Determination of Eligibility

Within the boundaries of the Project Site is the CF Braun & Company Historic District (the Historic District), identified in a 1999 Historic Property Survey Report (HPSR) prepared in accordance with the requirements of Section 106 of the National Historic Preservation Act of 1966 for the Fremont Avenue Widening Project. The evaluation resulted in a formal determination of eligibility for listing in the National Register under Criterion C, "as a distinctive example of design within an industrial context and as a unique example of the work of the prominent Pasadena architectural firm of Marston and Maybury." The period of significance identified for the Historic District was 1921 to 1949. The California Historical Resources Inventory (HRI) lists the Status Code for the address 1000 S. Fremont Avenue as 2S2 (individual property determined eligible for the National Register by a consensus through Section 106 process and listed in the California Register).

The Historic District is a relatively small area located on the west end of the block fronting S. Fremont Avenue. There were 13 buildings within the Historic District, 12 were listed as contributing and one listed as non-contributing. These buildings are administration and research offices and facilities that were constructed between 1941 and 1956. They occupy a portion of a single, large parcel, partially enclosed by a high brick wall. Buildings A0-A9, and Building B1 (shown on Figure IV.D-3) are all adjacent to one another, aligned with the pedestrian walkway located to their east with varying setbacks to their west, overlooking S. Fremont Avenue. Building B6 is located east of the pedestrian walkway, perpendicular to the others. Eight of the buildings (Buildings A1-A9) along S. Fremont Avenue are connected, though structurally distinct. They were documented on the 1999 inventory forms as one building, but were historically and are currently considered more than one. The buildings rise from two to four stories with long, low rectangular massing, clad in warm and dark red brick, topped with red slate hipped roofs and detailed in cast stone.

Two buildings included in the determination and evaluation of eligibility located at the northwest corner of the block have since been demolished. These buildings were the administration garage constructed circa 1927 and research laboratory constructed circa 1950. They have been replaced by contemporary buildings consisting of a structure occupied by L.A. Fitness and a large parking garage (Building B2). Both are four-story buildings constructed in 2009. It is noted on the inventory forms that Building B6 (76 D in the District Record), was not visible from the public right-of-way and was inaccessible. Therefore, it was listed as non-contributing to the significance of the Historic District.

(b) Contributing Buildings to the Historic District

As shown in Figure IV.D-3, the boundaries of the Historic District are limited to the westernmost edge of the Project Site along S. Fremont Avenue. No off-site areas are included within the Historic District. A detailed description of the 12 contributing and one non-contributing buildings within the Historic District is included in the Historic Resources Technical Report in **Appendix F-1** of the Draft EIR.

(c) Re-Evaluation of Historic District Eligibility

In 1999, the evaluation of the CF Braun & Company Alhambra Plant as a potential historical resource was limited to the buildings that were visible from the public right-of-way. Thus, all of the buildings on the site were not inspected or evaluated. Furthermore, the Historic District that was identified has changed since it was determined eligible for listing in the National Register. Two of the buildings listed as contributing to the significance of the Historic District were demolished and replaced with new buildings in 2009. Given the limitations and the length of time since the HPSR was completed (almost 20 years), the site is re-evaluated below.

Figure IV.D-3
1999 Historic District on the Project Site

Source: GPA Consultants, 2018.

(i) National Register of Historic Places

Criterion A

To be eligible for Criterion A, a property must be associated with events that have made a significant contribution to the broad patterns of our history. The context considered in this evaluation was the industrial and economic development of Alhambra. The period of significance identified for this context is 1922 to 1964, the date that CF Braun & Company was established in Alhambra to the date that the main manufacturing building was demolished.

Until the end of the nineteenth century, agriculture was the earliest industry in Alhambra. However, the early twentieth century brought a great deal of change to the area, which laid the foundation for a transition from agriculture to manufacturing. With a population of 600, Alhambra incorporated itself into a city in 1903.[28] That same year, the Pacific Electric Railroad completed a line from Alhambra to Los Angeles In its early days, the newly formed city promoted itself as a "country suburb," with the goal of attracting workers in Los Angeles and by 1910, the population had grown to 5,000.[29] This increase in population and success of some of the pioneer manufacturing companies in Alhambra, such as Standard Felt Company and American Pipe and Steel Construction, led to the prospect of manufacturing industries as a source of employment.[30]

The City succeeded in attracting industry. In 1926, the U.S. Census Department figures listed 64 manufacturing establishments in Alhambra. Industry continued to develop through the 1930s and by 1940, annual production in the Alhambra area exceeded $8 million with nearly 4,000 employees, ranking the area 14th in value of products in California.[31]

CF Braun & Company was one of the earliest and largest manufacturing industries to establish itself in Alhambra. Originally founded in San Francisco in 1909 by Carl F. Braun, who started his own engineering and manufacturing construction company with only $500. The company started with Braun as the only salesman and operated out of two rented offices.[32] Typical of industrial America during World War I, the company was

[28] *PCR Services Corporation, "Historical Overview," 4.*

[29] *Ibid.*

[30] *Bruce D, Risher, Alhambra, California, ed. Sharon Gibbs and Dulcy Jenkins, (Alhambra, CA: The City of Alhambra, 2004), 46.*

[31] *Risher, Alhambra, California, 48.*

[32] *CF Braun & Co., The Story of a Modern Engineering Establishment, (Alhambra, CA: CF Braun & Co., 1953), 14.*

a success, and the products were used in office buildings, power plants, oil refineries, and ships, but this success was threatened in 1918 with the end of World War I. The company, as with others during this period, saw a significant decline in contracts for manufactured ship components. Being the leader and opportunist that he was, Braun looked for new market potentials, which he found in the innovative exploration of petroleum processing plants, a new world market that few others recognized at the time.[33] With the future success of the company in mind, Braun looked for a new location with more affordable land than what was available in San Francisco. Attracted to Alhambra by the area's industrial resource potential, in 1922 CF Braun & Company purchased six acres of land in the southwest section of the city. This ideal location was situated in an area with abundant oil exploration, proximity to seaports, rail transportation, and an emerging megacity.[34] Located at the northeast corner of S. Fremont Avenue and Mission Road, the initial site included an office building, research laboratory, fabricating shop and construction tool center.[35] At the Alhambra location, CF Braun & Company was re-established as a leading manufacturer in the industry. The structure of the company constantly reorganized to meet the changing needs of supply and demand, and new technologies and innovative manufacturing processes were developed to keep the company at the forefront of industrial growth and development.

Beginning in the 1920s, CF Braun & Company progressed with innovative techniques in cast iron fabrication and electric welding.[36] CF Braun & Company continued to expand across the country, establishing plants first in Texas and New York. However, its headquarters and main campus remained in Alhambra. In 1926, the Alhambra plant underwent one of the first of many expansions. In anticipation of a quickly increasing workforce, the facilities were expanded to accommodate an additional 150 employees to the existing 450.[37] By 1927, CF Braun & Company had established itself as one of the largest companies in the world manufacturing apparatuses used in the refining of oils, the production of gasoline and in other industries where heat transfer is essential in the manufacturing process. The total value of the 26-acre plant in Alhambra, including machinery and equipment, reached $1,447,373.

The company continued to prosper through the 1930s and during World War II as a result of new techniques developed for refining aviation fuel. By 1948, the CF Braun &

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[33] *Gary Frueholz, "CF Braun - An Alhambra engineering, manufacturing institution," in Around Alhambra, August 2014, 5B.*

[34] *Frueholz, "CF Braun," 5B.*

[35] *CF Braun & Co., The Story of a Modern Engineering Establishment, 16.*

[36] *Frueholz, "CF Braun," 5B.*

[37] *"Factory Spending Million," Los Angeles Times, December 3, 1926, A1.*

Company headquarters in Alhambra had more than tripled its employment from the mid-1920s, employing 2,000 workers.[38] After the war, CF Braun & Company directed its efforts to petrochemical processing plants, which were being built across the United States and throughout the world.[39] By 1954, the year founder and president Carl F. Braun passed away, the CF Braun & Company plant in Alhambra employed 5,000 workers with an annual payroll of $30,000,000. The company was one of the nation's largest builders of oil refineries and chemical plants.[40]

After Carl F. Braun died in 1954, his son John G. Braun assumed control of the company. It was sold to Santa Fe International in 1980 and continued to operate at the Alhambra plant until 1989. Shortly thereafter, the conversion to a business park occurred. Throughout the company's prosperous growth, its headquarters and main campus remained in Alhambra. Although the Alhambra campus was established in the 1920s as the company's first and only manufacturing plant, it progressed over the years and became the administrative headquarters and think-tank of the global company. The buildings that remain on the campus were constructed in the 1940s, when Braun began this transition of the Alhambra site to the main office and factory for design, engineering and consulting services, research, and fabrication. Through the 1940s and into the 1950s, the original 1920s facilities "gave way to progress" and Braun constructed the company's $25,000,000 engineering-center, "a modern and complete affair on a 50-acre site."[41]

The CF Braun & Company administration offices (the Historic District) are associated with the important events in the founding and progressive, on-going development of CF Braun & Company The company held significant real estate holdings in the industrial district of Alhambra and employed a significant number of people from the area for a substantial length of time. Therefore, the Historic District appears to be eligible under Criterion A for its association with the industrial development of Alhambra that began in the 1920s and is a prime example of one of the successful industries that put Alhambra on the map as an industrial city, rather than a bedroom community.

Criterion B

[38] *"Southland Company Building $1,000,000 Office Structure," Los Angeles Times, February 22, 1948, 21; and "CF Braun, Builder of Refineries, Dies at 69," Los Angeles Times, February 5, 1954, A1.*

[39] *Frueholz, "CF Braun," 5B.*

[40] *"Southland Company Building $1,000,000 Office Structure," Los Angeles Times, February 22, 1948, 21; and "CF Braun, Builder of Refineries, Dies at 69," Los Angeles Times, February 5, 1954, A1.*

[41] *CF Braun & Co., The Story of a Modern Engineering Establishment, 16.*

To be eligible for listing in the National Register under Criterion B, a property must be associated with the lives of persons significant in our past. The person most closely associated with this property is Carl F. Braun (1884-1954), founder and leader of CF Braun & Company The period of significance considered for this evaluation is 1909 to 1954, the date that CF Braun established his company, CF Braun & Company, to the date of his death.

Braun was born in 1884 in Oakland and was the son of Carl A. Braun and Leonora Campbell, early ranchers of the Santa Clara Valley.[42] In 1907, Carl F. Braun graduated from Stanford University with a degree in mechanical engineering. He also held a Juris Doctorate degree from Occidental College.[43] In 1909, Braun founded CF Braun & Company in San Francisco. Within a few years, Braun leased property in the Bay Area, before relocating to Alhambra where it grew into the company recognized in history today. In 1922, CF Braun & Company moved to Alhambra and by 1930, Braun and his family also moved to Southern California, and purchased an estate at 1025 Oak Grove Avenue in the upscale suburb of San Marino.[44] Braun would reside here until his death in 1954, after which he left the estate to his wife.

In addition to starting his own company, Braun made significant contributions, individually, to the field of industrial engineering and was a pioneer in the petroleum refining industry, chemical industry, and other industries involving problems of heat-transfer and fractionation. Braun filed at least 22 patents between 1915 and 1927. In addition to these individual contributions, Braun left a legacy in his company, which continued to file even more patents after his death in 1954.

CF Braun also made significant contributions to business management and company organization in terms of human relations and social sciences for which he wrote a number of books, primarily written for his employees, but which gained high recognition in business, industry, and educational circles.[45] Some of these books include, *Fair Thought and Speech* (1946), *Letter Writing in Action* (1947), *Corporate Correspondence: Problems, Methods, Controls* (1948) and *Management & Leadership* (1948).

To be eligible under Criterion B, a property needs to be an important representation of the person's accomplishments, such as "the business headquarters of an important

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[42] *"CF Braun, Builder of Refineries, Dies at 69," Los Angeles Times, February 5, 1954, A1.*

[43] *Ibid.*

[44] *Ancestry.com, 1930 United States Federal Census, accessed December 19, 2017, https:/search.ancestry.com/cgi-bin/sse.dll?indiv=1&db=1930usfedcen&h=91138051.*

[45] *CF Braun & Co. Engineers and Constructors, "The Man,"6.*

industrialist."[46] Braun is individually significant for his various contributions to the field of engineering, specifically in the design and construction of the petroleum refining industry, chemical industry, and other industries involving problems of heat-transfer and fractionation.[47] He also made significant contributions to business management practices, specifically through company organization and corporate culture in terms of human-relations and social-sciences. Although his close-by residence in San Marino still stands, he is most closely associated with the existing buildings that contribute to the CF Braun & Company Historic District, which better represent his productive life as the property that was established as the company's headquarters and location of the executive offices, which remained so throughout the company's prosperous growth. The property stands as a physical example of Braun's success in his field and the site plan and architectural design are a direct result of Braun's philosophies on business management and company organization. Therefore, the property does appear to be eligible for listing under Criterion B.

Criterion C

To be eligible for listing under Criterion C, a property must embody the distinctive characteristics of a type, period, or method of construction, represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction. The period of significance considered for this evaluation is 1941-1964, the date of construction of the oldest surviving building to the demolition of the main manufacturing building on the plant site.

Evaluated individually, the architecture of the buildings does not fit neatly into a specific stylistic category for Southern California. However, the series of brick buildings represents an aesthetic whole that embodies a distinctive set of materials and features that was developed as a collaboration between architects Marston & Maybury working closely and directly with the client, Carl F. Braun, whose corporate organization and managerial philosophy is directly expressed in the site plan, as well as architectural designs of the buildings which comprise the office sector of the former CF Braun & Company plant.

David Gebhard and Robert Winter, in *Architecture in Los Angeles: A Compleat Guide* (1984), note "We mean no sneer when we say that these buildings are comparable to

[46] *"Criterion B: Person," National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation, (Washington D.C.: National Park Service, 2002), 14.*

[47] *Ancestry.com, California, Select Births and Christenings, 1812-1988, accessed December 19, 2017, https://www.ancestry.com.*

the best work of Albert Speer in the Germany of the thirties."[48] Speer was the chief architect for Adolf Hitler who designed monumental, but subdued buildings. The aesthetic conservatism seen in the CF Braun & Company plant apparently stemmed from the client, Carl F. Braun, who is remembered as a fanatic about neatness and appearance - no desk was allowed to be left with work on it, engineers were required to wear white shirts with ties, and "CF Braun" was always to be spelt without periods after the initials.[49]

In addition, his over-arching philosophies about management and leadership were manifested in the site plan, architectural design, and interior design throughout the company's various plants and facilities. Originally individual buildings, the administration and executive offices were grouped for convenience on the southwest corner of the site and as the company progressed, new buildings were added. Through the 1930s, the general administration and engineering offices consisted of only four buildings; the administration building, engineering, club, and administration garage. By the early 1940s, new office buildings were added for drafting, accounting, design and a restaurant. In the late 1940s and early 1950s, a research laboratory, originally located on the east end of the site, was moved to a new building constructed immediately north of the offices. By the 1950s, the buildings had all been more-or-less connected. Additions were constructed to create connective corridors between existing buildings and the later buildings had been constructed with corridors that connected to the adjacent buildings. This connectivity was designed to increase the efficiency of the office workers with the communications facilities, such as the mailroom and lithograph, centrally located for ease of access.

Based on the historic aerial photos from as early as 1948, the western section of the CF Braun & Company plant where the administration and executive offices are located, looked essentially as it does today. The eastern portion of the plant, which is no longer extant, contained the manufacturing facilities where the entire manufacturing operation was housed principally in a single building with ten acres under one roof.

Building permits indicate the architectural partnership of Marston & Maybury was retained for design services when the most dramatic growth of the plant took place between the mid-1930s and 1950s.[50] The oldest surviving building permits obtained from the City of Alhambra for this report date to the 1950s and list Edgar W. Maybury as

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[48] *David Gebhard and Robert Winter, Architecture in Los Angles: A Compleat Guide, (Salt Lake City, UT: Gibbs M. Smith, Inc., Peregrine Smith Books, 1985), 284.*

[49] *Leslie Heumann, PCR, "Department of Parks and Recreation Inventory Forms, CF Braun Company," January 12, 1999, 3.*

[50] *Huemann, "Inventory Forms, CF Braun Company," 3.*

the architect. However, the oldest surviving building permit referred to in the 1999 HRER dates to 1935 and lists Marston & Maybury as the architects. Although the project completed by Marston & Maybury pre-dates the contributing buildings on the property, it is apparent that the architectural character of CF Braun & Company, consistent throughout the various plants, was determined at this time when the office buildings were first designed and constructed with a long, low rectangular massing, one to two stories in height, clad in warm and dark red brick, topped with red slate hipped roofs, and detailed in cast stone.

The firm of Marston & Maybury had a large practice with a diverse scope of work comprising of residential, public, commercial, and educational buildings in cities across Southern California. Marston & Maybury was responsible for a large and influential range of buildings, primarily in the Pasadena area, including the Pacific Southwest Trust and Savings Bank, Grace Nicholson Building, Pasadena Y.M.C.A., Pasadena Athletic Club (demolished), American Legion Building, Westminster Presbyterian Church, Pasadena Post Office, the Padua Hills Theater, and an enormous number of residences. Other works constructed in the Alhambra area include Mark Keppel High School, a Public Works Administration project.

The firm of Marston & Maybury dissolved in 1941 when World War II erupted. As a testament to Braun's respect and appreciation of their work, he offered both architects jobs at CF Braun & Company[51] Marston declined and instead joined the war effort as an on-sight supervising architect with the U.S. Army Corps of Engineers but Maybury accepted and was still overseeing construction activities up until 1955, after Braun's death.[52] Although the architectural character of the CF Braun & Company buildings had been pre-determined by this time, it was under Maybury's employment at CF Braun & Company that some of the contributing buildings were originally constructed, and many of the alterations and additions to the buildings were completed.

Marston & Maybury was one of the largest architectural firms in Los Angeles and was responsible for over 1,000 works of architecture. The CF Braun & Company facilities hint at elements of their work, such as Period Revival details and site plan configuration that one could draw parallels to the bungalow court in terms of the importance of the open spaces between the buildings. However, the design and architectural style of these buildings embody the distinctive characteristics of a type developed by master architects Marston & Maybury in working closely with their very particular and visionary

[51] *Heumann, "Inventory Forms, CF Braun Company," 3.*

[52] *The AIA Historical Directory of American Architects, s.v. "Maybury, Edgar W.," (ahd1028944), accessed December 27, 2017, http://public.aia.org/sites/hdoaa/wiki/Wiki%20Pages/1956%20American%20Architects%20Directory.aspx.*

client, Braun, to produce a distinct image for the company through its architecture. Individually, the buildings do not have the level of detail or features to possess high artistic value. However, taken as a whole, they embody the distinctive characteristics of this type, which integrates guiding principles such as function, efficiency, and adaptability for growth, into the buildings, which are strategically designed to "tool" its users. Therefore, the CF Braun & Company Historic District is eligible under Criterion C as a significant and distinguishable entity whose components may lack individual distinction, for representing the work of master architects, and for embodying the distinctive characteristics of a type.

Integrity

To be eligible for listing in the National Register, properties must retain their physical integrity from the period in which they gained significance. In the case of architecturally significant properties, the period of significance is normally the date of construction. For historically significant properties, the period of significance is usually measured by the length of the associations. The Historic District is architecturally and historically significant; however, the overall period of significance is 1941 to 1964, the date of construction of the oldest surviving building to the demolition of the main manufacturing building on the plant site.

The Historic District retains integrity as a whole, although some aspects of integrity have been compromised by alterations, including the replacement of original windows and altered window openings. However, many of the more profound alterations were completed by CF Braun & Company, within the period of significance. The integrity of setting has been somewhat diminished by alterations to the plant site. The most significant alteration was the demolition of the main manufacturing building in 1964. However, the buildings within the Historic District were originally designed as the administration and office component of the larger plant, and were strategically located to be separate yet on the same site as the manufacturing facilities. The landscaping itself, particularly the lawns and courtyards between the buildings, have been altered but the pedestrian walkway and general circulation is extant. The individual buildings were moved and re-configured over time but remained within the original location of the complex of buildings. They were designed to ensure the best work environment for the engineers and office workers. Alterations were completed within the period of significance in an effort to meet the changing needs of the workers. Therefore, the Historic District retains integrity of location and design. The Historic District also retains integrity of materials, workmanship. Having been designed in close collaboration between the architects, Maybury & Marston and the client, Carl F. Braun, many of the original materials, including the brick veneer, red slate tile roofs, and cast stone details are intact. Their connectivity, achieved through various corridor and courtyard additions were completed within the period of significance and portrays the company's evolution

over time. The Historic District retains integrity of feeling and association, as the buildings still function as a complex.

Conclusion

The CF Braun & Company Historic District is eligible for the National Register under Criteria A, B, and C. The period of significance identified is 1941 to 1964. Although the buildings have each been altered, including the replacement of original windows and altered window openings, the buildings retain integrity as a district for their continuity in location, design and setting, having been originally designed as the administration and research component of the larger plant, these buildings were strategically located to be separate yet of the same site as the plant and designed to ensure the best work environment for the engineers and office workers. The complex of buildings remains in its original location on the site and many of the alterations were completed by CF Braun & Company, within the periods of significance. The Historic District also retains integrity of materials, workmanship, feeling and association, having been designed in close collaboration between the architect and client, many of the original materials are intact and their connectivity, achieved through various corridor and courtyard additions, portrays the company's evolution over time. The buildings still function as a complex and retain integrity of feeling and association.

Due to the re-evaluation of the Historic District, some of the contributing and non-contributing buildings have changed and the boundaries have been adjusted from the 1999 determination of eligibility, as shown on Figure IV.D-4. Building B6 has been changed from non-contributing to contributing. It was constructed during the period of significance and has not been substantially altered since 1964. The Historic District is still bounded on the west by the property line along S. Fremont Avenue. The boundaries have been tightened on the south to include only Building A0, rather than extending to the property line along Mission Road, as well as on the north, to exclude two buildings constructed in 2009 that replaced two contributing buildings (B2 and B3) that were demolished. The north boundary instead extends up to include Building B1, then jogs east, and extends further north to capture Building B6. The eastern boundary runs east of Buildings A0-A8 and B1 before jogging to the east to include Building A10 South, which was not included in the previous evaluation but is now added as a contributing building. A detailed description of Building A10 South is included in the Historic Resources Technical Report in **Appendix F-1** of the Draft EIR.

(ii) California Register of Historical Resources

The CF Braun & Company Historic District was previously determined eligible for the National Register under Criterion C, and is therefore listed on the California Register under Criterion 3, for embodying the distinctive characteristics of a type, period, or

method of construction and represents the work of a master. Because the California Register criteria mirror those of the National Register, the Historic District is additionally eligible for listing in the California Register under Criterion 1, being associated with events that have made a significant contribution to the broad patterns of local or regional history and Criterion 2, being associated with the lives of persons important to local, California, or national history for the same reasons outlined under the National Register evaluation.

Figure IV.D-4
Historic District Re-Evaluation Map

Source: GPA Consultants, 2018.

(d) Evaluation of Remainder of Project Site

There are 10 buildings on the Project Site that fall outside of the boundaries of the previously identified Historic District, as well as the redrawn boundaries, that require evaluation as potential historical resources. There are six that were constructed within the period of significance for the Historic District (1941-1964), but are physically and visually disconnected. There are two that were constructed after the period of significance, but are over 45 years of age. They are pictured, described, and evaluated in the Historic Resources Technical Report (see **Appendix F-1**) for their potential as individual historical resources and are summarized as follows:

- Building A11: Constructed in 1952 as an office building. In 1967, the building was remodeled with an addition on the east elevation, nearly doubling the building in size. A basement level and north addition were constructed in 1974. In 1975, the entrance wing on the northeast corner of the building was added. While it was originally constructed within the period of significance of the Historic District, the building has been significantly altered with multiple large additions that were constructed after 1964, such that most of the building post-dates the period of significance. In addition, the building is physically and visually disconnected from the concentration of contributing buildings along S. Fremont Avenue. Therefore, it does not appear to be eligible as a contributor to the Historic District. Research did not indicate that the building was individually significant. The building does not exhibit quality of design through distinctive features that would make it eligible for listing as an example of any particular style. Building A11 does not appear to be eligible for listing as a historical resource under national and state Criteria A/1, B/2, or C/3.

- Building A12: According to current floor plans, this building was originally constructed in 1927 and moved to its current location in 1964.[53] It is not certain exactly where the building was originally located but evidence suggests some possible scenarios. The first is that the building, if constructed in 1927, was the original engineering and drafting office, located northeast of the original administration building in 1927. It would have been moved in the 1940s to align with the other office buildings along S. Fremont Avenue before moving again to its current location in 1964. In order to architecturally align with the rest of the buildings, it would have been veneered in brick to appear as it does today. If Building A12 was constructed in 1927, the engineering and drafting office building is one of two other office buildings present on the site at the time. It is

[53] *CB Commercial, 1000 South Fremont Alhambra, California, Santa Fe International Facilities Plot Plan and Building Plans.*

also probable that Building A12 was moved a third time, prior to its current location. Whether or not the building was originally constructed within the period of significance as part of the office and administration buildings along S. Fremont Avenue, the building has been significantly altered from its 1927 appearance and significantly altered after the period of significance in 1974, when it was remodeled as Building A12. In addition, at its current location the building is physically and visually disconnected from the Historic District. Although the building was moved in 1964, right at the end of the period of significance, it was moved to a location that was not historically the site of the office and administration buildings, north of where the manufacturing plant building was located. Newer buildings have since been constructed to the southwest of Building A12, further visually separating it from the Historic District. Therefore, it does not appear to be eligible as a contributor to the Historic District. Research did not indicate that the building was individually significant. No information was found to suggest that individuals of historic significance were associated with the building. The building does not exhibit quality of design through distinctive features that would make it eligible for listing as an example of any particular style. Building A12 does not appear to be eligible for listing as a historical resource under national and state Criteria A/1, B/2, or C/3.

- Building B11: Constructed in 1955, the building was part of the smaller fabricating and maintenance shops, located south of the main manufacturing building. Although it was constructed within the period of significance of the Historic District, the building is physically and visually disconnected from the concentration of contributing buildings along S. Fremont Avenue. Therefore, it does not appear to be eligible as a contributor to the Historic District. Research did not indicate that the building was individually significant. No information was found to suggest that individuals of historic significance were associated with the building. The building does not exhibit quality of design through distinctive features that would make it eligible for listing as an example of any particular style. Building B11 does not appear to be eligible for listing as a historical resource under national and state Criteria A/1, B/2, or C/3.

- Building A10 North and Central: Building A10 North and Central was constructed in 1973 as a new office building with one floor below grade, four floors above grade and a two-floor wing on the north end. The building was intended to tie into the existing buildings on the north (A11) and south (A10 south).[54] Although the building was constructed under ownership of CF Braun & Company, it was

[54] *City of Alhambra Building Permit C-10345, August 4, 1973.*

constructed almost ten years after the period of significance and is not eligible as a contributor of the Historic District. Constructed after the manufacturing building was demolished, the subject building is not individually associated with the trend of industrial development in Alhambra. Research did not indicate that the building is specifically associated with any other trend that could be considered important. No information was found to suggest that individuals of historic significance were associated with the building. The building is not an original or unique architectural statement nor does the building exhibit quality of design through distinctive features that would make it eligible for listing as an excellent example of any particular style. Building A10 North and Central does not appear to be eligible for listing as a historical resource under national and state Criteria A/1, B/2, or C/3.

- Building B12: Building B12 was constructed in 1974 after the manufacturing building was demolished. Thus, the subject building is not individually associated with the trend of industrial development in Alhambra. Research did not indicate that the building is specifically associated with any other trend or events that have made a significant contribution to the broad patterns of our history. No information was found to suggest that individuals of historic significance were associated with the building. The building does not exhibit quality of design through distinctive features that would make it eligible for listing as an example of any particular style. It is an ordinary example of a warehouse from the period. Building B12 does not appear to be eligible for listing as a historical resource under national and state Criteria A/1, B/2, or C/3.

- Building B13: Building B13 was constructed in 1954 and was remodeled in 1973. Although it was constructed within the period of significance of the Historic District, the building was not purchased by CF Braun & Company until 1973, after the period of significance. Therefore, it does not appear to be eligible as a contributor to the Historic District. Research did not indicate that the building was individually significant. No evidence was found to indicate that the building was associated with a specific industry when it was constructed, and it was not owned or used by CF Braun & Company during an important period in the company's history. No information was found to suggest that individuals of historic significance were associated with the building. The building does not exhibit quality of design through distinctive features that would make it eligible for listing as an example of any particular style. It is an ordinary example of a warehouse from the period. Building B13 does not appear to be eligible for listing as a historical resource under national and state Criteria A/1, B/2, or C/3.

- Building B14: Although this building was constructed as early as 1952, within the period of significance of the Historic District, the building was not purchased by

CF Braun & Company until after the period of significance in 1973. Therefore, it does not appear to be eligible as a contributor to the Historic District. Research did not indicate that the building was individually significant. No evidence was found to indicate that the building was associated with a specific industry when it was constructed, and it was not owned or used by CF Braun & Company during an important period in the company's history. No information was found to suggest that individuals of historic significance were associated with the building. The building does not exhibit quality of design through distinctive features that would make it eligible for listing as an example of any particular style. It is an ordinary example of a warehouse from the period. Building B14 does not appear to be eligible for listing as a historical resource under national and state Criteria A/1, B/2, or C/3.

- Building B15: Although this building was constructed as early as 1956, within the period of significance of the Historic District, the building was not purchased by CF Braun & Company until after the period of significance in 1969. Therefore, it does not appear to be eligible as a contributor to the Historic District. According to building plans, the building was also altered in 1972 though the extent of work is not indicated. Research did not indicate that the building was individually significant. No evidence was found to indicate that the building was associated with a specific industry when it was constructed, and it was not owned or used by CF Braun & Company during an important period in the company's history. No information was found to suggest that individuals of historic significance were associated with the building. The building does not exhibit quality of design through distinctive features that would make it eligible for listing as an example of any particular style. It is an ordinary example of a warehouse from the period. Building B15 does not appear to be eligible for listing as a historical resource under national and state Criteria A/1, B/2, or C/3.

- Building B16: Although this building was constructed in 1954, the building was not purchased by CF Braun & Company until after the period of significance in 1969. Therefore, it does not appear to be eligible as a contributor to the Historic District. Research did not indicate that the building was individually significant. No evidence was found to indicate that the building was associated with a specific industry when it was constructed, and it was not owned or used by CF Braun & Company during an important period in the company's history. No information was found to suggest that individuals of historic significance were associated with the building. The building does not exhibit quality of design through distinctive features that would make it eligible for listing as an example of any particular style. It is an ordinary example of a warehouse from the period.

Building B16 does not appear to be eligible for listing as a historical resource under national and state Criteria A/1, B/2, or C/3.

- Corner Office: Research did not indicate that the building was individually significant. It was constructed in 1967-1968 as a manufacturing building with offices under the ownership of Nardon Manufacturing Company, manufacturers of metal parts and equipment.[55] No evidence was found to indicate that the company was particularly significant or influential to be specifically associated with the trend of industrial development in Alhambra. The building was not owned or used by CF Braun & Company during an important period in the company's history. Research did not indicate that the building is specifically associated with any other trend that could be considered important. No information was found to suggest that individuals of historic significance were associated with the building. The building is not an original or unique architectural statement nor does the building exhibit quality of design through distinctive features that would make it eligible for listing as an excellent example of any particular style. The Corner Office Building at 2215 W. Mission Road does not appear to be eligible for listing as a historical resource under national and state Criteria A/1, B/2, or C/3.

(e) Summary of Historic Resources Evaluation

There are a total of 26 buildings within the Project Site. Of the 22 that are over 45 years of age, a total of 12 historical resources have been identified, as shown in Table IV.D-2 below. The 12 identified historical resources are contributors to the CF Braun & Company Historic District. The remaining 10 buildings that are outside of the boundaries of the Historic District but over 45 years of age do not appear to meet the eligibility standards for listing due to lack of historical significance, architectural character, and/or physical integrity. None are currently listed under national or state landmark programs, nor are any included as significant in any historic resource surveys of the area.

[55] *City of Alhambra Building Permit B-3792, November 7, 1967.*

Table IV.D-2
Historic Resource Status of Buildings at the Project Site

Map Key	Assessor's Parcel Number	Address	Year Built[56]	Affected by Proposed Project	Proposed Status Code/District Status
A0	5342-001-021	1000 S. Fremont Avenue	1944 (first floor) / 1947 (second floor)	X	2D2/Contributing
A1	5342-001-021	1000 S. Fremont Avenue	1942 (first and second floors) / 1953 (lower level)		2D2/Contributing
A2	5342-001-021	1000 S. Fremont Avenue	1956 (main building and connections) / 1966		2D2/Contributing
A3	5342-001-021	1000 S. Fremont Avenue	1946 / 1953 (lower level) / 1966 (connections)		2D2/Contributing
A4	5342-001-021	1000 S. Fremont Avenue	1946 / 1951 (lower level) / 1956 (E. connection on second floor) / 1966 (E. connection on first floor and W. connection)		2D2/Contributing
A5	5342-001-021	1000 S. Fremont Avenue	1941 (W. half) / 1943 (E. half) / 1951 (lower level) / 1966 (connections)		2D2/Contributing
A6	5342-001-021	1000 S. Fremont Avenue	1948 / 1953-54 (connections)		2D2/Contributing
A7	5342-001-021	1000 S. Fremont Avenue	c. 1953[57] / 1966 (connections)		2D2/Contributing
A8	5342-001-021	1000 S. Fremont Avenue	1947 / 1952 (lower level and N. addition)		2D2/Contributing
A10 North	5342-001-021	1000 S. Fremont Avenue	1973		6Z/Non-Contributing
A10 Central	5342-001-021	1000 S. Fremont Avenue	1973		6Z/Non-Contributing
A10 South	5342-001-021	1000 S. Fremont Avenue	1946 (first floor) / 1948 (second floor) / 1970 (lower level)		2D2/Contributing
A11	5342-001-021	1000 S. Fremont Avenue	1952 / 1967 (remodel and E. addition) / 1974 (lower level and N. addition) / 1975 (E. entrance wing addition)		6Z/Non-Contributing
A12	5342-001-025	1000 S. Fremont Avenue	1927 / 1964 (moved) / 1974 (remodel)	X	6Z/Non-Contributing
B1	5342-001-021	1000 S. Fremont Avenue	1944 / 1952 (N. addition) / 1955 (N. addition) / 1967 (W. addition)		2D2/Contributing

[56] *CB Commercial, 1000 South Fremont Alhambra, California, Santa Fe International Facilities Plot Plan and Building Plans.*

[57] *Historic aerials 1952-1953.*

Map Key	Assessor's Parcel Number	Address	Year Built[56]	Affected by Proposed Project	Proposed Status Code/District Status
B6	5342-001-021	1000 S. Fremont Avenue	1948 / 1968		3D/Contributing
B11	5342-001-021	1000 S. Fremont Avenue	1955	X	6Z/Non-Contributing
B13	5342-001-023	1000 S. Fremont Avenue	1954 / 1973[58] (remodel)	X	6Z/Non-Contributing
B14	5342-001-023	1000 S. Fremont Avenue	1952 / 1973[59]	X	6Z/Non-Contributing
B15	5342-001-022	1000 S. Fremont Avenue	1956 / 1969[60] / 1972	X	6Z/Non-Contributing
B16	5342-001-022	1000 S. Fremont Avenue	1954 / 1969[61]	X	6Z/Non-Contributing
Corner Office	5342-001-019	2215 W. Mission Road	1968	X	6Z/Non-Contributing

Notes:
2D2 - Contributor to a district determined eligible for National Register by consensus through Section 106 process; Listed in the California Register.
6Z - Found ineligible for National Register, California Register, or local designation through survey evaluation.
3D - Appears eligible for National Register as a contributor to a National Register eligible district through survey evaluation.
Source: GPA Consulting, 2018.

(3) Archaeological Resources

Archaeology is the recovery and study of material evidence of human life and culture of past ages. The area surrounding and including the Project Site is a highly urbanized area that has been subject to disruption throughout the years. On March 14, 2018, a records search of the California Historical Resources Information System (CHRIS) at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton was conducted to identify previously documented archaeological resources within a 0.5-mile radius of the Project Site (see **Appendix F-2**, Archaeological and Tribal Cultural Resources Assessment, of the Draft EIR for additional detail).

The CHRIS records search identified 17 previously conducted cultural resources reports and 45 preciously recorded cultural resources within a 0.5-mile radius of the Project Site. None of the reports intersecting the Project Site included archaeological studies.

[58] *Date purchased by CF Braun & Co.*

[59] *Id.*

[60] *Id.*

[61] *Id.*

All of the resources identified in the records search are historic built-environment resources, one of which is a National Register of Historic Places (NRHP)- and California Register of Historic Resources (CRHR)-eligible Historic District located within the boundaries of the Project Site and discussed above under Historical Resources.

Though no archaeological resources have been previously recorded within the Project Site, it is possible that archaeological resources are preserved below the ground surface. The Project Site was assessed for the potential to contain unknown archaeological resources. Separate considerations were given for prehistoric archaeological resources and tribal cultural resources, which are affiliated exclusively with Native Americans (see **Section IV.O, Tribal Cultural Resources**, of the Draft EIR), and Historic-period archaeological resources, which have no Native American affiliations.

The potential for encountering unknown Historic-period archaeological resources is found to be high due to the extensive construction and demolition record dating at least to 1904 related to the establishment of the town of Dolgeville. The Historic-period artifacts and features may include those associated with residences along Date Avenue, as well as industrial uses within portions of the Project Site. The single geotechnical bore taken at the Project Site identified five feet of artificial fill overlying native alluvial sediments. The depth of the fill is likely to vary across the site and represents the zone in which the highest potential exists for encountering these Historic-period archaeological resources.[62]

3. Project Impacts

a) Methodology

(1) Historical Resources

To identify potential historical resources and assess potential project impacts, the following analytical steps were undertaken in the preparation of the Historical Resources Technical Report:

1. A preliminary field inspection of the Project Site and vicinity was conducted to determine what areas might be impacted by the Project and to identify listed or potential historical resources. For the purposes of this report, the study area was

[62] *SWCA Environmental Consultants, Archaeological and Tribal Cultural Resources Assessment for the Villages At The Alhambra Project, Alhambra, Los Angeles County, California, SWCA Environmental Consultants, April 2019, p. ii.*

identified as the block bounded by S. Fremont Avenue, Orange Street, Date Avenue, and W. Mission Road.

2. A records search from the SCCIC at California State University, Fullerton was requested and reviewed to determine whether or not any of the buildings in the study area are currently listed under national, state, or local landmark or historic district programs and whether or not they have been previously identified or evaluated as historical resources as defined by CEQA.

3. An intensive field inspection of the study area was conducted to determine if the Historic District had changed since 1999 and to identify the character-defining features and integrity of the buildings identified as potential historical resources.

4. It was determined that the CF Braun & Company Historic District should be re-evaluated given the fact that the 1999 determination of eligibility was limited to buildings that could be viewed from the public right-of-way and two of the buildings identified as contributing had been demolished.

5. A total of 22 buildings were identified within the study area over 45 years of age. Of the 22 buildings, 10 were previously identified as contributing buildings to the Historic District and one was identified as a non-contributor. Within the study area, there are 12 additional buildings that fall outside of the boundaries of the Historic District but are over 45 years of age and were identified as potential individual resources. The remaining seven buildings within the study area were excluded from further consideration as individual historical resources.

6. Additional research was conducted to fill information gaps, as necessary. Sources consulted included building plans and permits, Sanborn Fire Insurance maps, historic photograph collections including aerials, architectural periodicals, newspapers, and scholarly sources, such as books, articles, and documentaries.

7. Project plans were reviewed and evaluated to determine if the Project would have direct or indirect impacts on the identified historical resources as defined by CEQA.

(2) Archaeological Resources

To address potential impacts associated with archaeological resources, formal records searches were conducted to assess the archaeological sensitivity of the Project Site and vicinity. In addition, an evaluation of existing conditions and previous disturbances within the Project Site, the geology of the Project Site, and the anticipated depths of grading were evaluated to determine the potential for uncovering archaeological

resources. For additional methodological detail concerning these investigations, see **Appendix F-2** of the Draft EIR.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with the State CEQA Guidelines Appendix G (Appendix G), the Project would have a significant impact related to cultural resources if it would:

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

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

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

(2) Historic Resources

The State Legislature, in enacting the California Register, also amended CEQA to clarify which properties are considered historic resources, as well as which project impacts are considered to be significantly adverse. A project with an effect that may cause a substantial adverse change in the significance of a historic resource is a project that may have a significant effect on the environment.[63] A substantial adverse change in the significance of a historic resource means demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.[64] As such, the test for determining whether or not a proposed project will have a significant impact on an identified historical resource is whether or not the project will alter in an adverse manner the physical integrity of the historical resource such that it would no longer be eligible for listing in the National or California Registers or other landmark programs.

(a) Secretary of the Interior's Standards

Projects that may affect historical resources are considered mitigated to a level of less than significant if they are consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (Standards).[65] The Standards are accompanied by

[63] *CEQA Guidelines Section 15064.5(b).*

[64] *CEQA Guidelines Section 15064.5(b) (1).*

[65] *14 CCR Section 15126.4(b).*

Guidelines for four types of treatments for historical resources: Preservation, Rehabilitation, Restoration, and Reconstruction.

Though none of the four treatments as a whole applies specifically to new construction in the vicinity of historical resources, Standards #9 and #10 of the Standards for Rehabilitation provide relevant guidance for such projects.

The Standards for Rehabilitation are as follows:

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

3. Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.

4. Changes to a property that have acquired significance in their own right will be retained and preserved.

5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible

with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

It is important to note that the Standards are not intended to be prescriptive but, instead, provide general guidance. They are intended to be flexible and adaptable to specific project conditions to balance continuity and change, while retaining materials and features to the maximum extent feasible. Their interpretation requires exercising professional judgment and balancing the various opportunities and constraints of any given project. Not every Standard necessarily applies to every aspect of a project, nor is it necessary to comply with every Standard to achieve compliance.

(3) Archaeological Resources

In terms of archaeological resources, PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type;
- Is directly associated with a scientifically recognized important prehistoric or historic event or person;

If it can be demonstrated that a proposed project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Sections 21083.2[a], [b], and [c]). CEQA notes if an archaeological resource is neither a unique archaeological resource nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (CEQA Guidelines Section 15064.5[c][4]).

c) Project Design Features

No specific Project design features are proposed with regard to cultural resources, including historic and archaeological resources. For a discussion of tribal cultural resources, see **Section IV.O, Tribal Cultural Resources**, of the Draft EIR.

d) Analysis of Project Impacts

Threshold a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

(1) Impact Analysis

The Project involves four activities that have the potential to impact historical resources, namely the CF Braun & Company Historic District: demolition, relocation, rehabilitation, and new construction. The following discussion analyzes the potential impacts of the Project with respect to each of these activities.

(a) Demolition

The Project involves the demolition of a number of buildings. As the buildings are outside the boundaries of the reconsidered Historic District or are not individually significant, none are historical resources as defined by CEQA. Thus, the demolition of existing buildings as part of the Project would have no impact on historical resources.

(b) Relocation

The Project could involve the relocation of Building A0. Whether Building A0 is relocated depends on the precise realignment of the driveway off S. Fremont Avenue to create the required width and turning radius for vehicles. The current alignment of the driveway is not original. The realignment would be closer to the alignment during the period of significance for the Historic District.

In determining the impact on the Historic District, the central question is whether the relocation of Building A0 would affect the physical integrity of the Historic District to the degree that it would no longer qualify as a historical resource. Such an effect would only occur if the Historic District no longer retained sufficient integrity to convey its significance. According to *National Register Bulletin #15*, there are seven aspects of integrity: feeling, association, workmanship, location, design, setting, and materials. The only relevant aspects of integrity with respect to the impact of the relocation of Building A0 on the Historic District are setting and feeling. Setting is defined as "the physical

environment of a historic property" and feeling is defined as "a property's expression of the aesthetic or historic sense of a particular period of time."[66]

The activity of relocating Building A0 would have a less-than-significant impact on the Historic District in and of itself. Building A0 would remain within the Historic District and its relationship with the other contributing buildings would not be significantly altered because it would only be relocated a short distance (no more than 150 feet) and would have the same orientation. The new location would be compatible with the historic character and development pattern in the Historic District. Therefore, the general environment of Building A0 and the Historic District as a whole would not be materially impaired. The Historic District would continue to be eligible for listing in the National Register if Building A0 was relocated. It would continue to retain sufficient integrity, including setting and feeling, to convey its significance.

The logistics of moving Building A0 are unknown, because it is still unclear if the relocation is even necessary. Thus, the relocation has the potential to cause a substantial adverse change in that Building A0 could be damaged. As a result, impacts would be potentially significant.

(c) Rehabilitation

Interior alterations would be made to Building A0 as part of the Project, regardless of whether it is relocated. It is currently used as office space for the on-site security staff. In the proposed Project it would be used for resident services, which would require interior improvements. This aspect of the Project would have a less-than-significant impact on the Historic District. The interiors of the contributing buildings were not considered in the evaluation or determination of eligibility of the Historic District due to their past alteration from original states. Impacts would be less than significant.

(d) New Construction

In analyzing the potential impacts of the Project on the Historic District, the central question is whether the Project would affect the physical integrity of the Historic District to the degree that it would no longer be eligible for listing in the National Register. Such an effect would only occur if the Historic District no longer retained sufficient integrity to convey its significance. According to *National Register Bulletin #15*, there are seven aspects of integrity: feeling, association, workmanship, location, design, setting, and materials. The only relevant aspects with respect to the impact of new construction on an established historic district are setting and feeling. While *National Register Bulletin #15* does not directly address the impact of new construction on the setting or feeling of

[66] *National Register Bulletin #15*, 45.

a historic district, it provides direction in assessing the impact of non-contributing buildings on the physical integrity of a listed historic district, as follows:

> When evaluating the impact of intrusions upon the district's integrity, take into consideration the relative number, size, scale, design, and location of the components that do not contribute to the significance. A district is not eligible if it contains so many alterations or new intrusions that it no longer conveys the sense of historic environment.

As a result, this analysis of potential impacts on the Historic District considers how the Project might affect the Historic District's integrity of feeling and setting in terms of its relative number, size, scale, design, and location of visual intrusions.

(i) Relative Number

The Project would not affect the number of buildings in the Historic District or the ratio of contributing to non-contributing buildings because the South Plan Area of the Project Site only partially overlaps with the Historic District. The Project would not involve the demolition of any of the contributing buildings and would not involve the construction of any new buildings within the boundaries. Building A0 is the only contributing building within the portion of the Project Site proposed to be redeveloped under the Project, and it would be preserved.

(ii) Size, Scale, and Design

The CF Braun & Company Historic District is characterized by buildings one to four stories in height with rectangular plans and brick exteriors. The new five-story residential buildings would be a maximum of 60 feet in height above street grade, while the new five-story residential building in the Corner Plan Area would be a maximum of 62 feet in height above street grade. The new five-story residential buildings in the South Plan Area would be a maximum of nearly 67 feet in height above street grade, while the new five-level parking structure in the East Plan Area would be approximately 40 feet in height above street grade.

The size and scale of the new buildings are not inappropriate or incompatible with the contributing buildings in the Historic District. Furthermore, the majority of the new buildings would not be within view from the Historic District. The existing seven-story, 91-foot tall office building (A9 East) between the Historic District and Project site would remain, as would the existing five-story, 86-foot tall office building (A9 West) adjacent to it. These two connected buildings would block the view of the new parking structure. The new townhomes would be adjacent to contributing Building A10 South, but they are only two to three stories in height. The only new residential building that would share a block face with the Historic District is in the South Plan Area, at the corner of S. Fremont

Avenue and Mission Road. The footprint of the new building as it faces S. Fremont Avenue forms a courtyard to reduce the scale and to prevent it from overwhelming the nearby contributing Building A0.

Regarding design, the style of the new buildings is contemporary, but compatible with the architecture of the contributing buildings in the Historic District. The new buildings would be composed of a series of simple rectangular volumes. The exterior materials are mostly stucco, but with brick, wood, and metal accents that unite the new buildings with the contributing buildings in the Historic District. The Project would be sufficiently compatible with the Historic District in terms of size, scale, and design and impacts would be less than significant.

(iii) Location

The portions of the Project Site that would be redeveloped under the Project are located on the eastern and southern portions of the block and are occupied by existing surface parking lots and a few relatively small commercial and industrial buildings that are not historical resources. This is an ideal location for new construction as it is mostly outside the boundary of the Historic District and located where it has little potential to obstruct views of contributing buildings. The Project would not negatively affect the integrity of the Historic District because of an inappropriate location and impacts would be less than significant.

(e) Impact Conclusion

The new construction would not diminish the Historic District's integrity. It would have no impact on the relative number of contributors and non-contributors. It would be compatible in terms of size, scale, and design. The larger buildings in the center of the block would buffer the majority of the new buildings from the contributing buildings. The new buildings would not intrude on important view corridors within the Historic District. While the new buildings would alter the setting and feeling of the Historic District by introducing a new visual element, the Historic District would remain eligible for listing in the National Register and listed in the California Register and impacts would be less than significant. As discussed in **Section IV.K, Noise**, of the Draft EIR, impacts with respect to potential damage to buildings within the Historic District from on-site Project construction-related vibration would be less than significant. However, the potential relocation of Building A0 could cause a substantial adverse change in that the building could be damaged. As a result, impacts would be potentially **significant** on the identified historical resource.

(2) Mitigation Measures

Mitigation Measures CUL-MM-1 through CUL-MM-3 are recommended to reduce the Project's potential impact with respect to the possible relocation of contributing Building A0.

- **CUL-MM-1**: The Project Applicant shall retain a qualified historic preservation professional meeting the Secretary of the Interior's Professional Qualifications Standards for historic architecture to create a relocation plan for Building A0. The relocation plan shall include the identification of the receiving site, the orientation of the building after the relocation, a survey of the building to document the physical spaces and features and to assess the current condition of the materials and systems, and an analysis for compliance with the Standards. The relocation plan shall be submitted to the City of Alhambra Director of Development Services for concurrence. Building permits may be issued after the Director has concurred that the relocation plan complies with the Standards for Rehabilitation.

- **CUL-MM-2**: In advance of the relocation, the historic architect meeting the qualifications described above shall meet with the building mover to review the plan. Within five days of the meeting, the professional shall submit meeting minutes to the City of Alhambra Director of Development Services.

- **CUL-MM-3**: Prior to the issuance of any building permits, the Project Applicant shall retain a qualified historic preservation professional meeting the Secretary of the Interior's Professional Qualifications Standards for architectural history or historic architecture to review plans related to the alteration of Building A0. The plans shall be reviewed by this professional for compliance with the Standards for Rehabilitation. If the plans do not comply with the Standards, the professional shall make recommendations for changes to the plans so they comply. The review shall be summarized in a memorandum, and submitted to the City of Alhambra Director of Development Services for concurrence. Building permits may be issued after the Director has concurred that the plans comply with the Standards for Rehabilitation.

(3) Level of Significance After Mitigation

With implementation of Mitigation Measures CUL-MM-1 through CUL-MM-3, potential Impacts to historical resources relating to the possible relocation of Building A0 would be reduced to a **less-than-significant** level.

Threshold b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

(1) Impact Analysis

Archival research was conducted to assess the potential for the presence and preservation of buried archaeological resources within the Project Site, specifically the portions for which excavation has been proposed. Some of the vacant lots visible in aerial photographs from 1924 and 1927 suggest surface modifications may have occurred within the Project Site prior to this time, but it is not clear whether it was ever under cultivation during the nineteenth century when it was owned by the Lake Vineyard Land and Water Association between 1876 and ca. 1894, or the subsequent owner(s) before the early 1920s. It does not appear that any buildings or structures were constructed within the Project Site at any time prior to 1924. The Southern Pacific Railroad was completed in 1873 and ran south of the Project Site along what is now Mission Road, followed by a north-south running spur line constructed east of the Project Site along what is now Raymond Avenue. Fremont Avenue was established in the 1880s, originally as the county-owned Pasadena Road. It is possible that materials could have been discarded within the Project Site during any of the road or railroad constructions, or in association with the operation of agricultural properties in the surrounding area. It is unlikely that any of such materials were deeply buried, and are therefore unlikely to be have been preserved during subsequent land development.

The east half of the Project Site was included in the Dolgeville town design. The Dolgeville Land Company subdivided the property and created the lots along Date and Cypress Avenues. According to the 1903 tract map, at least five of the lots in the Project Site were sold in the first decade of the twentieth century. The unsold lots along Cypress Avenue were located adjacent to the parcel excluded from the Dolgeville plan, and it appears the two parcels remained undeveloped into the 1920s. Although some of the sold lots within Dolgeville remained undeveloped, several of the properties along Date Avenue were likely developed with single-family homes between 1904 and 1924.

The first substantial development of the Project area occurred in early 1920s when the CF Braun & Company completed the first phase of construction for their industrial manufacturing facility, which included a railroad spur line connecting with the Southern Pacific Railroad to the south. The Braun facility occupied the formerly vacant lots on the east side of the Project Site. The initial construction was completed in 1922 on the southern two-thirds of the Project Site, excluding the parcels fronting Date Avenue. Sanborn Insurance maps from 1931 show that the Braun plant included buried pipelines installed between the buildings. The Braun facility expanded slightly during the 1930s but within the same footprint. Infill along Date Avenue between the residential units began to include light industrial and storage buildings. This trend continued into the 1950s and eventually the residential dwellings began to be replaced, so that by the 1970s only industrial buildings were located along Date Avenue. The CF Braun &

Company expanded significantly in the 1940s and the plant was redesigned. The redesign included the demolition of nearly all the original buildings and structures, and the construction of the brick administrative buildings fronting Fremont Avenue within the Project's Office Plan Area. By the end of World War II, all but the eastern portion of the Project Site was occupied by the Braun plant. Beginning in the 1960s, the industrial buildings began to be demolished and replaced with paved parking lots. Although the original buildings associated with the Braun plant were demolished and the 1920s single-family homes were all replaced, buried physical remains dating from this time period may have been preserved after the subsequent construction. These remains could include domestic refuse, industrial hardware, building materials, structural foundations, and historical infrastructure.

Though no known archaeological resources have been identified within the Project Site, it is possible that archaeological resources are preserved below the surface. Specifically, Historic-period artifacts and features, especially those associated with residences along Date Avenue, as well as industrial uses within the portions of the Project Site being proposed for excavation. As noted previously, the single geotechnical bore taken within the Project Site identified five feet of artificial fill overlying the native alluvial sediments. The depth of the fill is likely to vary across the site and represents the zone in which the highest potential exists for encountering these resources. For these reasons, it is concluded that the Project Site has a high sensitivity for containing historic archaeological resources. Therefore, without mitigation, impacts related to archaeological resources would be potentially **significant**.

(2) Mitigation Measures

Mitigation Measures CUL-MM-4 through CUL-MM-7 would ensure the Project's potential impact to archaeological resources would be less than significant.

- **CUL-MM-4**: The Project Applicant shall retain a qualified archaeologist, defined as an archaeologist who meets the Secretary of the Interior's Standards for professional archaeology, who will carry out all mitigation measures related to archaeological resources.

- **CUL-MM-5**: Prior to the commencement of excavation, an Archaeological Resources Monitoring Plan (Monitoring Plan) shall be prepared. The Monitoring Plan shall include, but not be limited to, a monitoring protocol for any initial excavation conducted for the Project, a construction worker training program, and discovery and processing protocol for inadvertent discoveries of archaeological and tribal cultural resources. The Monitoring Plan should identify areas with moderate to high sensitivity determined for archaeological resources that require monitoring and detail a protocol for determining circumstances in

which additional or reduced levels of monitoring (e.g., spot-checking) may be appropriate. Specifically, the Monitoring Plan should include a framework for assessing the geo-archaeological setting to determine whether sediments capable of preserving archaeological remains are present (e.g., in native versus fill soils), and the depth at which these sediments would no longer be capable of containing archaeological material.

- **CUL-MM-6**: Prior to the commencement of excavation, the selected qualified archaeologist or their designee will provide a briefing to construction crews to provide information on regulatory requirements for the protection of archaeological resources. As part of this training, construction crews shall be briefed on proper procedures to follow should unanticipated archaeological resources discoveries be made during construction. Workers will be provided contact information and protocols to follow if inadvertent discoveries are made. In addition, workers will be shown examples of the types of archaeological resources that would require notification of the project archaeologist.

- **CUL-MM-7**: Prior to ground disturbance, an archaeological monitor shall be present during initial excavation activities as stipulated in the Monitoring Plan. The qualified archaeologist may designate an archaeologist to conduct the monitoring under their direction. Specifically, field observations regarding the geoarchaeological setting should be taken to determine the presence of sediments capable of preserving archaeological remains, and the depth at which these sediments would no longer be capable of containing archaeological material. In the event that archaeological resources are encountered during ground-disturbing activities, work in the vicinity of the discovery will temporarily halt and, if needed, redirected while the archaeological monitor can evaluate the find. The duration and timing of the monitoring shall be determined by the qualified archaeologist in consultation with the City and the Project Applicant. At the conclusion of monitoring activities, a technical report will be prepared documenting the methods and results of all work completed under the Monitoring Plan. The report will be prepared under the supervision of a qualified archaeologist and submitted to the Project Applicant, the City of Alhambra, and the SCCIC.

(3) Level of Significance After Mitigation

By ensuring that excavation work is undertaken in accordance with a monitoring plan and is overseen by a qualified archaeologist with the ability to halt work in the event of any inadvertent resource discoveries, and that any resources encountered are properly identified and handled, implementation of Mitigation Measures CUL-MM-4 through CUL-

MM-7 would ensure that Project impacts with respect to unknown archaeological resources that may be present on-site are reduced to a **less-than-significant** level.

Threshold c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

(1) Impact Analysis

As discussed in in the Initial Study (**Appendix A-3** of the Draft EIR), the Project Site is located in a heavily urbanized area and is currently developed with parking lots and multiple buildings. The likelihood of encountering human remains on the Project Site is minimal. The Proposed Project would be required to comply with applicable provisions of State law with respect to the inadvertent discovery of unknown human remains (see also **Section IV.O, Tribal Cultural Resources**, of the Draft EIR for additional discussion). Per State law, if human remains were discovered during construction of the Project, work in the immediate vicinity would be halted, the County Coroner, construction manager, and other entities would be notified per California Health and Safety Code Section 7050.5, and disposition of the human remains and any associated grave goods would occur in accordance with Public Resources Code Section 5097.91 and 5097.98, as amended. Compliance with all required regulatory measures would ensure that any potential impacts related to human remains would be **less than significant**.

(2) Mitigation Measures

Impacts related to human remains would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to human remains would be **less than significant** without mitigation.

e) Cumulative Impacts

(1) Impact Analysis

As provided in **Section III, Environmental Setting**, of the Draft EIR, there are nine cumulative development projects within an approximate three-mile radius of the Project Site. While the majority of these cumulative projects are located a substantial distance from the Project Site (as shown in Figure III-16), one is located in proximity to the Project Site at the southwest corner of Commonwealth and Date Avenues, approximately one block to the north of the Project Site's northern edge. Collectively,

the cumulative projects involve a variety of residential uses, retail, restaurant, commercial, hotel, and office uses, consistent with existing uses in the Project Site area.

Although impacts to historic resources tend to be site-specific, cumulative impacts would occur if the Project and the cumulative projects affected local resources with the same level or type of designation or evaluation, affected other structures located within the same historic district, or involved resources that are significant within the same context as the Project. As discussed above, there is one historical resource, the Historic District, located on the Project Site. No part of this resource extends beyond Project Site boundaries. Furthermore, all Project development would remain on-site. Therefore, the Project's contribution to potential cumulative impacts historic resources within the vicinity of the Project Site would not be considerable, and cumulative impacts would be **less than significant**.

With regard to potential cumulative impacts related to archaeological resources, the Project vicinity is urbanized and has been disturbed and developed over time. In the event that archaeological resources are uncovered, each cumulative project would be required to comply with applicable regulatory requirements. In addition, as part of the environmental review processes for the cumulative projects, it is expected that mitigation measures would be established as necessary to address the potential for uncovering archaeological resources. Therefore, the Project's contribution to potential cumulative impacts to archaeological resources would not be considerable, and cumulative impacts would be **less than significant**.

(2) Mitigation Measures

See Mitigation Measures CUL-MM-4 through CUL-MM-7 above.

(3) Level of Significance After Mitigation

Cumulative impacts related to historical resources would be **less than significant** without mitigation. Cumulative impacts related to archaeological resources would be **less than significant** with implementation of the mitigation measures identified above.

IV. Environmental Impact Analysis

E. Energy

1. Introduction

This section of the Draft EIR provides the content and analysis required by Public Resources Code (PRC), Section 21100(b)(3) and described in Appendix G to the Guidelines for the Implementation of the California Environmental Quality Act (CEQA) (14 California Code of Regulations [CCR] §§ 15000 et seq.). This section analyzes the Project's potential impacts on energy resources, focusing on the following three energy resources: electricity, natural gas, and transportation-related energy (petroleum-based fuels). This section evaluates the demand for energy resources attributable to the Project during construction and operation; demonstrates whether the current and planned electrical, natural gas, and petroleum-based fuel supplies and distribution systems are adequate to meet the Project's forecasted energy consumption; and makes a determination regarding the Project's use and conservation of energy resources. The section is partially based on energy calculations for the Project, included in **Appendices D and H** of the Draft EIR, and correspondence received from Southern California Gas Company (SoCalGas) and Southern California Edison (SCE), included as appendices to the Project Civil Engineering Support Studies Report in **Appendix J** of the Draft EIR:

J Civil Engineering Support Studies for The Villages At The Alhambra, Fuscoe Engineering Inc., April 17, 2019 (see Appendix 4.11 for correspondence from Antoine Williams, Design Service Representative, Southern California Edison, March 20, 2018; and correspondence from Katrina Regan, Planning Supervisor, Southern California Gas Company, January 22, 2016).

2. Environmental Setting

a) Regulatory Framework

(1) Federal

First established by the U.S. Congress in 1975, the Corporate Average Fuel Economy (CAFE) standards reduce energy consumption by increasing the fuel economy of cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (USEPA) jointly administer the CAFE standards. The U.S. Congress has specified that CAFE standards must be set at the "maximum

feasible level" with consideration given for: (1) technological feasibility; (2) economic practicality; (3) effect of other standards on fuel economy; and (4) need for the nation to conserve energy.[1]

(2) State

(a) Building Energy Efficiency Standards

The Building Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) were first adopted in 1976 and have been updated periodically since then as directed by statute. The Building Energy Efficiency Standards contain energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. PRC Sections 25402 (Subdivisions (a) and (b)) and 25402.1 emphasize the importance of building design and construction flexibility by requiring the California Energy Commission (CEC) to establish performance standards, in the form of an "energy budget" in terms of the energy consumption per square foot of floor space. For this reason, the Building Energy Efficiency Standards include both a prescriptive option, allowing builders to comply by using methods known to be efficient, and a performance option, allowing builders complete freedom in their designs provided the building achieves the same overall efficiency as an equivalent building using the prescriptive option. Reference Appendices are adopted along with the Building Energy Efficiency Standards that contain data and other information that helps builders comply with the Building Energy Efficiency Standards.

The 2016 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The most significant efficiency improvements to the residential Building Energy Efficiency Standards include improvements for attics, walls, water heating, and lighting, as well as alignment with the American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) 90.1 2013 national standards. New efficiency requirements for elevators and direct digital controls are included in the nonresidential Building Energy Efficiency Standards. The 2016 Building Energy Efficiency Standards also include changes made throughout all of its sections to improve the clarity, consistency, and readability of the regulatory language. The Building Energy Efficiency Standards are enforced through the local building or individual agency permit and approval processes.[2] The 2019 Building Energy Efficiency Standards will go

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[1] *United States Department of Transportation, CAFE standards, www.nhtsa.gov/fuel-economy.*

[2] *CEC, 2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings, June 2015.*

into effect on January 1, 2020. Building permit applications submitted on or after that date will be subject to the new standards.

(b) California Green Building Standards Code

Part 11 of the Title 24 California Building Standards Code is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality." As of January 1, 2011, compliance with the CALGreen Code is mandatory for all new buildings constructed in the state. The CALGreen Code was updated in 2016 to include mandatory measures for nonresidential development related to site development; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. These updates came into effect on January 1, 2017. The Project would be required to comply with the lighting power requirements in the California Energy Code, CCR, Title 24, Part 6.

(c) California Renewable Portfolio Standard

First established in 2002 under Senate Bill (SB) 1078, California's Renewable Portfolio Standards (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020.[3] The California Public Utilities Commission (CPUC) and the CEC jointly implement the RPS program. The CPUC's responsibilities include: (1) determining annual procurement targets and enforcing compliance; (2) reviewing and approving each investor-owned utility's renewable energy procurement plan; (3) reviewing contracts for RPS-eligible energy; and (4) establishing the standard terms and conditions used in contracts for eligible renewable energy.

(d) Senate Bill 350

SB 350, signed October 7, 2015, is the Clean Energy and Pollution Reduction Act of 2015. SB 350 is the implementation of some of the goals of Executive Order B-30-15, issued in April 2015, which established a new statewide policy goal to reduce greenhouse gas (GHG) emissions 40 percent below their 1990 levels by 2030. The objectives of SB 350 are: (1) to increase the procurement of electricity from renewable sources from 33 percent to 50 percent, and (2) to double the energy efficiency savings

[3] *CPUC, California Renewables Portfolio Standard (RPS), www.cpuc.ca.gov/RPS_Homepage/, accessed May 7, 2018.*

in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.[4]

(e) Assembly Bill 32

Assembly Bill (AB) 32 (Health and Safety Code Sections 38500–38599), also known as the California Global Warming Solutions Act of 2006, commits the State to achieving year 2000 GHG emission levels by 2010 and year 1990 levels by 2020. To achieve these goals, AB 32 tasked the CPUC and the CEC with providing information, analysis, and recommendations to the California Air Resources Board (CARB) regarding ways to reduce GHG emissions in the electricity and natural gas utility sectors.[5]

(f) Assembly Bill 1493/Pavley Regulations

AB 1493 (commonly referred to as CARB's Pavley regulations) was the first legislation to regulate GHG emissions from new passenger vehicles. Under this legislation, CARB adopted regulations to reduce GHG emissions from non-commercial passenger vehicles (cars and light-duty trucks) for model years 2009–2016. The Pavley regulations are expected to reduce GHG emissions from California's passenger vehicles by about 30 percent in 2016, while improving fuel efficiency and reducing motorists' costs. [6]

(g) Low Carbon Fuel Standard

The Low Carbon Fuel Standard (LCFS), established in 2007 through Executive Order S-1-07 and administered by CARB, requires producers of petroleum-based fuels to reduce the carbon intensity of their products, starting with 0.25 percent in 2011 and culminating in a 10-percent total reduction in 2020. Petroleum importers, refiners and wholesalers can either develop their own low carbon fuel products or buy LCFS credits from other companies that develop and sell low carbon alternative fuels, such as biofuels, electricity, natural gas, and hydrogen.[7]

(h) CARB's Advanced Clean Cars Regulation

Closely associated with the Pavley regulations, the Advanced Clean Car Standards emissions-control program (ACC program) was approved by CARB in 2012. The program combines the control of smog, soot, and GHG emissions with requirements for greater numbers of zero-emission vehicles for model years 2017-2025. The

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[4] *Senate Bill 350 (2015–2016 Reg, Session) Stats 2015, ch. 547.*

[5] *Ibid.*

[6] *Clean Car Standards - Pavley, Assembly Bill 1943, www.energy.ca.gov/low_carbon_fuel_standard/*

[7] *Low Carbon Fuel Standard: Fuels and Transportation Division Emerging Fuels and Technologies Office, www.energy.ca.gov/low_carbon_fuel_standard/*

components of the ACC program include 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 (i.e., 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.[8]

(i) Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

The Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (Title 13, California Code of Regulations, Division 3, Chapter 10, Section 2435) was adopted to reduce public exposure to diesel particulate matter and other air contaminants by limiting the idling of diesel-fueled commercial motor vehicles. This section applies to diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than 10,000 pounds that are or must be licensed for operation on highways. Reducing idling of diesel-fueled commercial motor vehicles reduces the amount of petroleum-based fuel used by the vehicle.

(j) Sustainable Communities Strategy

The Sustainable Communities and Climate Protection Act of 2008, or Senate Bill 375 (SB 375), coordinates land use planning, regional transportation plans, and funding priorities to help California meet the GHG emissions reduction mandates established in AB 32. SB 375 specifically requires the Metropolitan Planning Organization (MPO) to prepare a "sustainable communities strategy" (SCS) as a part of its Regional Transportation Plan (RTP) that will achieve GHG emission reduction targets set by CARB for the years 2020 and 2035 by reducing vehicle miles traveled (VMT) from light-duty vehicles through the development of more compact, complete, and efficient communities.[9]

The Project Site is located within the planning jurisdiction of the Southern California Association of Governments (SCAG). SCAG's first-ever SCS is included in the 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (2012–2035 RTP/SCS), which was adopted by SCAG in April 2012. The goals and policies of the SCS that reduce VMT (and result in corresponding decreases in transportation-related fuel consumption) focus on transportation and land use planning that include building infill projects, locating residents closer to where they work and play, and designing

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[8] *CARB, California's Advanced Clean Cars Program, www.arb.ca.gov/msprog/acc/acc.htm, last reviewed by CARB January 18, 2017.*

[9] *Sustainable Communities, www.arb.ca.gov/cc/sb375/sb375.htm*

communities so there is access to high quality transit service. In 2016, SCAG adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016-2040 RTP/SCS).[10] The goals and policies of the 2016-2040 RTP/SCS are the same as those in the 2012–2035 RTP/SCS.

(k) Senate Bill 1389

SB 1389 (Public Resources Code Sections 25300–25323) requires the development of an integrated plan for electricity, natural gas, and transportation fuels. The CEC must adopt and transmit to the Governor and Legislature an Integrated Energy Policy Report every two years. The most recently completed report, the 2016 Integrated Energy Policy Report, addresses a variety of issues, including the environmental performance of the electricity generation system, landscaped-scale planning, the response to the gas leak at the Aliso Canyon natural gas storage facility, transportation fuel supply reliability issues, update on the Southern California electricity reliability, methane leakage, climate adaptation activities for the energy sector, climate and sea level rise scenarios and the *California Energy Demand Forecast*.[11]

(l) California Environmental Quality Act

In accordance with CEQA and Appendix G of the CEQA Guidelines, in order to assure that energy implications are considered in project decisions, EIRs are required to include a discussion of the potential significant energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Appendices F and G of the CEQA Guidelines provide a list of energy-related topics that should be analyzed in the EIR. In addition, while not described or required as significance thresholds for determining the significance of impacts related to energy, Appendix F provides the following topics that the lead agency may consider in the discussion of energy use in an EIR, where topics are applicable or relevant to the project:

- The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed;
- The effects of the project on local and regional energy supplies and on requirements for additional capacity;

[10] *SCAG, 2016 RTP/SCS, dated April 2016.*

[11] *CEC, 2016 Integrated Energy Policy Report, docketed January 18, 2017.*

- The effects of the project on peak and base period demands for electricity and other forms of energy;
- The degree to which the project complies with existing energy standards;
- The effects of the project on energy resources;
- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

(3) Regional

SCAG's 2016-2040 RTP/SCS presents a long-term transportation vision through the year 2040 for the six-county region of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. On April 7, 2016, the SCAG Regional Council adopted the 2016-2040 RTP/SCS, the mission of which is "leadership, vision and progress which promote economic growth, personal well-being, and livable communities for all Southern Californians."[12] The 2016-2040 RTP/SCS includes land use strategies that focus on urban infill growth and walkable, mixed-use communities in existing urbanized and opportunity areas. More mixed-use, walkable, and urban infill development would be expected to accommodate a higher proportion of growth in more energy-efficient housing types like townhomes, apartments, and smaller single-family homes, as well as more compact commercial building types. Furthermore, the 2016-2040 RTP/SCS includes transportation investments and land use strategies that encourage carpooling, increase transit use, active transportation opportunities, and promoting more walkable and mixed-use communities, which would potentially help to reduce VMT.

The 2016-2040 RTP/SCS also establishes High-Quality Transit Areas (HQTA), which are described as generally walkable transit villages or corridors that are within 0.5 miles of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours.[13] Local jurisdictions are encouraged to focus housing and employment growth within HQTAs to reduce VMT. The Project Site is located within a HQTA as designated by the 2016-2040 RTP/SCS.[14]

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[12] *SCAG, 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy, dated April 2016.*

[13] *SCAG, 2016–2040 RTP/SCS, p. 8.*

[14] *SCAG, 2016–2040 RTP/SCS; Exhibit 5.1: High Quality Transit Areas in the SCAG Region for 2040 Plan, p. 77.*

(4) Local

(a) City of Alhambra General Plan

The City has recently updated its General Plan in August 2019. A draft of the updated General Plan had been released in July 2018 for public review and a revised draft released in early 2019. The updated General Plan is intended to allow land use and policy determinations to be made within a comprehensive framework that incorporates public health, safety, and qualities of life considerations. The General Plan consists of seven elements, including a Land Use Element, Circulation Element, and Open Space Element. Each element addresses its respective subject and the City's 20-year vision for the future. With regard to energy, the General Plan establishes the following goal and policies:

- **Goal R-3:** Minimization of energy use and its associated impacts to air quality and climate change.
  - **Policy R-3B** Encourage the use of energy saving designs, systems, and innovations in public and private building construction.
  - **Policy R-3C** Promote using renewable energy, such as solar panels and biomethane.

b) Existing Conditions

(1) Electricity

Electricity, a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into electricity. The delivery of electricity involves a number of system components, including substations and transformers that lower transmission line power (voltage) to a level appropriate for on-site distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid. Conveyance of electricity through transmission lines is typically responsive to market demands.

Energy capacity, or electrical power, is generally measured in watts (W), while energy use is measured in watt-hours (Wh). For example, if a light bulb has a capacity rating of 100 W, the energy required to keep the bulb on for 1 hour would be 100 Wh. If ten 100-W bulbs were on for 1 hour, the energy required would be 1,000 Wh or 1 kilowatt-hour (kWh). On a utility scale, a generator's capacity is typically rated in megawatts (MW), which is one million W, while energy usage is measured in megawatt-hours (MWh) or gigawatt-hours (GWh), which is one billion Wh.

SCE provides electrical service throughout the City and many areas of the Owens Valley, including the Project Site. SCE generates power from a variety of energy sources, including hydropower, coal, gas, nuclear sources, and renewable resources, such as wind, solar, and geothermal sources. Since SCE supplies electrical power to the Project Site, it also maintains an overhead electrical system along Date Avenue and Mission Road. The overhead distribution systems serve the Project Site and additional SCE commercial customers on the east side of Date Avenue, respectively. In 2018 SCE had total power supplies over 87 billion watts to its customers with a demand of roughly 78 billion watts.[15]

As discussed in detail in **Section II, Project Description**, of the Draft EIR, the Project Site is currently developed with office, warehouse, storage, utility substation, and surface parking lot/parking structure uses, all of which consume electricity.

(2) Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs, mainly located outside the state, and delivered through high-pressure transmission pipelines. The natural gas transportation system is a nationwide network, and thus, resource availability is typically not an issue. Almost two-thirds of California households use natural gas for home heating, and about half of California's utility-scale net electricity generation is fueled by natural gas.[16]

Natural gas is provided to the Project Site by SoCalGas. SoCalGas is the nation's largest natural gas distribution utility and is the principal distributor of natural gas in southern California, serving residential, commercial, and industrial markets. SoCalGas serves approximately 21.6 million customers in more than 500 communities encompassing approximately 20,000 square miles throughout central and southern California, from the City of Visalia to the Mexican border.[17]

SoCalGas receives gas supplies from several sedimentary basins in the western United States and Canada, including supply basins located in New Mexico (San Juan Basin), West Texas (Permian Basin), the Rocky Mountains, and Western Canada, as well as local California supplies. Traditional Southwestern U.S. sources of natural gas will

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[15] *SCE Website: https://www.edison.com/content/dam/eix/documents/investors/sec-filings-financials/2018-financial-statistical-report.pdf, Pages 15-16.*

[16] *U.S. Energy Information Administration, California State Energy Profile, www.eia.gov/state/print.php?sid=CA, accessed December 2018.*

[17] *Southern California Gas Company, Company Profile: About SoCalGas, https://www.socalgas.com/about-us/company-profile, accessed December 2018.*

continue to supply most of SoCalGas's natural gas demand. Rocky Mountain supply supplements traditional Southwestern U.S. gas sources for Southern California, and the use of Canadian sources provides only a small share of SoCalGas supplies due to the high cost of transport. Gas demand from SoCalGas averaged 236 billion cubic feet (cf) per day in 2018 (the most recent year for which data are available).[18] Total available supply was estimated at roughly 323 billion cf per day in 2017.[19]

SoCalGas supplies natural gas to the Project Site from natural gas service lines located in the Project Site vicinity. Specifically, natural gas is provided to the Project Site through a network of underground pipelines that are operated and maintained by SoCalGas.

(3) Transportation Energy

In 2017, California consumed 15.6 billion gallons of gasoline (includes aviation fuel) and 3.01 billion gallons of diesel fuel.[20] Despite sales of low-carbon biofuels and electric vehicles steadily increasing and hydrogen fuel cell vehicles recently becoming commercially available, petroleum-based gasoline and diesel fuels still currently account for 91 percent of California's ground transportation fuel sources.[21] However, the state is now working on developing flexible strategies to reduce petroleum use. Over the last decade, California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHG emissions from the transportation sector, and reduce VMT. Accordingly, gasoline consumption in California has declined. Though California's population and economy are expected to grow, gasoline demand is projected to decline from roughly 15.6 billion gallons in 2017 to between 12.1 and 12.6 billion gallons in 2030, a 19 percent to 22 percent reduction. This decline comes in response to both increasing vehicle electrification and higher fuel economy for new gasoline vehicles.[22] According to CARB's EMFAC Web Database, Los Angeles County on-road transportation sources consumed 4.19 billion gallons of gasoline and 0.56 billion gallons of diesel fuel in 2017.[23]

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[18] *California Gas and Electric Utilities, 2018 California Gas Report, p. 44.*

[19] *California Gas and Electric Utilities, 2018 California Gas Report, p. 80.*

[20] *CEC, Revised Transportation Energy Demand Forecast, 2018-2030, February 2018.*

[21] *CEC, 2018-2019 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program, May 2018.*

[22] *CEC, Revised Transportation Energy Demand Forecast, 2018-2030, February 2018.*

[23] *CARB, EMFAC2017 Web Database, www.arb.ca.gov/emfac/2017/, accessed on July 24, 2018.*

The existing on-site land uses currently generate a demand for transportation-related fuel use as a result of vehicle trips to and from the Project Site. As detailed in **Appendix D** of the Draft EIR, the estimate of annual VMT associated with the existing Project Site uses is roughly 274,106 per year. Based on gasoline and diesel fuel consumption and VMT data provided by CARB for Los Angeles County in 2017, the average miles per gallon (mpg) in the County was 22.5 for gasoline and 8.6 for diesel.[24] Based on CARB's 2017 County VMT data, the approximate vehicle fuel split was 95 percent gasoline and 5 percent diesel. Thus, the VMT associated with existing uses currently on-site translates to approximately 5.85 million gallons of gasoline and approximately 117,863 gallons of diesel per year.

3. Project Impacts

a) Methodology

(1) Construction

Electricity used to power lighting, electronic equipment, and other construction activities necessitating electrical power was assumed to be minimal. In terms of natural gas, construction activities typically do not involve the consumption of natural gas. Fuel consumption from on-site heavy-duty construction equipment was calculated based on the equipment mix and usage factors provided in the CalEEMod construction output files included in **Appendix D** of the Draft EIR. The total horsepower was then multiplied by fuel usage estimates per horsepower-hour included in Table A9-3-E of the South Coast Air Quality Management District's (SCAQMD) *CEQA Air Quality Handbook*. Fuel consumption from construction worker, vendor, and delivery/haul trucks was calculated using the trip rates and distances provided in the CalEEMod construction output files. Total VMT was then calculated for each type of construction-related trip and divided by the corresponding county-specific miles per gallon factor using CARB's EMFAC 2014 model. EMFAC provides the total annual VMT and fuel consumed for each vehicle type. Consistent with CalEEMod, construction worker trips were assumed to include 50 percent light duty gasoline automobiles and 50 percent light duty gasoline trucks. Construction vendor and delivery/haul trucks were assumed to be heavy-duty diesel trucks.

(2) Operation

Annual consumption of electricity (including electricity usage associated with the supply and conveyance of water) and natural gas was calculated using demand factors

[24] *CARB, EMFAC2017 Web Database, https://www.arb.ca.gov/emfac/2017/, 2018.*

provided in CalEEMod as part of the greenhouse gas (GHG) analysis included in **Section IV.G, Greenhouse Gas Emissions**, of the Draft EIR. CalEEMod provides default factors based on the 2013 Title 24 standards. The Project would be required to comply with the more efficient 2019 Title 24 standards, which will go into effect on January 1, 2020.

Energy impacts associated with transportation during operation were also assessed. Daily trip generation used in this analysis was based on the Traffic Impact Analysis for the Project that is included as **Appendix E** of the Draft EIR. As discussed therein, the trip generation for the Project was determined based on the Institute of Transportation Engineers trip generation factors for the applicable land uses. The daily Project-related trips were then input into CalEEMod, which calculated the annual VMT. The resulting annual VMT was used as part of the GHG emissions analysis included in **Section IV.G, Greenhouse Gas Emissions**, of the Draft EIR. Based on this annual VMT, gasoline and diesel consumption rates were calculated using the county-specific miles per gallon calculated using EMFAC 2014. The vehicle fleet mix for vehicles anticipated to visit the Project Site was calculated consistent with the CalEEMod default for Los Angeles County (refer to **Appendix D** of the Draft EIR). These calculations were used to determine if the Project causes the wasteful, inefficient, and/or unnecessary consumption of energy, as required by CEQA Appendix G guidelines.

The Project's estimated energy demands were also assessed relative to SCE's and SoCalGas existing and planned energy supplies in 2028 (i.e., the eventual Project buildout year) to determine if these two energy utility companies would be able to meet the Project's energy demands.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with the State CEQA Guidelines Appendix G (Appendix G), the Project would have a significant impact related to energy if it would:

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

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

(2) State CEQA Guidelines Appendix F

Appendix F, Energy Conservation, of the CEQA Guidelines directs an EIR to include the following:

a) The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials maybe discussed;

b) The effects of the project on local and regional energy supplies and on requirements for additional capacity;

c) The effects of the project on peak and base period demands for electricity and other forms of energy;

d) The degree to which the project complies with existing energy standards;

e) The effects of the project on energy resources; and

f) The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Appendix F of the State CEQA Guidelines states that, in order to ensure that energy implications are considered in project decisions, the potential energy implications of a project shall be considered in an EIR, to the extent relevant and applicable to the project. Appendix F further states that a project's energy consumption and proposed conservation measures may be addressed, as relevant and applicable, in the Project Description, Environmental Setting and Impact Analysis portions of technical sections, as well as through mitigation measures and alternatives. In accordance with Appendix F of the State CEQA Guidelines, this Draft EIR includes relevant information and analyses that address the energy implications of the Project. This section represents a summary of the Project's anticipated energy needs, impacts, and conservation measures.

c) Project Design Features

The Project would include Project Design Features designed to improve energy efficiency as set forth in **Section IV.G, Greenhouse Gas Emissions**, of the Draft EIR.

d) Analysis of Project Impacts

Threshold a) Would the project result in potential significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

As discussed above, the Project would consume energy during construction and operational activities. Sources of energy for these activities would include electricity usage, natural gas consumption, and transportation fuels, such as diesel and gasoline. The analysis below includes the Project's energy requirements and energy use efficiencies by fuel type for each stage of the Project (construction, operations, and maintenance).

For purposes of this analysis, Project maintenance would include activities, such as repair of the building, landscaping, and architectural coatings. Energy usage related to Project maintenance activities is assumed to be included as part of Project operations.

(1) Impact Analysis

(a) Construction

During Project construction, energy would be consumed in the form of electricity associated with the conveyance of water used for dust control and, on a limited basis, powering lights, electronic equipment, or other construction activities necessitating electrical power. As discussed below, construction activities, including the construction of a new building, typically do not involve the consumption of natural gas. Project construction would also consume energy in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment on the Project Site, construction worker travel to and from the Project Site, and delivery and haul truck trips (e.g., hauling of demolition material to off-site reuse and disposal facilities).

(i) Electricity

During construction of the Project, electricity would be consumed to supply and convey water for dust control and, on a limited basis, may be used to power lighting, electronic equipment, tools, and other construction activities necessitating electrical power. Electricity would be supplied to the Project Site by SCE and would be obtained from the existing electrical lines that connect to the Project Site.

The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. The estimated construction electricity usage represents a negligible amount of the estimated net annual operational demand, which, as discussed below, would be within the supply and infrastructure service capabilities of SCE. Moreover, construction electricity usage would be somewhat offset by the removal of the existing uses on-site. When not in use, electric equipment would be powered off so as to avoid unnecessary energy consumption. Overall, electricity consumption during Project construction would be temporary and would cease upon the completion of construction, as well as vary depending on site-specific operations and the amount of construction occurring at any given time. Thus, construction activities associated with the Project would require limited electricity generation that would not be expected to have an adverse impact on available electricity supplies.

As existing power lines are located in the vicinity of the Project Site, temporary power poles may be installed to provide electricity during Project construction. Existing off-site infrastructure would not have to be expanded or newly developed to provide electrical service to the project during construction or demolition. Therefore, construction of the

Project would not result in an increase in demand for electricity that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

With regard to existing electrical distribution lines, the Applicant would be required to coordinate electrical infrastructure removals or relocations with the City and comply with site-specific requirements set forth by SCE, which would ensure that service disruptions and potential impacts associated with grading, construction, and development within SCE easements are minimized. Project contractors would notify and coordinate with SCE to identify the locations and depth of all existing electricity lines and avoid disruption of electricity service to other properties. As such, construction of the Project is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity. Therefore, electricity impacts during construction would be less than significant.

(ii) Natural Gas

Construction activities, including the construction of a new building, typically do not involve the consumption of natural gas. Accordingly, natural gas would not be supplied to support Project construction activities; thus, there would be no demand for natural gas generated by Project construction.

The Project would involve installation of new and upgraded natural gas connections to serve the Project Site. Since the Project Site is located in an area already served by existing natural gas infrastructure, it is anticipated that the Project would not require extensive off-site infrastructure improvements to serve the Project Site. Construction impacts associated with the installation of natural gas connections would be confined to trenching in order to place the lines below surface. In addition, prior to ground disturbance, Project contractors would notify and coordinate with SoCalGas to identify the locations and depth of all existing gas lines and avoid disruption of gas service to other properties. Therefore, construction of the Project would not result in an increase in demand for natural gas to affect available supply or distribution infrastructure capabilities and would not result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Therefore, natural gas impacts during construction would be less than significant.

(iii) Transportation Energy

Petroleum-based fuel is energy that could potentially be consumed during Project construction based on a conservative set of assumptions. Transportation fuels, primarily gasoline and diesel, would be provided by local or regional suppliers and vendors.

Project-related vehicles would require a negligible fraction of the total state's transportation fuel consumption.

During Project construction activities, energy consumption would occur in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment on the Project Site, construction worker travel to and from the Project Site, and delivery and haul truck trips (e.g., hauling of demolition material to off-site reuse and disposal facilities). As shown in Table IV.E-1, Project construction would consume approximately 966 gallons of gasoline and 48,986 gallons of diesel. Project construction is expected to be completed by 2028. Because the total amount and type of construction would be the same under Buildout Scenarios 1 and 2 (see **Section II, Project Description** of the Draft EIR), there would be no expected difference in the amount of transportation energy consumption between the two buildout scenarios.

Table IV.E-1
Summary of Energy Use During Project Construction

Fuel Type	Quantity
Gasoline	
On-Road Construction	966 gallons[1]
Off-Road Construction	0 gallons[2]
Total Gasoline	***966 gallons***
Diesel	
On-Road Construction	35,986 gallons[3]
Off-Road Construction	13,000 gallons[4]
Total Diesel	***48,986 gallons***
Total Petroleum-Based Fuel	**49,952 gallons**

Note: Based on gasoline and diesel fuel consumption and VMT data provided by CARB for Los Angeles County in 2017, the average mpg in the County was 22.5 for gasoline and 8.6 for diesel.
[1] Includes worker trips to and from Project Site.
[2] Off-road construction equipment uses diesel fuel.
[3] Includes haul-truck trips.
[4] Includes construction equipment mostly used on-site, such as excavators, cranes, pavers, etc., during construction period.

A study by Caltrans found that the statewide average fuel economy for all vehicle types (automobiles, trucks, and motorcycles) is projected at 20.4 miles per gallon (mpg) and worse-case diesel trucks is 5.71 mpg in 2015.[25] In 2015, California consumed a total of 15.1 billion gallons of gasoline by the transportation sector.[26] Further, while construction

[25] *Caltrans, 2007 California Motor Vehicle Stock, Travel and Fuel Forecast, Table 7, http://www.energy.ca.gov/2008publications/CALTRANS-1000-2008-036/CALTRANS-1000-2008-036.PDF.*

[26] *California Energy Commission, Fuel Use in California: https://ww2.energy.ca.gov/almanac/transportation_data/fuel_use.html, accessed August 21, 2019.*

activities would consume petroleum-based fuels, consumption of such resources would be temporary and cease upon the completion of construction. Therefore, construction-related impacts to petroleum fuel consumption would be less than significant.

(iv) Energy Conservation

The Project would utilize construction contractors who demonstrate compliance with applicable California Air Resources Board (CARB) regulations governing the accelerated retrofitting, repowering, or replacement of heavy-duty diesel on- and off-road equipment. CARB has adopted an Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants (TACs). This measure prohibits diesel-fueled commercial vehicles greater than 10,000 pounds from idling for more than five minutes at any given time. CARB has also approved the Truck and Bus regulation (CARB Rules Division 3, Chapter 1, Section 2025, subsection (h))[27] to reduce NOX, PM10, and PM2.5 emissions from existing diesel vehicles operating in California; this regulation will be phased in with full implementation by 2023. In addition to limiting exhaust from idling trucks, CARB recently promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower. The regulation aims to reduce emissions by requiring the installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models. Implementation began January 1, 2014 and the compliance schedule requires that best available control technology turnovers or retrofits be fully implemented by 2023 for large and medium equipment fleets and by 2028 for small fleets. Compliance with the above anti-idling and emissions regulations would result in efficient use of construction-related energy and the minimization or elimination of wasteful and unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption, as would use of haul trucks with larger capacities, as previously stated.

As energy consumption during Project construction activities would be relatively negligible, the Project would not likely affect regional energy consumption in years during the construction period.

(b) Operation

During operation of the Project, energy would be consumed for multiple purposes, including, but not limited to, heating/ventilating/air conditioning (HVAC); refrigeration;

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[27] *California Air Resources Board, Final Regulation Order, Amendments to the Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants from In-Use On-Road Diesel-Fueled Vehicles, http://www.arb.ca.gov/msprog/onrdiesel/documents/tbfinalreg.pdf.*

lighting; and the use of electronics, equipment, and machinery. Energy would also be consumed during Project operations related to water usage, solid waste disposal, and vehicle trips.

(i) Electricity

As discussed earlier, through compliance with Title 24 standards and the applicable CALGreen Code and the City of Alhambra requirements, buildout of the Project would result in a projected gross increase in the on-site demand for electricity totaling approximately 9,975,370 kWh per year. In addition, SCE is required to procure at least 50 percent of their energy portfolio from renewable sources by 2025 and 60 percent by 2030. The current sources procured by SCE include wind, solar, and geothermal sources. This represents the available off-site renewable sources of energy that would meet the Project's energy demand. Furthermore, the Project would comply with Section 110.10 of Title 24, which includes mandatory requirements for solar-ready buildings, and, as such, would not preclude the potential use of alternate energy sources.

SCE's total energy supplies were forecasted at roughly 87 billion watts in 2018.[28] As such, the Project-related gross increase in annual electricity consumption of 9,975,370 kWh per year would represent approximately 0.000114 percent of SCE's projected supply, assuming similar supply levels. In addition, as described in **Section II, Project Description**, and in **Section IV.G, Greenhouse Gas Emissions**, of the Draft EIR, the Project would incorporate a variety of energy conservation measures to reduce energy usage. Therefore, it is anticipated that SCE's existing and planned electricity capacity and electricity supplies would be sufficient to support the Project's electricity demand.

(ii) Natural Gas

Through compliance with Title 24 standards and the applicable CALGreen Code and City of Alhambra requirements, buildout of the Project is projected to generate a net increase in the on-site demand for natural gas totaling approximately 15,964,010 cf per year. As discussed above, in addition to complying with applicable regulatory requirements regarding energy conservation, the Project would incorporate a variety of energy conservation measures to reduce energy usage.

As stated earlier, the Project's estimated gross increase in demand for natural gas is approximately 43,737 cf per day (approximately 15,964,010 cf per year). Based on information obtained from SoCalGas, they estimate natural gas consumption to lower slightly in the next few years from the total consumption of roughly 236 billion cf per day

[28] *SCE Website: https://www.edison.com/content/dam/eix/documents/investors/sec-filings-financials/2018-financial-statistical-report.pdf, Pages 15-16.*

in 2017. With this, the Project would account for approximately 0.00000018 percent of the 2017 consumption for the entire SoCalGas served area. This amount is even lower when compared to total available supply to SoCalGas customers. In addition, the Project would incorporate a variety of energy conservation measures as required under the CALGreen Code and the Alhambra Municipal Code (AMC) to reduce energy usage (see **Section IV.G, Greenhouse Gas Emissions**, of the Draft EIR). In sum, energy consumption during Project operation would be relatively negligible, and energy requirements would be within SoCalGas's service capabilities.

(iii) Transportation Energy

During operation, Project-related traffic would result in the consumption of petroleum-based fuels related to vehicular travel to and from the Project Site. The Project's location takes advantage of existing transportation alternatives in the vicinity that could reduce energy (gasoline, electric, or natural gas, depending on the mode of travel) consumption for transportation needs. Public bus transit is available adjacent to the Project Site, thereby providing access for employees, patrons, and residents of the Project Site and providing an alternative to driving individual vehicles both into the Project Site from surrounding areas and for residents, guests, and visitors at the Project Site to travel to surrounding areas. The mix of uses on the Project Site would help to reduce vehicle trips and VMT by encouraging walking, bicycling, and other non-automotive forms of transportation, which would result in corresponding reductions in energy demand. The Project would provide bicycle storage areas for Project residents and guests. The Project would feature characteristics that would reduce trips and VMT as compared to standard Institute of Transportation Engineers trip generation rates. For additional detail on the transportation environment in the vicinity of the Project Site, see **Section IV.N, Transportation**, of the Draft EIR.

When accounting for the features of the Project that would be expected to reduce VMT, the Project's estimated petroleum-based fuel usage would be approximately 597,734 gallons of gasoline and 82,307 gallons of diesel per year, or a total of 680,041 gallons of petroleum-based fuels annually.[29]

Transportation fuels, primarily gasoline and diesel, would be provided by local or regional suppliers and vendors. Project-related vehicles would require a negligible fraction of the total state's transportation fuel consumption. Alternative-fueled, electric,

[29] *Calculation based upon Project net vehicle miles traveled (VMT) increase of 14,156,855 miles per year over existing uses to be replaced by the Project. Vehicle fleet assumed to consist of 95% gasoline and 5% diesel vehicles with average fuel consumption rates of 22.5 miles per gallon for gasoline fleet and 8.6 miles per gallon for diesel fleet. (Source: EMFAC2017 v. 1.0.2 Emissions Inventory for Los Angeles County.)*

and hybrid vehicles, to the extent that these types of vehicles would be utilized by visitors to the Project Site, would reduce the Project's consumption of gasoline and diesel. Through compliance with Title 24 standards, the applicable CALGreen Code, and AMC requirements, the Project's operations would not result in wasteful, inefficient, and unnecessary consumption of energy.

The Project characteristics listed below are consistent with the CAPCOA guidance document, *Quantifying Greenhouse Gas Mitigation Measures*, which provides emission reduction values for recommended mitigation measures, and would reduce VMT and vehicle trips to the Project Site.[30] These Project characteristics would result in a corresponding reduction in VMT and vehicle trips and associated transportation energy consumption and, as such, reduce the potential for inefficient, wasteful, and unnecessary use of energy. Measures applicable to the Project include the following, with a brief description of the Project's relevance to the measure:

- **Increase Density (CAPCOA Measure LUT-1):** Increased density, measured in terms of persons, jobs, or dwelling units per unit area, reduces emissions associated with transportation as it reduces the distance people travel for work or services and provides a foundation for the implementation of other strategies, such as enhanced transit services. The Project would increase the Project Site's density in terms of residents, in an area served by transit.

- **Increase Diversity of Urban and Suburban Developments (Mixed-Uses) (CAPCOA Measure LUT-3):** The Project would introduce new residential uses to the Project Site. The Project would co-locate complementary office and residential land uses in proximity to other existing off-site commercial, office, and residential uses. The increases in land use diversity and mix of uses on the Project Site would reduce vehicle trips and associated VMT by encouraging walking and other non-automotive forms of transportation (i.e. biking), which would result in corresponding reductions in transportation-related emissions.

- **Increase Destination Accessibility (CAPCOA Measure LUT-4):** The Project would be located in an area that offers access to nearby retail and employment centers. In addition, the Project Site is located at a primary job center (within the on-site Office Plan Area) and next to a second large off-site employment node (County office building), also accessible by public transportation. The access provided by the Project to multiple destinations in proximity to the Project Site would potentially reduce vehicle trips and associated VMT compared to the statewide average and would encourage walking and non-automotive forms of

[30] *California Air Pollution Control Officers Association, Quantifying Greenhouse Gas Mitigation Measures, 2010.*

transportation and would result in corresponding reductions in transportation-related emissions.

- **Increase Transit Accessibility (CAPCOA Measure LUT-5):** The Project would be located adjacent to a bus route. The Project would also provide adequate bicycle parking spaces to encourage utilization of alternative modes of transportation.

- **Improve Design of Development (CAPCOA Measure LUT-9)**: The Project would include improved design elements, replacing a series of surface parking lots, warehouses, and light industrial buildings with a landscaped urban residential community, improved streetscapes, and courtyards with linked pedestrian pathways, enhancing walkability in the Project vicinity. The Project would also locate a development in an area with a high level of street accessibility and connectivity.

As such, the Project's siting, design, and proposed land use would reduce transportation fuel consumption through the reduction of VMT, as described above and discussed further in **Section IV.G, Greenhouse Gas Emissions**, of the Draft EIR.

(c) Impact Conclusion

Therefore, neither the Project's construction nor operation would result in wasteful, inefficient, or unnecessary consumption of energy resources and impacts would be **less than significant**.

(2) Mitigation Measures

Impacts related to energy conservation would be **less than significant**. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to energy conservation would be **less than significant** prior to mitigation.

Threshold b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

(1) Impact Analysis

In California, state and local plans designed to reduce the emission of GHG are generally also designed to promote the use of renewable energy sources and improve overall energy efficiency. A detailed analysis of the Project's consistency with State and local plans and policies to reduce GHG emissions is presented in **Section IV.G, Greenhouse Gas Emissions**, of the Draft EIR. The discussion below is intended to

supplement the analysis in **Section IV.G**, which concludes that the Project would have a less-than-significant impact with respect to conflict with or obstruction of state and local GHG emission reduction policies.

Although Title 24 requirements typically apply to energy usage for buildings, construction equipment would also comply with Title 24 requirements where applicable. Electricity and natural gas usage during Project operations would comply with Title 24 standards and the applicable 2016 CALGreen Code and AMC green building requirements. Therefore, Project construction and operational activities would comply with existing energy standards with regard to electricity and natural gas usage.

With regard to transportation fuels, trucks, and equipment used during proposed construction activities, the Project would comply with CARB's anti-idling regulations, as well as the In-Use Off-Road Diesel-Fueled Fleets regulation. Although these regulations are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in efficient use of construction-related energy. During Project operations, vehicles traveling to and from the Project Site are assumed to comply with CAFE fuel economy standards. Project-related vehicle trips would also comply with Pavley and Low Carbon Fuel Standards, which are designed to reduce vehicle GHG emissions but would also result in fuel savings in addition to CAFE standards. Therefore, Project construction and operational activities would comply with existing energy standards with regards to transportation fuel consumption.

The Project characteristics listed above under Threshold (a) are consistent with the CAPCOA guidance document, *Quantifying Greenhouse Gas Mitigation Measures*, which provides emission reduction values for recommended mitigation measures, and would reduce VMT and vehicle trips to the Project Site.[31] These Project characteristics would result in a corresponding reduction in VMT and vehicle trips and associated transportation energy consumption and, as such, reduce the potential for inefficient, wasteful, and unnecessary use of energy.

The Project does not contain any components that would effectively conflict with or obstruct the implementation of state or local plans for renewable energy or energy efficiency. Thus, the Project's impact would be **less than significant**.

(2) Mitigation Measures

Impacts related to energy conservation plans and policies would be **less than significant**. Therefore, no mitigation measures would be required.

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[31] *California Air Pollution Control Officers Association, Quantifying Greenhouse Gas Mitigation Measures, 2010.*

(3) Level of Significance After Mitigation

Impacts related to energy conservation plans and policies would be **less than significant** prior to mitigation.

e) Cumulative Impacts

(1) Impact Analysis

A total of nine cumulative projects were identified in the study area (see Table III-2 in **Section III, Environmental Setting** of the Draft EIR). Cumulative growth in the Project area includes these specific known development projects, as well as general ambient growth projected to occur, such as that envisioned in the City's General Plan. Some of this growth is anticipated to occur on or around properties in the Project. In addition, each of the identified cumulative projects would be individually evaluated with respect to consideration of energy conservation features that could alleviate electrical demand, including compliance with Title 24 and the City Building Code regulations and other State Building Codes. Nonetheless, regardless of the number and location of the cumulative projects, the Project, together with the cumulative development, would not create an impact that is cumulatively considerable, as each development project would have to comply with site-specific development standards, as well as federal, state, and local energy regulations.

As such, cumulative impacts related to consumption of energy and consistency with plans for energy efficiency and renewable energy would be **less than significant**, and the Project's overall contribution would not be cumulatively considerable.

(2) Mitigation Measures

The Project's contribution to all other cumulative impacts related to energy would be **less than significant**. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

The Project's contribution to cumulative impacts related to energy would be **less than significant** without mitigation.

IV. Environmental Impact Analysis

F. Geology and Soils

1. Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts with regard to geology and soils, including rupture of a known earthquake fault, seismic ground shaking, seismic-related ground failure (e.g., liquefaction), geologic unit or soil stability (e.g., settlement, lateral spreading, subsidence), and expansive and corrosive soils. The Project's potential impact on paleontological resources is also evaluated. The section includes information from the following documents, which are included as **Appendix F-3** and **Appendix G** of the Draft EIR:

F-3 Paleontological Resources Technical Report for the Villages At The Alhambra Project, Alhambra, Los Angeles County, California, SWCA Environmental Consultants, April 2019.

G Preliminary Geotechnical Assessment, Proposed Residential Structures, Townhomes and Parking Structure, 1000 South Fremont Avenue, Alhambra, California, Geotechnologies, Inc., March 7, 2018.

2. Environmental Setting

a) Regulatory Framework

(1) State of California

(a) Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621) was enacted by the State of California in 1972 to address the hazard of surface faulting to structures for human occupancy.[1] The Alquist-Priolo Earthquake Fault Zoning Act was enacted in response to the 1971 San Fernando Earthquake, which was associated with extensive surface fault ruptures that damaged homes, commercial buildings, and other structures. The primary purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to

[1] *The Alquist-Priolo Earthquake Fault Zoning Act was originally entitled the Alquist-Priolo Geologic Hazard Zones Act. California Geological Survey, Fault-Rupture Hazard Zones in California, Special Publication 42, Interim Revision 2007.*

address the construction of buildings intended for human occupancy on the surface traces of active faults. The Alquist-Priolo Earthquake Fault Zoning Act is also intended to increase the safety of citizens and minimize the loss of life during and immediately following earthquakes by facilitating seismic retrofitting to strengthen buildings against ground shaking.

The Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to establish regulatory zones, known as "earthquake fault zones," around the surface traces of active faults and to issue appropriate maps to assist cities and counties in planning, zoning, and building regulation functions. Maps are distributed to all affected cities and counties for the control of new or renewed construction and are required to sufficiently define potential surface rupture or fault creep. The State Geologist is charged with continually reviewing new geologic and seismic data and revising existing zones and delineating additional earthquake fault zones when warranted by new information. Local agencies must enforce the Alquist-Priolo Earthquake Fault Zoning Act in the development permit process, where applicable, and may be more restrictive than state law requires. According to the Alquist-Priolo Earthquake Fault Zoning Act, before a project located within an earthquake fault zone can be permitted, cities and counties shall require a geologic investigation, prepared by a licensed geologist, to demonstrate that buildings will not be constructed across active faults. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back a minimum of 50 feet.[2] The Alquist-Priolo Earthquake Fault Zoning Act and its regulations are presented in California Department of Conservation, California Geological Survey (CGS), Special Publication 42, *Fault-Rupture Hazard Zones in California*.

(b) Seismic Safety Act

The California Seismic Safety Commission (the "Commission") was established by the Seismic Safety Act in 1975 to provide oversight, review, and recommendations to the Governor and State Legislature regarding seismic issues. The Commission's name was changed to the Alfred E. Alquist Seismic Safety Commission in 2006. The Commission has adopted several documents based on recorded earthquakes, including the following:[3]

- Research and Implementation Plan for Earthquake Risk Reduction in California 1995 to 2000, report dated December 1994; and,

[2] *California Department of Conservation, www.conservation.ca.gov/cgs/rghm/ap/Pages/main.aspx, accessed April 13, 2018.*

[3] *Alfred E. Alquist Seismic Safety Commission, Publications, http://ssc.ca.gov/forms_pubs/seismic_safety_act.pdf, accessed April 13, 2018.*

- Commercial Property Owner's Guide to Earthquakes Safety, report dated October 2006.

(c) Seismic Hazards Mapping Act

In order to address the effects of strong ground shaking, liquefaction, landslides, and other ground failures due to seismic events, the State Legislature enacted the Seismic Hazards Mapping Act of 1990 (Public Resources Code Sections 2690–2699). Under the Seismic Hazards Mapping Act, the State Geologist is required to delineate "seismic hazard zones." Cities and counties must regulate certain development projects within these zones to ensure that the geologic and soil conditions of a project site are investigated and appropriate mitigation measures, if required, are incorporated into development plans. The State Mining and Geology Board has promulgated additional regulations and policies to assist municipalities in preparing the Safety Element of their General Plans and encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety. Under Public Resources Code Section 2697, cities and counties shall require, prior to the approval of a project located in a seismic hazard zone, a geotechnical report defining and delineating any seismic hazard. Each city or county shall submit one copy of each geotechnical report, including mitigation measures, to the State Geologist within 30 days of its approval. Public Resources Code Section 2698 does not prevent cities and counties from establishing policies and criteria that are stricter than those established by the State Mining and Geology Board.

State publications supporting the requirements of the Seismic Hazards Mapping Act include CGS Special Publication 117, *Guidelines for Evaluating and Mitigating Seismic Hazards in California,* and CGS Special Publication 118, *Recommended Criteria for Delineating Seismic Hazard Zones in California*. The objectives of Special Publication 117 are to assist in the evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations and to promote uniform and effective statewide implementation of the evaluation and mitigation elements of the Seismic Hazards Mapping Act. Special Publication 118 implements the requirements of the Seismic Hazards Mapping Act in the production of Probabilistic Seismic Hazard Maps for the state.

(d) California Building Code

The California Building Code (California Code of Regulations, Title 24) is a compilation of building standards, including seismic safety standards for new buildings. California Building Code standards are based on the following: (i) building standards that have been adopted by state agencies without change from a national model code; (ii) building standards based on a national model code that have been changed to address particular

California conditions; and (iii) building standards authorized by the California legislature but not covered by the national model code. Given the State's susceptibility to seismic events, the seismic standards within the California Building Code are among the strictest in the world. The California Building Code includes provisions for demolition and construction, as well as regulations regarding building foundations and soil types. The California Building Code applies to all occupancies in California, except where stricter standards have been adopted by local agencies.

The California Building Code is published on a triennial basis, and supplements and errata can be issued throughout the cycle. The 2016 edition of the California Building Code became effective on January 1, 2017, and incorporates by adoption the 2015 edition of the International Building Code of the International Code Council, with California amendments.[4] The 2016 California Building Code incorporates the latest seismic design standards for structural loads and materials, as well as provisions from the National Earthquake Hazards Reduction Program to mitigate losses from an earthquake and provide for the latest in earthquake safety. The current California Building Code has been adopted by the County of Los Angeles as Title 26 of the Los Angeles County Code, with local amendments made by the City of Alhambra (the City) and adopted as Chapter 20.05 of the Alhambra Municipal Code (AMC). As such, the California Building Code forms the basis of the Alhambra Building Code (ABC).

(2) City of Alhambra

(a) General Plan

The current City of Alhambra General Plan (adopted in 1986) addresses public safety risks due to natural disasters, including seismic events and geologic conditions; and sets forth guidance for emergency response during such disasters. The General Plan also provides a generalized map of designated areas within the City that are considered susceptible to earthquake-induced hazards such as fault rupture and landslides.

The 2019 General Plan Update addresses the same topics in its Health & Safety chapter. Regarding assessment of seismic hazards, the Draft General Plan Update notes that the City is not included within an Alquist-Priolo Special Study Zone.[5]

The State of California released the current official and final Earthquake Zones of Required Investigation Map for the Los Angeles Quadrangle on June 15, 2017.[6] This map

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[4] *California Building Code, California Code of Regulations, Title 24, Part 2.*

[5] *City of Alhambra, Draft Alhambra General Plan: Vision 2040 – A Community Mosaic, July 2018, p. 93.*

[6] *State of California, California Geologic Survey, Los Angeles Quadrangle, Earthquake Fault Zones (June 15, 2017) and Seismic Hazard Zones (March 25, 1999) Map.*

is the State of California's official earthquake fault zone map for the portion of the City that includes the Project Site. It is the most current and accurate map available to delineate the boundaries of earthquake fault zones and seismic hazard zones within this portion of the City.[7] Accordingly, the seismic hazards analysis in the Draft EIR relies primarily on the State's current official Los Angeles Quadrangle map to determine the location of the Project Site in relation to the nearest officially mapped earthquake fault zone and other seismic hazard zones.

(b) Alhambra Building Code

Earthwork activities, including grading, are governed by the ABC, which is contained in AMC, Chapter 20.05. Specifically: Sections 111, J 104.3, and J 105.12 address the submittal of soils and geological reports for review and approval; [8] Section J 104 includes requirements regarding import and export of earth material; Section J 103 includes regulations pertaining to excavations; Section J 107 includes requirements for fill materials; Section J 101 includes general construction requirements, as well as requirements regarding flood and mudflow protection; and Section 110.2 includes regulations for areas that are subject to slides and unstable soils or other hazards. In addition, Section 113 includes specific requirements addressing earthquakes and seismic design. The ABC incorporates by reference the California Building Code, with City amendments for additional requirements. The Building Division within the City's Development Services Department is responsible for implementing and enforcing the provisions of the ABC.

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[7] *Ibid.*

[8] *A report prepared by the Soils Engineer retained to provide such services in accordance with Section J 105.4, including locations and elevations of field density tests, summaries of field and laboratory tests, other substantiating data, and comments on any changes made during grading and their effect on the recommendations made in the approved soils engineering investigation report. The report shall include a certification by the Soils Engineer that to the best of his or her knowledge, the work within the Soils Engineer's area of responsibility is in accordance with the approved Soils Engineering report and applicable provisions of this chapter. The report shall contain a finding regarding the safety of the completed grading and any proposed structures against hazard from landslide, settlement, or slippage.*

A report prepared by the Engineering Geologist retained to provide such services in accordance with Section J 105.5, including a final description of the geology of the site and any new information disclosed during the grading and the effect of such new information, if any, on the recommendations incorporated in the approved grading plan. The report shall contain a certification by the Engineering Geologist that, to the best of his or her knowledge, the work within the Engineering Geologist's area of responsibility is in accordance with the approved engineering geology report and applicable provisions of this Chapter. The report shall contain a finding regarding the safety of the completed grading and any proposed structures against hazard from landslide, settlement, or slippage. The report shall contain a final as-built geologic map and cross-sections depicting all the information collected prior to and during grading.

b) Existing Conditions

(1) Regional Geologic Setting

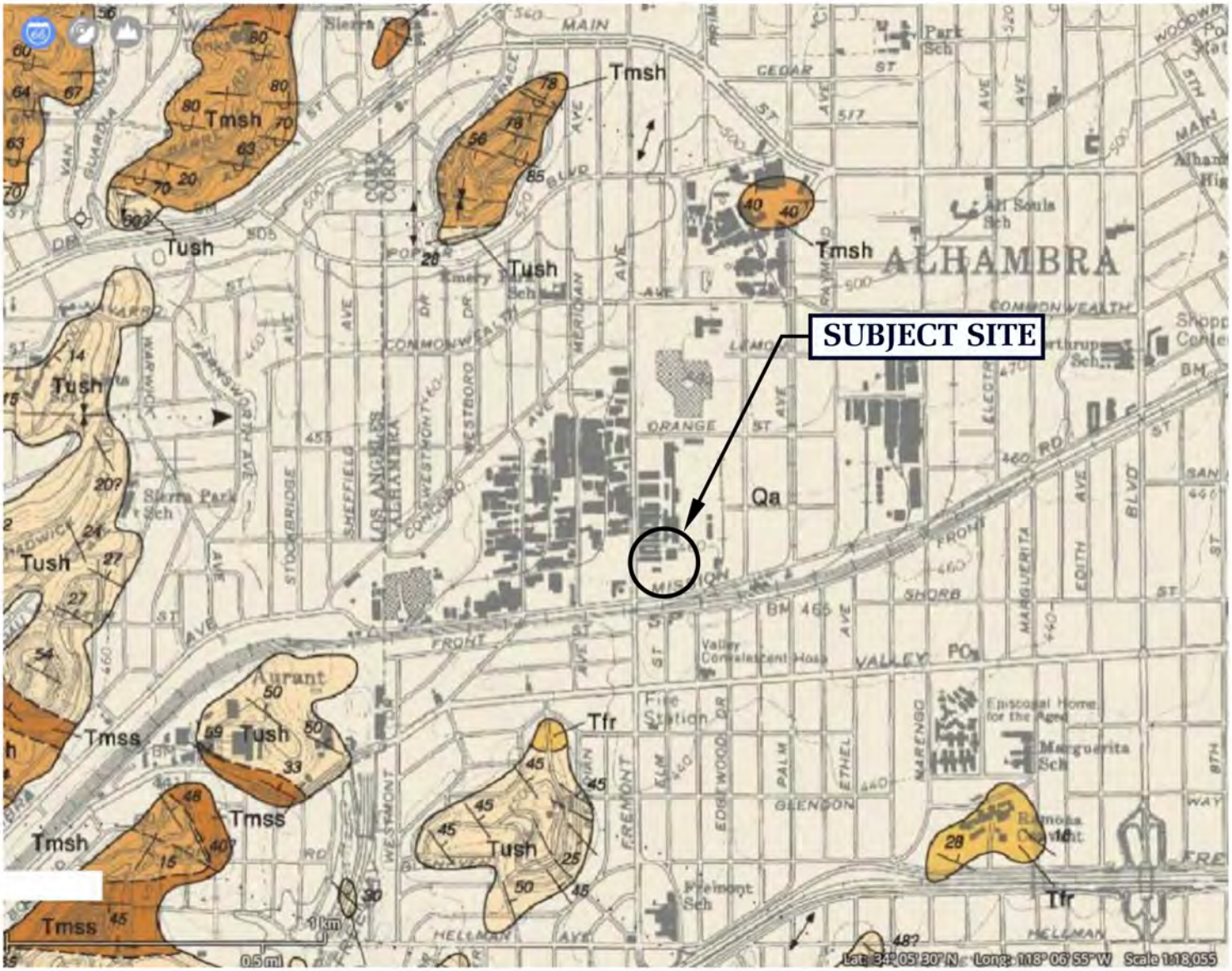
The Project Site is located in the northern portion of the Los Angeles Basin and on the western edge of the San Gabriel Valley. The Los Angeles Basin is located at the northern end of the Peninsular Ranges Geomorphic Province. The basin is bounded to the east and southeast by the Santa Ana Mountains and San Joaquin Hills, to the northwest by the Santa Monica Mountains, and to the south and southwest by the Pacific Ocean and the Palos Verdes Peninsula. The basin is underlain by a deep structural depression, which has been filled by both marine and continental sedimentary deposits underlain by a basement complex of igneous and metamorphic composition. The basement surface within the central portion of the basin extends to a maximum depth of approximately 32,000 feet below sea level. The Peninsular Ranges are characterized by northwest-trending blocks of mountain ridges and sediment-floored valleys. The dominant geologic structural features are northwest trending fault zones that either die out to the northwest or terminate at east-west trending reverse faults that form the southern margin of the Transverse Ranges. A map describing the regional geologic setting is provided as Figure IV.F-1.

(2) Existing Site Conditions

The Project Site is currently developed with office buildings, miscellaneous commercial buildings, parking structures, and paved parking lots. The existing structures are predominantly concentrated in the central to western portions of the site and range from a single story to seven stories in height. The topography observed across the Project Site descends gently to the southwest, with an estimated elevation difference of approximately 15 feet across the site for an overall site gradient of 130 to 1 (horizontal to vertical). Vegetation at the site consists of a few mature trees, and a limited amount of grass lawns, bushes, and shrubs contained in small manicured landscaped areas. Drainage across the site is by sheetflow to the adjacent city streets toward the southwest.

(a) Soils

As part of the field investigation conducted by Geotechnologies, Inc., a single boring (Boring B1) was drilled to a level 50 feet below the existing site grade with the aid of a truck-mounted drilling machine using 8-inch diameter hollowstem augers and hand labor. This boring was drilled in order to assess the site and its percolation feasibility. Due to the geologic uniformity of the subsurface materials anticipated within the Project Site, the geologic characterization indicated by Boring B1 is considered sufficiently representative of overall site conditions. In addition, previous boring log profiles drilled as part of previous investigations at the Project Site were examined.



LEGEND

Qa: Surficial Sediments - alluvium: unconsolidated floodplain deposits of gravel, sand and silt
Tush: Unnamed Shale - gray to light brown, thin bedded, silty clay shale
Tmsh: Monterey Formation - white-weathering, thin bedded, platy, silieous shale

Folds - arrow on axial trace of fold indicates direction of plunge
Fault - dashed where indefinite or inferred, dotted where concealed, queried where existence is doubtful

REFERENCE: DIBBLEE, T.W., (1989) GEOLOGIC MAP OF THE LOS ANGELES QUADRANGLE (#DF-22)

N

Geotechnologies, Inc

Figure IV.F-1
Local Geology Map

Source: Geotechnologies, Inc., 2018.

(i) Fill

Fill materials observed within the exploratory excavation consists of sandy silt to silty sand, is medium brown in color, slightly moist, stiff, and fine grained. A fill thickness of five feet below the ground surface (bgs) was encountered in the exploratory excavation.

(ii) Alluvium

The existing fill materials beneath the ground surface are underlain by alluvial deposits. The native alluvial soils consist of sandy silts, and silty sands to sands, which are medium orange brown to yellowish or olive brown in color, slightly moist, stiff to very stiff, dense to very dense, and fine to medium grained. Additional detail regarding the earth materials encountered in Boring B1 are provided in Plate A-1 of the Project Geotechnical Assessment in **Appendix G** of the Draft EIR.

(b) Groundwater

The historically highest groundwater level at the Project Site was established by review of the Los Angeles 7.5-minute quadrangle Seismic Hazard Evaluation Report, Plate 1.2, Historically Highest Ground Water Contours (CDMG, 2006). Review of this plate indicates that the historically highest groundwater level at the site is estimated at 200 feet below ground surface. A copy of this plate is included in the Project Geotechnical Assessment in **Appendix G** of the Draft EIR. Groundwater was not encountered during site exploration to a depth of 50 feet bgs in Boring B1.

(c) Surface Fault Rupture

The numerous faults in southern California include active, potentially active, and inactive faults. The criteria for these major groups are based on criteria developed by the CGS for the Alquist-Priolo Earthquake Fault Zone Program. By definition, an active fault is one that has had surface displacement within Holocene time (about the last 11,000 years). A potentially active fault has demonstrated surface displacement during Quaternary time (approximately the last 1.6 million years) but has had no known Holocene movement. Faults that have not moved in the last 1.6 million years are considered inactive.

Buried thrust faults are faults without a surface expression but are a significant source of seismic activity. They are typically broadly defined based on the analysis of seismic wave recordings of hundreds of small and large earthquakes in the southern California area. Due to the buried nature of these thrust faults, their existence is usually not known until they produce an earthquake. The risk for surface rupture potential of these buried thrust faults is inferred to be low. However, the seismic risk of these buried structures in terms of recurrence and maximum potential magnitude is not well established. Therefore, the

potential for surface rupture on these surface-verging splays at magnitudes higher than 6.0 cannot be precluded.

A list of faults located within 60 miles of the Project Site is provided in the Project Geotechnical Assessment in **Appendix G** of the Draft EIR. This table is based on information provided by the USGS in their 2008 National Seismic Hazard Maps - Source Parameters database. The distances provided are measured from a point selected near the center of the Project Site. A map illustrating the locations of these faults is also provided in **Appendix G**.

CGS policy is to delineate a boundary from 200 to 500 feet wide on each side of the known fault trace based on the location precision, the complexity, or the regional significance of the fault. If a site lies within an Earthquake Fault Zone, a geologic fault rupture investigation must be performed that demonstrates that the proposed building site is not threatened by surface displacement from the fault before development permits may be issued. Surface rupture is defined as surface displacement which occurs along the surface trace of the causative fault during an earthquake. Based on review of the Earthquake Fault Zone Map for Los Angeles Quadrangle (CGS, 2017), the nearest Earthquake Fault Zone is located approximately 2.6 miles to the north of the site, for the Raymond Fault. Therefore, the potential for surface rupture due to faulting occurring beneath the site is considered low.

(d) Seismic Ground Motion

The Project Site is located in the seismically active southern California region, and could be subjected to moderate to strong ground shaking in the event of an earthquake on one of the many active southern California faults. However, this hazard is common in southern California and the effects of ground shaking can be mitigated if structures are designed and constructed in conformance with current building codes and engineering practices.

Table IV.F-1 summarizes design criteria for the Project Site obtained from the 2016 California Building Code. The values presented in Table IV.F-1 are for the risk-targeted maximum considered earthquake (MCE), defined as an earthquake that results in ground motions that have a two percent chance of being exceeded in 50 years (a 2,475-year recurrence interval). The peak ground acceleration (PGA_M) and modal magnitude for the site was obtained from the USGS Probabilistic Seismic Hazard Deaggregation program. A shear wave velocity (Vs30) of 259 meters per second was utilized in the computation. The USGS program indicates a PGA_M of 1.034g and a modal magnitude of 6.9 for the site.

Based on information derived from the subsurface investigation, the site is classified as Site Class D, which corresponds to a “Stiff Soil” Profile. This information and the site

coordinates were input into the USGS U.S. Seismic Design Maps tool (Version 3.1.0) to calculate the ground motions for the site.

Table IV.F-1
Project Site Seismic Design Parameters

Parameter	Value or Classification
Site Class	D
Mapped Spectral Acceleration at Short Periods (S_S)	2.710g
Site Coefficient (F_A)	1.0
Maximum Considered Earthquake Spectral Response for Short Periods (S_{MS})	2.710g
Five-Percent Damped Design Spectral Response Acceleration at Short Periods (S_{DS})	1.807g
Mapped Spectral Acceleration at One-Second Period (S_1)	0.937g
Site Coefficient (F_V)	1.5
Maximum Considered Earthquake Spectral Response for One-Second Period (S_{M1})	1.406g
Five-Percent Damped Design Spectral Response Acceleration for One-Second Period (S_{D1})	0.937g
Source: Geotechnologies, Inc., 2018.	

Conformance to the criteria in Table IV.F-1 for seismic design does not constitute any kind of guarantee or assurance that significant structural damage or ground failure would not occur if a large earthquake occurs. The primary goal of seismic design is to protect life, not to avoid all damage, since such design may be economically prohibitive.

(e) Liquefaction and Seismic Dry Settlement Potential

Liquefaction is a phenomenon in which saturated silty to cohesionless soils below the groundwater table are subject to a temporary loss of strength due to the buildup of excess pore pressure during cyclic loading conditions such as those induced by an earthquake. Liquefaction-related effects include loss of bearing strength, amplified ground oscillations, lateral spreading, and flow failures. Based on review of the Seismic Hazards Maps of the State of California, the site is not located within a “Liquefiable” area. This determination is based on groundwater depth records, soil type and distance to a fault capable of producing a substantial earthquake.

Seismically-induced settlement or compaction of dry or moist, cohesionless soils can be an effect related to earthquake ground motion. Such settlements are typically most damaging when the settlements are differential in nature across the length of structures. Due to the uniform nature of the underlying geologic materials at the Project Site, the site is not considered subject to excessive differential settlements.

(f) Slope Instability and Lateral Spreading

Slope instability or landslides may occur in hillside areas and at sites with slopes where adverse geologic conditions are present and/or as a result of soil liquefaction (generally referred to as lateral spreading). The ground surface level at the site is flat with only a very modest gradient to the southwest, and the potential for the liquefaction of the soil types underlying the Project Site is low. The site is not located within a static or seismic slope stability hazard zone. Therefore, the potential for landslides or static or seismic slope instability is absent at the site.

(1) Paleontological Resources

Paleontology is the study of fossils, which are the remains of ancient life forms. On May 19, 2018, a Project-specific paleontological records search was conducted through the Natural History Museum of Los Angeles County (LACM) to determine the potential impacts of the Project on paleontological resources. The results of the paleontological records search, which are also discussed in **Appendix F-3** of the Draft EIR, indicate there are no previously encountered fossil vertebrate localities located within the Project Site. However, the records search indicates that there are nearby fossil localities from similar geologic formations within five miles of the Project Site.

The surface of the Project Site consists of older alluvium. Older alluvium has high paleontological sensitivity because it is of an age known to preserve fossil resources and has a well-established record of fossil preservation throughout the Los Angeles Basin.[9] The closest fossil localities known to the LACM in alluvial sediments are located approximately four miles southwest of the Project Site. At LACM 1023, near the intersection of Workman Street and Alhambra Avenue, turkey (*Meleagris californicus*), saber-toothed cat (*Smilodon fatalis*), horse (*Equus*), and deer (*Odocoileus*) were collected from an unstated depth. Near this site, around the intersection of Mission Road and Daly Street, fossil specimens of pond turtle (*Clemmys mamorata*), ground sloth (*Paramylodon harlani*), mastodon (*Mammut americanum*), mammoth (*Mammuthus imperator*), horse (*Equus*), and camelid (*Camelops*) were collected from a depth of 20-35 feet below the surface at LACM 2032.[10] The review of the literature and the records of the LACM indicate that older alluvium found at the surface of the Project Site, as well as the Fernando and Puente formations, which are likely present in the subsurface, have high paleontological sensitivity.

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[9] *SWCA Environmental Consultants, Paleontological Resources Technical Report for the Villages At The Alhambra Project, Alhambra, Los Angeles County, California, SWCA Environmental Consultants, April 2019, p. i.*

[10] *Id, p.13.*

3. Project Impacts

a) Methodology

To evaluate potential hazards relative to geology and soils, a Geotechnical Assessment was prepared by Geotechnologies, Inc. The Geotechnical Assessment included field exploration (i.e., an exploratory soil boring) and testing to determine the characteristics of the subsurface conditions at the Project Site. In addition, relevant literature and materials were reviewed as part of the Geotechnical Assessment. The Geotechnical Assessment is contained in **Appendix G** of the Draft EIR.

As noted previously, the Project Site was explored in January 2018 by drilling one boring (Boring B1) to a depth of between approximately 50 feet bgs. Tests were performed on selected soil samples obtained during the investigation to determine pertinent physical and chemical soil properties. The laboratory test results are summarized in Plate A-1 of the Geotechnical Assessment (see **Appendix G** of the Draft EIR). Boring logs and test results from previous investigations at the Project Site are also included in **Appendix G**.

To address potential impacts associated with paleontological resources, formal records searches were conducted to assess the paleontological sensitivity of the Project Site and vicinity. In addition, an evaluation of existing conditions and previous disturbances within the Project Site, the geology of the Project Site, and the anticipated depths of grading were evaluated to determine the potential for uncovering paleontological resources. For additional methodological detail concerning these investigations, see **Appendix F-3** of the Draft EIR.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In 2015, the California Supreme Court in *CBIA v. BAAQMD* held that CEQA generally does not require a lead agency to consider the impacts of the existing environment on the future residents or users of a project.[11] The revised thresholds are intended to comply with this decision. Specifically, the decision held that an impact from the existing environment to the project, including future users and/or residents, is not an impact for the purposes of CEQA. However, if the project, including future users and residents, exacerbates conditions that already exist, that impact must be assessed, including how it might affect future users and/or residents of the project.

[11] *California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369, Case No. S213478*.

In accordance with Appendix G of the CEQA Guidelines and the *CBIA v. BAAQMD* decision, a project could have a significant impact related to geology and soils if it would result in any the following impacts to future residents or users on the Project Site:

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

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

(ii) Strong seismic ground-shaking;

(iii) Seismic-related ground failure, including liquefaction; or

(iv) 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 direct or indirect substantial 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 wastewater.

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

In assessing impacts related to geology and soils in this section, the City is using Appendix G as the thresholds of impact significance.

c) Project Design Features

No specific Project Design Features are proposed with regard to geology and soils.

d) Analysis of Project Impacts

(1) Impact Analysis

Threshold a)(i) ***Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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?***

As discussed previously, the Project Site is not located within an Alquist-Priolo Earthquake Fault Zone, nor is it located within a Seismic Hazard Zone as indicated on the CGS' Earthquake Zones of Required Investigation, Los Angeles Quadrangle Map (CGS, 2017). The Project Site is not located within an active fault zone. Therefore, the potential for surface rupture due to faulting occurring beneath the site is considered very low. As a result, the Project would not exacerbate geologic hazards related to fault rupture under either buildout scenario, and impacts would be **less than significant**.

Threshold a)(ii) ***Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground-shaking?***

Although the Project Site is not within an Alquist-Priolo Zone, as with all properties in the seismically active southern California region, the Project Site is susceptible to ground shaking during a seismic event. The main seismic hazard affecting the Project Site is moderate to strong ground shaking on one of the local regional faults. As the Project Site is located in a seismically active region, the Project would conform to all applicable provisions of the ABC and CBC with respect to new construction. Development of the Project at the Project Site would not exacerbate existing hazardous environmental conditions related to strong seismic ground shaking under either buildout scenario, and impacts would be **less than significant**.

Threshold a)(iii) ***Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?***

The CGS' Earthquake Zones of Required Investigation, Los Angeles Quadrangle Map indicates that the Project Site is not located within a Liquefaction Zone. This determination is based on groundwater depth records, soil type, and distance to a fault capable of producing a substantial earthquake. The historic high groundwater level beneath the site is approximately 200 feet beneath the ground surface. Typically, saturated soils within the upper 50 feet of the ground surface or lowest adjacent grade are considered subject to

liquefaction. Based on the conditions documented at the Project Site, the potential for liquefaction is low.

Some seismically-induced settlement of the proposed structure should be expected as a result of strong ground-shaking, however, due to the uniform nature of the underlying geologic materials, excessive differential settlements are not expected to occur. Therefore, the potential for liquefaction or seismic (dry) settlement to occur at the Project Site is considered low, and development of the Project at this location would not exacerbate existing hazardous conditions related to liquefaction or seismically induced ground failure under either buildout scenario. Therefore, impacts related to seismic-related ground failure, including liquefaction would be **less than significant**.

Threshold a)(iv) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

As discussed in **Section IV.A, Impacts Found Not to be Significant**, and in the Initial Study (**Appendix A-3**) of the Draft EIR, the Project Site is relatively flat and not located near any hillside areas. The Project Site is not located within an Earthquake-Induced Landside Zone as shown on the CGS' Earthquake Zones of Required Investigation, Los Angeles Quadrangle Map. Therefore, the Project would have a **less-than-significant** impact with respect to Threshold a)(iv) under either buildout scenario. The Project would not exacerbate existing hazardous environmental conditions by bringing people or structures into areas that are susceptible to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides, and no further analysis is required.

(2) Mitigation Measures

No significant impacts related to seismic events, including fault rupture, strong seismic ground shaking, and ground failure have been identified. In addition, no impacts related to landslide would occur. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to seismic events would be **less than significant**.

Threshold b) Would the project result in substantial soil erosion or the loss of topsoil?

As discussed in **Section IV.A, Impacts Found Not to be Significant**, and in the Initial Study (**Appendix A-3**) of the Draft EIR, the Project Site is located in an urbanized portion of the City and is completely paved and developed. Any topsoil that may exist on the site was previously blended with other on-site soils during previous site preparation/grading

activities. As such, development of the Project would not result in substantial loss of topsoil.

Construction activities such as grading and excavation could create the potential for soil erosion. The potential for soil erosion on the site is low due to the generally level topography of the site and the presence of existing off-site drainage facilities. Project construction would require the removal of existing pavement, the grading of earth, and excavation. Conformance with the ABC, which includes construction requirements for grading, excavation, and use of fill, would reduce the potential for wind or waterborne erosion.

In addition, the AMC (Section 16.34.070) requires the implementation of erosion control best management practices (BMPs) during construction activity, consistent with the requirements of the State General Construction Activity Stormwater Permit (GCASP) with which the proposed Project would be required to comply. As the Project would comply with all mandatory Code and GCASP requirements, Project impacts related to soil erosion during construction would be minimal and less than significant.

The potential for soil erosion during Project operation would be relatively low due to the urban nature of the Project Site and its generally level topography. The Project Site would be fully developed with new and existing buildings, paving, landscaping, and surface treatments. Therefore, the Project would have a **less-than-significant** impact with respect to soil erosion and topsoil loss under either buildout scenario. No further analysis is required.

Threshold c) ***Would the project 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?***

(1) Impact Analysis

The Project Site does not contain soils or geologic units that are unstable or would become unstable as a result of the Project. As discussed under Threshold a)(iii) above, the potential for liquefaction or seismic (dry) settlement to occur at the Project Site is considered low, and development of the Project at this location would not exacerbate existing hazardous conditions related to liquefaction or seismically induced ground failure. As discussed under Threshold a)(iv) above, the Project Site is not located within a static or seismic slope stability hazard zone. Therefore, the potential for landslides or static or seismic slope instability (lateral spreading) is absent at this site.

Subsidence is typically associated with the withdrawal of subsurface fluids or gases, such as water, methane or oil. Based on review of the California State Division of Oil, Gas and

Geothermal Resources (DOGGR) on-line mapping system, the Project Site is not located within the limits of an oil field. In addition, no oil or gas wells have been drilled at the Project Site. The nearest well was drilled approximately 1.3 miles to the southeast. As a result, there appears to be little or no potential for ground subsidence due to withdrawal of fluids or gases at the Project Site. In addition, based on previous geotechnical investigations conducted within the vicinity of the site, the soils underlying the area are not be considered prone to hydroconsolidation or collapse.

Therefore, given the absence of these geologic hazards and the physical conditions within which they are likely to occur from the Project Site, the Project would not have the potential to exacerbate existing hazardous conditions related to soil or geologic unit instability, and impacts would be **less than significant** under either buildout scenario.

(2) Mitigation Measures

No significant impacts related to soil or geologic unit instability have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to soil or geologic unit instability would be **less than significant**.

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

(1) Impact Analysis

The geologic materials tested by Geotechnologies, Inc. for nearby sites ranged from the very low to high expansion range. The Expansion Index was found to be between 10 and 115 for representative samples tested. The on-site geologic materials are anticipated to be in the low to moderate expansion range. Special design considerations for the mitigation of highly expansive soils are not likely to be required and thus impacts would be **less than significant** under either buildout scenario.

(2) Mitigation Measures

No significant impacts related to expansive soil have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to expansive soil would be **less than significant**.

Threshold e): ***Would the project site 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 wastewater?***

As discussed in **Section IV.A, Impacts Found Not to be Significant**, and in the Initial Study (**Appendix A-3**) of the Draft EIR, the Project Site is located in a developed area of the City, which is served by a wastewater collection, conveyance, and treatment system operated by the City. No septic tanks or alternative disposal systems are necessary, nor are they proposed. Therefore, the Project would have **no impact** with respect to Threshold (e) under either buildout scenario. No impacts resulting from the use of septic tanks or alternative wastewater disposal systems would occur and no further analysis is required.

Threshold f): ***Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

(1) Impact Analysis

As previously discussed, a records search conducted for the Project Site indicates there are no previously encountered fossil vertebrate localities located within the Project Site. The closest identified localities in proximity to the Project Site are LACM 1023 and 2032, approximately four miles to the southwest, collected, in the latter case, at a depth of 20-35 feet below the surface. The Project Site has been subject to grading and development in the past and grading for the Project would consist of relatively minimal excavation to an approximate depth of 10-12 feet below the surface. Even so, the possibility exists that paleontological artifacts that were not recovered during prior construction or other human activity may be present given the noted high paleontological sensitivity of the area. As such, the Project could have the potential to destroy a unique paleontological resource or site or unique geologic feature. Therefore, impacts related to paleontological resources would be potentially **significant**.

(2) Mitigation Measures

Mitigation Measures GEO-MM-1 through GEO-MM-4 would ensure the Project's potential impact to paleontological resources would be less than significant.

- **GEO-MM-1**: A Project Paleontologist (meeting Society of Vertebrate Paleontology [SVP] standards) will prepare a Paleontological Resources Monitoring and Mitigation Plan (PRMMP). This plan will address specifics of monitoring and mitigation and comply with the recommendations of the SVP (2010). The Project Paleontologist will also prepare a report of the findings of the monitoring plan after construction is completed.

- **GEO-MM-2**: The Project Paleontologist will develop a Worker's Environmental Awareness Program (WEAP) to train the construction crew on the legal requirements for preserving fossil resources as well as procedures to follow in the event of a fossil discovery. This training program will be given to the crew before ground-disturbing work commences and will include handouts to be given to new workers.

- **GEO-MM-3**: All ground disturbances at the Project Site that occur in previously undisturbed sediment will require monitoring. Monitoring should be conducted by a Paleontological Monitor meeting the standards of the SVP (2010) and under the supervision of the Project Paleontologist. The Project Paleontologist may periodically inspect construction activities to adjust the level of monitoring in response to subsurface conditions. Full-time monitoring can be reduced to part-time inspections or ceased entirely if determined adequate by the Project Paleontologist. Paleontological monitoring will include inspection of exposed sedimentary units during active excavations within sensitive geologic sediments. The monitor will have authority to temporarily divert activity away from exposed fossils to evaluate the significance of the find and, should the fossils be determined significant, professionally and efficiently recover the fossil specimens and collect associated data. Paleontological Monitors will record pertinent geologic data and collect appropriate sediment samples from any fossil localities.

- **GEO-MM-4**: In the event of a fossil discovery, whether by the Paleontological Monitor or a member of the construction crew, all work will cease in a 50-foot radius of the find while the Project Paleontologist assesses the significance of the fossil and documents its discovery. Should the fossil be determined significant, it will be salvaged following the procedures and guidelines of the SVP (2010). Recovered fossils will be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility. The most likely repository is the LACM. A repository will be identified and a curatorial arrangement will be signed prior to collection of the fossils.

(3) Level of Significance After Mitigation

By ensuring that excavation work is undertaken in accordance with a monitoring plan and is overseen by a qualified paleontologist with the ability to halt work in the event of any inadvertent resource discoveries, and that any resources encountered are properly identified and handled, implementation of Mitigation Measures GEO-MM-1 through GEOL-MM-4 would ensure that any potential impacts related to paleontological resources would be **less than significant**.

e) Cumulative Impacts

(1) Impact Analysis

A total of nine cumulative projects were identified by the City within the general vicinity of the Project Site, as listed in Table III-2 in **Section III, Environmental Setting**, of the Draft EIR. None of these cumulative projects would be located within one block of the Project Site. In general, geotechnical impacts of proposed developments are site-specific and do not cause effects beyond the perimeter of the subject properties. In most cases involving hazards related to site-specific soil conditions, erosion, and ground-shaking during earthquakes, the impacts associated with developing a project at a specific location would be specific to that site and its users and would not be common or contribute to (or shared with, in an additive sense) the impacts on other sites.

Because the closest cumulative project (No. 4, located at the corner of Commonwealth Avenue and Date Avenue) is approximately two blocks to the north of the Project Site, it is unlikely that potential geology and soils impacts associated with the development of this project could have an effect on the Project Site. However, given that this cumulative project would be subject to the same regulatory requirements as the proposed Project, any potential impacts associated with each of these projects would be reduced to a less-than-significant level, as would be the case with the proposed Project. Therefore, this cumulative project, together with the proposed Project, would not create an impact that is cumulatively considerable.

None of the cumulative projects is known to have elements or involve activities that would cause or accelerate geologic hazards off-site that would contribute to increased geological hazards in the vicinity of the Project Site. In addition, the design and construction of the Project and the cumulative projects must conform to the Alhambra and California Building Code seismic standards as approved by the Development Services Department for the cumulative projects located within the City, and to similar requirements and approvals for the cumulative projects located within the City of Monterey Park. In addition, development of each cumulative project site would be subject to uniform site development and construction standards that are designed to protect public safety, which includes a geotechnical report. Therefore, incremental impacts related to geology and soils would not be cumulatively considerable under either buildout scenario and impacts would be **less than significant**.

With regard to potential cumulative impacts related to paleontological resources, the Project vicinity is urbanized and has been disturbed and developed over time. In the event that paleontological resources are uncovered, each cumulative project would be required to comply with applicable regulatory requirements. In addition, as part of the environmental review processes for the cumulative projects, it is expected that mitigation

measures would be established as necessary to address the potential for uncovering paleontological resources. Therefore, the Project's contribution to potential cumulative impacts to paleontological resources would not be considerable, and cumulative impacts would be **less than significant**.

(2) Mitigation Measures

See Mitigation Measures GEO-MM-1 through GEO-MM-4 above.

(3) Level of Significance After Mitigation

Cumulative geologic hazards and soils impacts would be **less than significant** without mitigation. Cumulative impacts related to paleontological resources would be **less than significant** with implementation of the mitigation measures identified above.

IV. Environmental Impact Analysis

G. Greenhouse Gas Emissions

1. Introduction

This section evaluates the potential impacts of the Project on greenhouse gas (GHG) emissions. GHGs are emitted by both natural processes and human activities. The accumulation of GHGs in the atmosphere regulates the earth's temperature. The State of California has undertaken initiatives designed to address the effects of GHGs, and to establish targets and emission reduction strategies for GHG emissions in California. The GHG data supporting this section is included as **Appendix H** of the Draft EIR.

There are several unique challenges to analyzing GHG emissions and climate change under CEQA, largely because of the global nature of climate change. Typical CEQA analyses address local actions that have local – or regional – impacts, whereas climate change presents the considerable challenge of analyzing the relationship between local activities and the resulting potential, if any, for global environmental impacts. Most environmental analyses examine the "project-specific" impacts that a particular Project is likely to generate. With regard to global climate change, however, it is generally accepted that while the magnitude of global warming effects is substantial, the contribution of an individual general development Project is so small that direct project-specific significant impacts are highly unlikely.

Global climate change is also fundamentally different from other types of air quality impact analyses under CEQA in which the impacts are all measured within, and are linked to, a discrete region or area. Instead, a climate change analysis must be considered on a global level, rather than the typical local or regional setting, and requires consideration of emissions from the project under consideration, and the extent of the displacement, translocation, and redistribution of emissions. In the usual context, where air quality is linked to a particular location or area, it is appropriate to consider the creation of new emissions in that specific area to be an environmental impact whether or not the emissions are truly "new" emissions to the overall globe. When the impact is a global one, however, it makes more sense to consider whether the emissions really are new emissions, or are merely being moved from one place to another. For example, the approval of a new developmental plan or project does not necessarily create new automobile drivers - the primary source of a land use project's emissions. Rather, due to the "relocation" factor, new land use projects often merely redistribute existing mobile

emissions;[1] accordingly, the use of models that measure overall emissions increases without accounting for existing emissions will substantially overstate the impact of the development project on global warming. This makes an accurate analysis of GHG emissions substantially different from other air quality impacts, where the "addition" of redistributed emissions to a new locale can make a substantial difference to overall air quality.

2. Environmental Setting

a) GHG Emissions Background

The earth's natural warming process is known as the "greenhouse effect." Certain atmospheric gases act as an insulating blanket for solar energy to keep the global average temperature in a suitable range for life support. The greenhouse effect raises the temperature of the earth's surface by about 60 degrees Fahrenheit. With the natural greenhouse effect, the average temperature of the earth is about 45 degrees Fahrenheit; without it, the earth would be about minus 15 degrees.[2] It is normal for the earth's temperature to fluctuate over extended periods of time. Over the past one hundred years, the earth's average global temperature has generally increased by one degree Fahrenheit. In some regions of the world, the increase has been as much as four degrees Fahrenheit.[3] Scientists studying the particularly rapid rise in global temperatures during the late twentieth century believe that natural variability alone does not account for that rise. Rather, human activity spawned by the industrial revolution has likely resulted in increased GHG emissions, primarily from the burning of fossil fuels (i.e., during motorized transport, electricity generation, consumption of natural gas, industrial activity, manufacturing, etc.) and deforestation, as well as agricultural activity and the decomposition of solid waste.[4]

The California Global Warming Solutions Act of 2006 (discussed in the following pages) defined GHGs to include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O),

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[1] *For example, a new subdivision of 500 homes may generate 5,000 new trips per day and those trips would be added to the local streets and intersections in the city where the subdivision was built. Trips associated with those homes presumably would emit roughly the same volume of GHGs in that city as they would if they were traveling the same number of miles in Cleveland, Ohio. While raw vehicle trip counts accurately predict changes in congestion at intersections, the same certainty cannot be provided for climate change. The trips would certainly increase the number of vehicles passing through local intersections, but they would not increase the amount of GHG emissions into the world's atmosphere if those trips simply have been relocated from another location on the planet.*

[2] *Climate Change 101: Understanding and Responding to Global Climate Change, published by the Pew Center on Global Climate Change and the Pew Center on the States, October 12, 2006.*

[3] *Ibid.*

[4] *Ibid.*

hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride. A general description of each GHG discussed in this report is provided in Table IV.G-1. CO_2 is the most abundant GHG. Other GHGs are less abundant, but have higher global warming potential (discussed below) than CO_2. Thus, emissions of other GHGs are frequently expressed in the equivalent mass of CO_2, denoted as CO_2e. Forest fires, decomposition, industrial processes, landfills, and consumption of fossil fuels for power generation, transportation, heating, and cooking are the primary sources of GHG emissions globally.

Global Warming Potential (GWP) is one type of simplified index based upon radiative properties that is used to estimate the potential future impacts of emissions of different gases upon the climate system in a relative sense. GWP is based on a number of factors, including the radiative efficiency (heat-absorbing ability) of each gas relative to that of CO_2, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years) relative to that of CO_2. A summary of the atmospheric lifetime and GWP of selected gases is presented in Table IV.G-2.

Table IV.G-1
Description of Identified Greenhouse Gases

GHG	General Description
BC[a]	Black carbon (BC) are particles produced both naturally and by human activities as a result of the incomplete combustion of fossil fuels, biofuels, and biomass. When suspended in air, BC absorbs sunlight and generates heat in the atmosphere, which warms the air and can affect regional cloud formation and precipitation patterns. When deposited on snow and ice, it absorbs sunlight, again generating heat, which warms both the air above and the snow and ice below, thus accelerating melting.
CO_2	CO_2 is an odorless, colorless GHG, which has both natural and man-made sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing; man made sources of CO_2 are burning coal, oil, natural gas, and wood.
CH_4	CH_4 is a flammable gas and is the main component of natural gas. When one molecule of CH_4 is burned in the presence of oxygen, one molecule of CO_2 and two molecules of water are released. There are no ill health effects from CH_4. A natural source of CH_4 is the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain CH_4, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and cattle.
N_2O	N_2O is a colorless GHG. High concentrations can cause dizziness, euphoria, and sometimes slight hallucinations. N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used in rocket engines, race cars, and as an aerosol spray propellant.
NF_3[b]	NF_3 was not listed initially in the California Global Warming Solutions Act but was subsequently added to the list of major GHGs by Senate Bill 104. NF_3 is used as a replacement for PFCs (mostly Hexafluoroethane (C_2F_6)) and SF_6 in the electronic industry (plasma etching and chamber cleaning), manufacture of semi-conductors and LCD panels (Liquid Crystal Display). Nitrogen trifluoride is also used in the photovoltaic industry (thin-film solar cells) for "texturing, phosphorus silicate glass (PSG) removal, edge isolation and reactor cleaning after deposition of silicon nitrate or film silicon". Nitrogen trifluoride is further used in hydrogen fluoride and deuterium fluoride lasers, which are types of chemical lasers.

HFCs	HFCs are synthetic man-made chemicals that are used as a substitute for chlorofluorocarbons (CFCs) for automobile air conditioners and refrigerants. CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. Because they destroy stratospheric ozone, the production of CFCs was stopped as required by the Montreal Protocol in 1987.
PFCs	PFCs have stable molecular structures and do not break down though the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above the Earth's surface are able to destroy the compounds. PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane and hexafluoroethane. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.
SF_6	SF_6 is an inorganic, odorless, colorless, non-toxic, and nonflammable gas. SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Source: Association of Environment Professionals, Alternative Approaches to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents, Final, June 29, 2007.

[a] Center for Climate and Energy Solutions, Working Together for the Environment and the Economy, Factsheet: What is Black Carbon?, April 2010.

[b] United Nations Framework Convention on Climate Change, Compilation of technical information on the new greenhouse gases and groups of gases included in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, July 27, 2010.

Table IV.G-2
Atmospheric Lifetimes and Global Warming Potentials

GHG	Lifetime (Years)	Global Warming Potential (20-Year)	Global Warming Potential (100-Year)
Carbon Dioxide	100	1	1
Nitrous Oxide	121	264	265
Nitrogen Trifluoride	500	12,800	16,100
Sulfur Hexaflouride	3,200	17,500	23,500
Perflourocarbons	3,000-50,000	5,000-8,000	7,000-11,000
Black Carbon	days to weeks	270-6,200	100-1,700
Methane	12	84	28
Hydroflourocarbons	Uncertain	100-11,000	100-12,000

Source: CARB, First Update to the Climate Change Scoping Plan, May 2014. IPCC, Climate Change 2014: Synthesis Report, 2014.

b) Regulatory Framework

Climate change and GHG emissions are governed by an evolving body of laws, regulations, and case law. Below are summaries of some of the key regulations; however, the discussion below should not be considered exhaustive of this growing body of regulation.

(1) Federal

(a) Supreme Court Ruling in Massachusetts et al. v. Environmental Protection Agency

President George W. Bush administration's approach to addressing climate change was challenged in *Massachusetts et al. v. Environmental Protection Agency*, 549 US 497 (2007). In this decision, the U.S. Supreme Court held that the United States Environmental Protection Agency (U.S. EPA) was authorized by the Clean Air Act to regulate CO_2 emissions from new motor vehicles. The Court did not mandate that the U.S. EPA enact regulations to reduce GHG emissions, but found that the only instances in which the U.S. EPA could avoid taking action were if it found that GHGs do not contribute to climate change or if it offered a "reasonable explanation" for not determining that GHGs contribute to climate change.

On December 7, 2009, the U.S. EPA issued an "endangerment finding" under the Clean Air Act, concluding that GHGs threaten the public health and welfare of current and future generations and that motor vehicles contribute to GHG pollution.[5] These findings provide the basis for adopting new national regulations to mandate GHG emission reductions under the federal Clean Air Act. The U.S. EPA's endangerment finding paves the way for federal regulation of GHGs.

Under the Consolidated Appropriations Act of 2008 (HR 2764), Congress established mandatory GHG reporting requirements for some emitters of GHGs. In addition, on September 22, 2009, the U.S. EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule. The rule requires annual reporting to the U.S. EPA of GHG emissions from large sources and suppliers of GHGs, including facilities that emit 25,000 metric tons (MT) or more a year of GHGs.

(b) United States Environmental Protection Agency and National Highway Traffic Safety Administration Joint Rulemaking for Vehicle Standards

In response to the *Massachusetts v. Environmental Protection Agency* ruling discussed above, the President George W. Bush issued an Executive Order on May 14, 2007, directing the U.S. EPA, the U.S. Department of Transportation, and the U.S. Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008.

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[5] *United States Environmental Protection Agency, Endangerment, and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act, website: https://www.epa.gov/ghgemissions/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a-clean, accessed December 2018.*

On October 10, 2008, the National Highway Traffic Safety Administration (NHTSA) released a final environmental impact statement analyzing proposed interim standards for passenger cars and light trucks in model years 2011 through 2015. The NHTSA issued a final rule for model year 2011 vehicles on March 30, 2009.[6]

On May 7, 2010, the U.S. EPA and the NHTSA issued a final rule regulating fuel efficiency and GHG pollution from motor vehicles for cars and light-duty trucks for model years 2012–2016.[7] On May 21, 2010, President Barack Obama issued a memorandum to the Secretaries of Transportation and Energy, and the Administrators of the U.S. EPA and the NHTSA calling for establishment of additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure.[8] In response to this directive, U.S. EPA and NHTSA issued a Supplemental Notice of Intent announcing plans to propose stringent, coordinated federal GHG and fuel economy standards for model year 2017-2025 light-duty vehicles.[9] The agencies proposed standards projected to achieve 163 grams/mile of CO_2 in model year 2025, on an average industry fleet wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. California has announced its support of this national program.[10] The final rule was adopted in October 2012, and NHSTA intends to set standards for model years 2022-2025 in a future rulemaking.[11, 12] On April

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[6] *National Highway Traffic Safety Administration, Laws & Regulations, CAFE - Fuel Economy, Average Fuel Economy Standards Passenger Cars and Light Trucks Model Year 2011, Final Rule, March 23, 2009, website: http://www.nhtsa.gov/DOT/NHTSA/Rulemaking/Rules/Associated%20Files/CAFE_Updated_Final_Rule_MY2011.pdf, accessed: December 2018.*

[7] *United States Environmental Protection Agency, Light Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, Final Rule, May 7, 2010, website: https://www.federalregister.gov/articles/2010/05/07/2010-8159/light-duty-vehicle-greenhouse-gas-emission-standards-and-corporate-average-fuel-economy-standards, accessed: December 2018.*

[8] *Government Printing Office, Federal Register, Vol. 75, No. 101, Presidential Documents, Improving Energy Security, American Competitiveness and Job Creation, and Environmental Protection Through a Transformation of Our Nation's Fleet of Cars and Trucks, May 21, 2010, website: http://www.gpo.gov/fdsys/pkg/FR-2010-05-26/html/2010-12757.htm, accessed: December 2018.*

[9] *Government Printing Office, Federal Register, Vol. 76, No. 153, Proposed Rules, 2017-2025 Model Year Light-Duty Vehicle GHG Emissions and CAFÉ Standards: Supplemental Notice of Intent, August 9, 2011, website: http://gpo.gov/fdsys/pkg/FR-2011-08-09/pdf/2011-19905.pdf, accessed: December 2018.*

[10] *California Air Resource Board, Commitment Letter to National Program, July 28, 2011, website: http://www.epa.gov/otaq/climate/letters/carb-commitment-ltr.pdf, accessed: December 2018.*

[11] *National Highway Traffic Safety Administration, Federal Register, Vol. 77, No. 199, Rules & Regulations, 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards, effective December 14, 2012, website: https://federalregister.gov/a/2012-21972, accessed: December 2018.*

[12] *National Highway Traffic Safety Administration, Corporate Average Fuel Economy Standards, Passenger Cars and Light Trucks, Model Years 2017-2025, Final Environmental Impact Statement,*

2, 2018, the U.S. EPA signed the Mid-term Evaluation Final Determination which finds that the model year 2022-2025 greenhouse gas standards are not appropriate and should be revised.[13] This serves to initiate a notice to further consider appropriate standards for model year 2022-2025 light duty vehicles. On August 24, 2018, the U.S. EPA and NHTSA published a proposal to freeze the model year 2020 standards through model year 2026 and to revoke California's waiver under the Clean Air Act to establish more stringent standards.[14]

(c) Heavy-Duty Engines and Vehicles Fuel Efficiency Standards

In addition to the regulations applicable to cars and light-duty trucks, on August 9, 2011, the U.S. EPA and the NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks, which apply to vehicles from model years 2014 through 2018.[15] The U.S. EPA and the NHTSA adopted standards for CO_2 emissions and fuel consumption, respectively, tailored to each of three main vehicle categories: (1) combination tractors, (2) heavy-duty pickup trucks and vans, and (3) vocational vehicles. According to the U.S. EPA, this program will reduce GHG emissions and fuel consumption for affected vehicles by 6 percent to 23 percent.

(d) Energy Independence and Security Act

On December 19, 2007, the federal Energy Independence and Security Act of 2007 (EISA) was signed into law.[16] Among other key measures, the EISA would do the following, which would aid in the reduction of national GHG emissions, both mobile and non-mobile:

July 2012, website: http://www.nhtsa.gov/staticfiles/rulemaking/pdf/cafe/FINAL_EIS.pdf. Accessed: December 2018.

[13] *Federal Register, Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022-2025 Light-Duty Vehicles, website: https://www.federalregister.gov/documents/2018/04/13/2018-07364/mid-term-evaluation-of-greenhouse-gas-emissions-standards-for-model-year-2022-2025-light-duty, accessed: August 2019.*

[14] *Regulations, The Safer Affordable Fuel-Efficient Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks, website: https://www.regulations.gov/document?D=EPA-HQ-OAR-2018-0283-0756, accessed: August 2019.*

[15] *United States Environmental Protection Agency, Office of Transportation and Air Quality. EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium-and Heavy-Duty Vehicles, August 2011, website: http://www.epa.gov/otaq/climate/documents/420f11031.pdf, accessed: December 2018.*

[16] *Government Printing Office, Energy Independence and Security Act of 2007, January 4, 2007, website: http://www.gpo.gov/fdsys/pkg/BILLS-110hr6enr/pdf/BILLS-110hr6enr.pdf, accessed: December 2018.*

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.

2. Prescribe or revise standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labelling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

3. While superseded by NHTSA and U.S. EPA actions described above, EISA also set miles per gallon targets for cars and light trucks and directed the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.

Additional provisions of the EISA address energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green jobs."

(2) State

(a) Executive Order S-3-05

Executive Order S-3-05, issued in June 2005, established GHG emissions targets for the State of California, as well as a process to ensure the targets are met. The order directed the Secretary for California's Environmental Protection Agency (CalEPA) to report every two years on the state's progress toward meeting the Governor's GHG emission reduction targets. As a result of this executive order, the California Climate Action Team, led by the Secretary of CalEPA, was formed. The California Climate Action Team is made up of representatives from a number of state agencies and was formed to implement global warming emission reduction programs and reporting on the progress made toward meeting statewide targets established under the Executive Order. The California Climate Action Team reported several recommendations and strategies for reducing GHG emissions and reaching the targets established in the Executive Order.[17] The statewide GHG targets are as follows:

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

[17] *California Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006.*

However, with the adoption of the California Global Warming Solutions Act of 2006 (also known as Assembly Bill (AB) 32), discussed below, the Legislature did not adopt the 2050 horizon-year goal from Executive Order No. S-3-05.

The California Climate Action Team stated that smart land use is an umbrella term for strategies that integrate transportation and land-use decisions. Such strategies generally encourage jobs/housing proximity, promote transit-oriented development, and encourage high-density residential/commercial development along transit corridors. These strategies develop more efficient land-use patterns within each jurisdiction or region to match population increases, workforce, and socioeconomic needs for the full spectrum of the population. "Intelligent transportation systems" is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and the movement of people, goods, and service.[18]

(b) Assembly Bill 32 and Senate Bill 32 (Statewide GHG Reductions)

The California Global Warming Solutions Act of 2006 (AB 32) was signed into law in September 2006. The law instructs the California Air Resources Board (CARB) to develop and enforce regulations for the reporting and verifying of statewide GHG emissions. AB 32 set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.[19]

The heart of AB 32 is the requirement that statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 required CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions. CARB accomplished the key milestones set forth in AB 32, including the following:

- June 30, 2007. Identification of discrete early action GHG emissions reduction measures. On June 21, 2007, CARB satisfied this requirement by approving

[18] *California Environmental Protection Agency, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006, page 58.*

[19] *Legislative Counsel of California, California Assembly Bill 32, September 2006, website: http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.pdf, accessed: December 2018.*

three early action measures.[20] These were later supplemented by adding six other discrete early action measures.[21]

- January 1, 2008. Identification of the 1990 baseline GHG emissions level and approval of a statewide limit equivalent to that level and adoption of reporting and verification requirements concerning GHG emissions. On December 6, 2007, CARB approved a statewide limit on GHG emissions levels for the year 2020 consistent with the determined 1990 baseline.[22]

- January 1, 2009. Adoption of a scoping plan for achieving GHG emission reductions. On December 11, 2008, CARB adopted the *Climate Change Scoping Plan: A Framework for Change* (Scoping Plan), discussed in more detail below.[23]

- January 1, 2010. Adoption and enforcement of regulations to implement the "discrete" actions. Several early action measures have been adopted and became effective on January 1, 2010.[24, 25]

- January 1, 2011. Adoption of GHG emissions limits and reduction measures by regulation. On October 28, 2010, CARB released its proposed cap-and-trade regulations, which would cover sources of approximately 85 percent of

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[20] *California Air Resources Board, Summary of Board Meeting, Consideration of Recommendations for Discrete Early Actions for Climate Change Mitigation in California, June 21-22, 2007, website: http://www.arb.ca.gov/board/ms/2007/ms062107.pdf, accessed: December 2018.*

[21] *California Air Resources Board, Summary of Board Meeting, Public Meeting to Consider Approval of Additions to Reduce Greenhouse Gas Emissions under the California Global Warming Solutions Act of 2006 and to Discuss Concepts for Promoting and Recognizing Voluntary Early Actions, October 25-26, 2007, website: http://www.arb.ca.gov/board/ms/2007/ms102507.pdf, accessed: December 2018.*

[22] *California Air Resources Board, Staff Report, California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit, November 16, 2007, website: http://www.arb.ca.gov/cc/inventory/pubs/reports/staff_report_1990_level.pdf, accessed: December 2018.*

[23] *California Air Resources Board, Climate Change Scoping Plan, December 2008, website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf, accessed: December 2018.*

[24] *California Air Resources Board, Summary of Board Meeting, Consideration of Recommendations for Discrete Early Actions for Climate Change Mitigation in California, June 21-22, 2007, website: http://www.arb.ca.gov/board/ms/2007/ms062107.pdf, accessed: December 2018.*

[25] *California Air Resources Board, Summary of Board Meeting, Public Meeting to Consider Approval of Additions to Reduce Greenhouse Gas Emissions under the California Global Warming Solutions Act of 2006 and to Discuss Concepts for Promoting and Recognizing Voluntary Early Actions, October 25-26, 2007, website: http://www.arb.ca.gov/board/ms/2007/ms102507.pdf, accessed: December 2018.*

California's GHG emissions.[26] CARB's Board ordered its Executive Director to prepare a final regulatory package for cap-and-trade on December 16, 2010.[27]

- January 1, 2012. GHG emissions limits and reduction measures adopted in 2011 became enforceable.

As noted above, on December 11, 2008, CARB adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions for various categories of emissions. CARB determined that achieving the 1990 emission level by 2020 would require an approximately 28.5 percent reduction of GHG emissions in the absence of new laws and regulations (referred to as "business as usual" or "No Action Taken"). The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction measures by both entities, and identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. The key elements of the Scoping Plan include the following:[28]

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewable energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions;
- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and

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[26] *California Air Resources Board, Proposed Regulation to Implement the California Cap-and-Trade Program, December 16, 2010, website: http://www.arb.ca.gov/regact/2010/capandtrade10/capandtrade10.htm, accessed: December 2018.*

[27] *California Air Resources Board, California Cap-and-Trade Program, Resolution 10-42, December 16, 2010, website: http://www.arb.ca.gov/regact/2010/capandtrade10/res1042.pdf, accessed: December 2018.*

[28] *California Air Resources Board, Climate Change Scoping Plan, December 2008, website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf, accessed: December 2018.*

- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

In connection with preparation of the supplement to the Functional Equivalent Document, CARB released revised estimates of the expected 2020 emission reductions in consideration of the economic recession and the availability of updated information from development of measure-specific regulations. Incorporation of revised estimates in consideration of the economic recession reduced the projected 2020 emissions from 596 metric tons of CO_2 equivalent ($MTCO_2e$) to 545 million $MTCO_2e$ ($MMTCO_2e$).[29] Under this scenario, achieving the 1990 emissions level in 2020 would require a reduction of GHG emissions of 118 $MMTCO_2e$, or 21.7 percent. This revised reduction represents a 6.8 percentage point reduction from the 28.5 percent level determined in CARB's 2008 Scoping Plan. The 2020 AB 32 baseline was also updated to account for measures incorporated into the inventory, including Pavley (vehicle model-years 2009 to 2016) and the renewable portfolio standard (12 percent to 20 percent). Inclusion of these measures further reduced the 2020 baseline to 507 $MMTCO_2e$. As a result, based on both the economic recession and the availability of updated information from development of measure-specific regulations, achieving the 1990 emission level would now require a reduction of GHG emissions of 80 $MMTCO_2e$ or a reduction by approximately 16 percent (down from the 28.5 percent level determined in CARB's 2008 Scoping Plan) by 2020 in the "business as usual" or No Action Taken condition.[30,31]

On May 15, 2014, CARB released the first update to the Scoping Plan. The update recalculates 1990 GHG emissions using *Intergovernmental Panel on Climate Change Fourth Assessment Report* released in 2007. Using the AR4 GWPs, the 427 $MMTCO_2e$ 1990 emissions level and 2020 GHG emissions limit would be slightly higher, at 431 $MMTCO_2e$.[32] Based on the revised estimates of expected 2020 emissions identified in the 2011 supplement to the Functional Environmental Document and updated 1990 emissions levels identified in the draft first update to the Scoping Plan, achieving the 1990 emission level would require a reduction of 76 $MMTCO_2e$ (down from 507

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[29] *California Air Resources Board, Status of Scoping Plan Recommended Measures, July 25, 2011, website: http://www.arb.ca.gov/cc/scopingplan/status_of_scoping_plan_measures.pdf, accessed: December 2018.*

[30] *Ibid.*

[31] *California Air Resources Board, Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document, website: http://www.arb.ca.gov/cc/scopingplan/document/final_supplement_to_sp_fed.pdf, accessed: December 2018.*

[32] *California Air Resources Board, Climate Change Scoping Plan First Update, Discussion Draft for Public Review and Comment, October 2013, website: http://www.arb.ca.gov/cc/scopingplan/2013_update/discussion_draft.pdf, accessed: December 2018.*

$MMTCO_2e$) or a reduction by approximately 15 percent (down from 28.5 percent) to achieve in 2020 emissions levels in the "business as usual" or No Action Taken condition.[33]

As California moves closer to reaching the 2020 GHG emission reduction goal, state legislation has focused on furthering GHG emission reduction targets. Executive Order B-30-15 was issued April of 2015 and establishes a mid-term GHG reduction target for California of 40 percent below 1990 levels by 2030. In 2016, the Legislature passed SB 32 with the companion bill AB 197 which further mandates the 2030 target and provides additional direction to CARB on strategies to reduce GHG emissions. In response to Executive Order B-30-15 and SB 32, CARB has released California's 2017 Climate Change Scoping Plan.[34] The plan shows California is on track to exceed its 2020 climate target and establishes a path that will lead California to its 2030 climate goal. Per SB 32, the 2030 limit is 260 $MMTCO_2e$ a year. However, known commitments are expected to result in emissions that are 60 $MMTCO_2e$ above the target in 2030, and have a cumulative emissions reduction gap of about 236 $MMTCO_2e$. This means the known commitments do not decline fast enough to achieve the 2030 target. The remaining 236 $MMTCO_2e$ of estimated GHG emissions reductions would not be achieved unless further action is taken to reduce GHGs. However, while there is a potential GHG emissions reduction gap of approximately 236 $MMTCO_2e$, the Cap-and-Trade Program discussion below notes that the California legislature passed AB 398 to extend the cap-and-trade program from January 1, 2021 through December 31, 2030 in order to achieve the necessary GHG reductions associated with SB 32.

(c) Cap-and-Trade Program

As mentioned above, the Scoping Plan identifies a cap-and-trade program as one of the strategies the state will employ to reduce GHG emissions that cause climate change. The cap-and-trade program is implemented by CARB and "caps" GHG emissions from the industrial, utility, and transportation fuels sections, which account for roughly 85 percent of the state's GHG emissions. The program works by establishing a hard cap

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[33] *California Air Resources Board, Status of Scoping Plan Recommended Measures, July 25, 2011, website: http://www.arb.ca.gov/cc/scopingplan/status_of_scoping_plan_measures.pdf, accessed: December 2018.*

California Air Resources Board, Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document, website: http://www.arb.ca.gov/cc/scopingplan/document/final_supplement_to_sp_fed.pdf, accessed: December 2018.

California Air Resources Board, Climate Change Scoping Plan First Update, Discussion Draft for Public Review and Comment, October 2013, website: http://www.arb.ca.gov/cc/scopingplan/2013_update/discussion_draft.pdf, accessed: December 2018.

[34] *California Air Resources Board, California's 2017 Climate Change Scoping Plan: The Strategy for achieving California's 2030 greenhouse gas target, November 2017.*

on about 85 percent of total statewide GHG emissions. The cap starts at expected business-as-usual emissions levels in 2012, and declines two to three percent per year through 2020. Fewer and fewer GHG emissions allowances are available each year, requiring covered sources to reduce their emissions or pay increasingly higher prices for those allowances. The cap level is set in 2020 to ensure California complies with AB 32's emission reduction target of returning to 1990 GHG emission levels.

The scope of GHG emission sources subject to cap-and-trade in the first compliance period (2013-2014) includes all electricity generated and imported into California (the first deliverer of electricity into the state is the "capped" entity and the one that will have to purchase allowances as appropriate), and large industrial facilities emitting more than 25,000 $MTCO_2e$ per year (e.g., oil refineries and cement manufacturers). The scope of GHG emission sources subjected to cap-and-trade during the second compliance period (2015-2017) expands to include distributors of transportation fuels (including gasoline and diesel), natural gas, and other fuels. The regulated entity will be the fuel provider that distributes the fuel upstream (not the gas station). In total, the cap-and-trade program is expected to include roughly 350 large businesses, representing about 600 facilities. Individuals and small businesses will not be regulated.

Under the program, companies do not have individual or facility-specific reduction requirements. Rather, all companies covered by the regulation are required to turn in allowances[35] in an amount equal to their total GHG emissions during each phase of the program. The program gives companies the flexibility to either trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more will have to turn in more allowances. Companies that can cut their emissions will have to turn in fewer allowances. Furthermore, as the cap declines, total GHG emissions are reduced. On October 20, 2011, CARB's Board adopted the final cap-and-trade regulation. The cap-and-trade program began on January 1, 2012, with an enforceable compliance obligation beginning with the 2013 GHG emissions.[36]

On July 17, 2017 California legislature passed AB 398 to extend the cap-and-trade program from January 1, 2021 through December 31, 2030. AB 398 established the Compliance Offsets Protocol Task Force to provide guidance in approving new offset protocols that increase direct environmental benefits in the state. Moreover, AB 398 continues the gradual reduction in the number of allowances given to industries and reduces carbon offset credits to 4 percent from 2021 through 2025 and 6 percent from 2026 through 2030.

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[35] *"Allowance" means a limited tradable authorization to emit up to one metric ton of carbon dioxide equivalent.*

[36] *CARB, Cap-and-Trade Program, website: https://www.arb.ca.gov/cc/capandtrade/capandtrade.htm, accessed: December 2018.*

(d) Executive Order B-30-15 & SB 32

On April 29, 2015, Governor Edmund G. Brown Jr. issued Executive Order B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. This new emission reduction target is a step toward the ultimate goal of reducing emissions by 80 percent below 1990 levels by 2050.

Senate Bill 32 (SB 32) was approved by Governor Brown on September 8, 2016, and requires the CARB to approve GHG emissions limits equivalent to 40 percent below 1990 levels by 2030 (consistent with Executive Order B-30-15) and 80 percent below the 1990 level by 2050. Specifically, this bill:

1. Requires CARB to approve, based on the best available scientific, technological, and economic assessments, the following statewide limits on GHG emissions, including short-lived climate pollutants:
    a) 40% below the 1990 level by 2030.
    b) 80% below the 1990 level by 2050.
2. Authorizes CARB to approve an interim GHG emissions target to be achieved by 2040.
3. States the intent of the Legislature for the Legislature and appropriate agencies to adopt complementary policies that ensure the long-term emissions reductions adopted pursuant to the 2030 and 2050 limits advance all of the following:
    a) Job growth and local economic benefits in California
    b) Public health benefits for California residents, particularly in disadvantaged communities.
    c) Innovation in technology and energy, water, and resource management practices.
    d) Regional and international collaboration to adopt similar GHG emissions reduction policies.
4. Prohibits CARB from taking any action to implement the next update of the AB 32 (Núñez), Chapter 488, Statutes of 2006, Scoping Plan unless CARB has:
    a) Conducted an evaluation, with input from an independent advisory committee, of the current and projected GHG reduction actions other jurisdictions are taking, as well as the cost-effectiveness of the various GHG reduction strategies CARB has undertaken, including considering the marginal costs of the strategies.

b) Submitted the draft Scoping Plan to the Joint Legislative Budget Committee and appropriate policy committees, and submitted the final version at least 60 days before adoption.

5. Requires the Legislature to hold at least one oversight hearing on the draft and final Scoping Plans before adoption by CARB.

6. Authorizes the Legislature to act to modify, reject or delay some or all of the Scoping Plan before its adoption.

7. Requires CARB to submit an annual report including:

    a) A list of regulatory policies that have been adopted and implemented by a state agency in furtherance of achieving the GHG emissions limits adopted by CARB pursuant to AB 32.

    b) The amounts, sources, and locations of GHG emissions reductions achieved toward the statewide emissions limit.

8. Requires CARB, in furtherance of approving statewide GHG emissions limits, to consider historic efforts to reduce GHG emissions and objectively seek, and account for, cost-effective actions to reduce GHG emission across all sectors.

9. Requires the Office of Environmental Health Hazard Assessment (OEHHA) to prepare a report analyzing the impacts of the GHG emissions limits on disadvantaged communities.

10. States that nothing in the section affects the authority of CARB or a local air district under the federal Clean Air Act or state air resources laws, or to implement measures adopted prior to the approval of the next update to the Scoping Plan.

11. States the intent of the Legislature that the chapter be interpreted in a manner that does not violate California Constitution Article IV, Section 8.

12. States that the provisions of the chapter are severable.

13. Requires CARB, in consultation with various specified public entities, to ensure that the 2050 GHG emissions limit is achieved without imposing disproportionate GHG emissions reduction requirements on land use and permitting decisions.

(e) Senate Bill 97

Senate Bill 97, which was signed into law on August 24, 2007, added Public Resources Code 21083.05, which states, “The Office of Planning and Research and the Natural Resources Agency shall periodically update the guidelines for the mitigation of

greenhouse gas emissions or the effects of greenhouse gas emissions." Pursuant to Public Resources Code 20183.05, the California Natural Resources Agency adopted amendments to the state CEQA Guidelines, which address the specific obligations of public agencies when analyzing GHG emissions under CEQA to determine a project's effects on the environment. These amendments give discretion to the lead agency whether to: (1) use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use; or (2) rely on a qualitative analysis or performance-based standards. The amendments also identify three factors that should be considered in the evaluation of the significance of GHG emissions:

1. The extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting;

2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and

3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.[37]

(f) Senate Bill 375

In September 2008, the California Legislature adopted Senate Bill 375 (SB 375), legislation which (1) relaxes CEQA requirements for some housing projects that meet goals for reducing GHG emissions and (2) requires the regional governing bodies in each of the state's major metropolitan areas to adopt, as part of their regional transportation plan, "sustainable community strategies" that will meet the region's target for reducing GHG emissions. SB 375 creates incentives for implementing the sustainable community strategies by allocating federal transportation funds only to projects that are consistent with the emissions reductions.

Local governments would then devise strategies for housing development, road-building and other land uses to shorten travel distances, reduce vehicular travel time and meet the new targets. If regions develop these integrated land use, housing, and transportation plans, residential projects that conform to the sustainable community strategy (and therefore contribute to GHG reduction) can have a more streamlined environmental review process.

[37] *14 Cal. Code Regs. § 15064.4(b).*

(g) Short-Lived Climate Pollutant Reduction Strategy (SB 605 and SB 1383)

Short-lived climate pollutants (SLCPs) are powerful climate forcers that remain in the atmosphere for a much shorter period of time than longer-lived climate pollutants, such as CO_2. They include CH_4, HFCs, and black carbon. Their relative potency, when measured in terms of how they heat the atmosphere, can be tens, hundreds, or even thousands of times greater than that of CO_2. SLCPs are harmful air pollutants and the impacts of SLCPs are especially strong over the short term. Reducing these emissions can make an immediate beneficial impact on climate change and improve public health.

In 2014, SB 605 directed CARB to develop a comprehensive SLCP strategy, in coordination with other state agencies and local air quality management and air pollution control districts to reduce emissions of SLCPs. SB 1383 directed CARB to approve and begin implementing the plan by January 1, 2018, and set statewide 2030 emission reduction targets for CH_4, HFCs, and anthropogenic black carbon. The SLCP Reduction Strategy was approved by CARB in March 2017. SB 1383 also included a number of directives for addressing dairy and livestock sector CH_4 emissions and landfill CH_4 emissions via diversion of organic material from the waste stream.

(h) Renewables Portfolio Standards (SB 1078, SB 107, SBX1-2, SB 350, and SB 100)

Established in 2002 under Senate Bill (SB) 1078, and accelerated in 2006 under SB 107 and again in 2011 under SBX1-2, California's Renewables Portfolio Standards (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020.[38,39] The 33 percent standard is consistent with the RPS goal established in the Scoping Plan.[40] As interim measures, the RPS requires 20 percent of retail sales to be sourced from renewable energy by 2013, and 25 percent by 2016. SB 350 established The Clean Energy and Pollution Reduction Act of 2015 which increased the standards of the California RPS program by requiring that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased to 50 percent by 2030. SB 100 was signed September 10, 2018 and requires electricity

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[38] *Legislative Counsel of California, Senate Bill 1078, September 2002, website: http://www.energy.ca.gov/portfolio/documents/documents/SB1078.PDF, accessed: December 2018.*

[39] *Legislative Counsel of California, Senate Bill 1368, September 2006, website: http://www.energy.ca.gov/emission_standards/documents/sb_1368_bill_20060929_chaptered.pdf. accessed: December 2018.*

[40] *California Air Resources Board, Climate Change Scoping Plan, December 2008, website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf, accessed: December 2018.*

providers to provide renewable energy for at least 60 percent of their delivered power by 2030 and 100 percent use of renewable energy and zero-carbon resources by 2045. SB 100 also increases existing renewable energy targets, in accordance with the RPS, to 44 percent by 2024 and 52 percent by 2027. Initially, the RPS provisions applied to investor-owned utilities, community choice aggregators, and electric service providers. SBX1-2 added, for the first time, publicly-owned utilities to the entities subject to RPS. The expected growth in RPS to meet the standards in effect in 2008 is not reflected in the "business as usual" calculation in the AB 32 Scoping Plan, discussed below. In other words, the Scoping Plan's "business as usual" 2020 does not take credit for implementation of RPS that occurred after its adoption.[41]

(i) GHG Emissions Standard for Baseload[42] Generation

SB 1368, which was signed into law on September 29, 2006, prohibits any retail seller of electricity in California from entering into a long-term financial commitment for baseload generation if the GHG emissions are higher than those from a combined-cycle natural gas power plant. This performance standard (i.e., reducing long-term GHG emissions as a result of electrical baseload generation) applies to electricity generated both within and outside of California, and to publicly owned as well as investor-owned electric utilities.

(j) Mobile Source Reductions

Assembly Bill 1493, the "Pavley Standard," required CARB to adopt regulations by January 1, 2005, to reduce GHG emissions from non-commercial passenger vehicles and light-duty trucks of model year 2009 through 2016. The bill also required the California Climate Action Registry to develop and adopt protocols for the reporting and certification of GHG emissions reductions from mobile sources for use by CARB in granting emission reduction credits. The bill authorizes CARB to grant emission reduction credits for reductions of GHG emissions prior to the date of enforcement of regulations, using model year 2000 as the baseline for reduction.[43]

In 2004, CARB applied to the U.S. EPA for a waiver under the federal Clean Air Act to authorize implementation of these regulations. The waiver request was formally denied by the U.S. EPA in December 2007 after California filed suit to prompt federal action. In

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[41] *California Air Resources Board, Climate Change Scoping Plan Appendices, Vol. I, December 2008, website: http://www.arb.ca.gov/cc/scopingplan/document/appendices_volume1.pdf, accessed: December 2018.*

[42] *Baseload is the minimum amount of power an electrical, or other utility, company must generate in a 24-hour time period to meet estimated demand from its customers.*

[43] *CARB, Clean Car Standards - Pavley, Assembly Bill 1493, website: https://www.arb.ca.gov/cc/ccms/ccms.htm.*

January 2008, the State Attorney General filed a new lawsuit against the U.S. EPA for denying California's request for a waiver to regulate and limit GHG emissions from these vehicles. In January 2009, President Barack Obama issued a directive to the U.S. EPA to reconsider California's request for a waiver. On June 30, 2009, the U.S. EPA granted the waiver to California for its GHG emission standards for motor vehicles. As part of this waiver, U.S. EPA specified the following provision: CARB may not hold a manufacturer liable or responsible for any noncompliance caused by emission debits generated by a manufacturer for the 2009 model year. CARB has adopted a new approach to passenger vehicles (cars and light trucks), by combining the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California. These standards will apply to all passenger and light duty trucks used by customers, employees of, and deliveries to the Project.

(k) Low Carbon Fuel Standard

Executive Order S-01-07 (January 18, 2007) requires a 10 percent or greater reduction in the average fuel carbon intensity for transportation fuels in California regulated by CARB. CARB identified the Low Carbon Fuel Standard (LCFS) as a Discrete Early Action item under AB 32, and the final resolution (09-31) was issued on April 23, 2009.[44] In 2009, CARB approved for adoption the LCFS regulation, which became fully effective in April 2010 and is codified at Title 17, California Code of Regulations, Sections 95480-95490. The LCFS will reduce GHG emissions by reducing the carbon intensity of transportation fuels used in California by at least 10 percent by 2020.

(l) Clean Cars

In January 2012, CARB approved the Advanced Clean Cars Program, a new emissions-control program for model year 2017 through 2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of zero-emission vehicles. By 2025, when the rules will be fully implemented, the new automobiles will emit 34 percent fewer global warming gases compared to 2016 levels and 75 percent fewer smog-forming emissions compared to 2014 levels.

[44] *California Air Resources Board, Initial Statement of Reason for Proposed Regulation for The Management of High Global Warming Potential Refrigerant for Stationary Sources, October 23, 2009, website: http://www.arb.ca.gov/regact/2009/gwprmp09/isorref.pdf, accessed: December 2018.*

(m) Assembly Bill 1236, Executive Order B-16-12, and Executive Order B-48-18

AB 1236, adopted in October 2015, established new requirements for cities and counties to streamline their permitting for residential and non-residential electric vehicle charging stations. As of September 30, 2017, all local governments are required to have an expedited, streamlined permitting process for electric vehicle charging stations that complies with the requirements of AB 1236. Essentially AB 1236 removes unreasonable barriers to the installation of electric vehicle charging stations and does not unreasonably restrict the ability of homeowners and business concerns to install electric vehicle charging stations. The purpose of AB 1236 is to promote and encourage the use of electric vehicle charging stations and to limit obstacles to their use. In March of 2012, Executive Order B-16-12 was signed and orders state agencies to facilitate the rapid commercialization of zero-emission vehicles (ZEVs). Executive Order B-16-12 sets a target for the number of 1.5 million ZEVs in California by 2025. Also Executive Order B-16-12 sets as a target for 2050 a reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels. In January of 2018, Executive Order B-48-18 was signed to increase the supply of ZEVs and charging and refueling stations in the state. Executive Order B-48-18 directs state government to meet a series of milestones toward a long-term target of 1.5 million zero-emission vehicles on California's roadways by 2025 and 5 million by 2030.

(n) California Appliance Efficiency Regulations (California Code of Regulations, Title 20, Sections 1601 through 1608)

The 2014 Appliance Efficiency Regulations, adopted by the California Energy Commission, include standards for new appliances (e.g., refrigerators) and lighting, if they are sold or offered for sale in California. These standards include minimum levels of operating efficiency, and other cost-effective measures, to promote the use of energy- and water-efficient appliances.

(o) Assembly Bill 1109 (The Lighting Efficiency and Toxic Reduction Act)

The Lighting Efficiency and Toxic Reduction Act prohibits a person from manufacturing for sale in the state specified general purpose from manufacturing for sale in the state specified general purpose lights that contain levels of hazardous substances, as it requires the establishment of minimum energy efficiency standards for all general service incandescent lamps. The standards were structured to reduce 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.

(p) Green Building Code (California Code of Regulations, Title 24)

Although not originally intended to reduce GHG emissions, California Code of Regulations Title 24 Part 6: *California's Energy Efficiency Standards for Residential and Nonresidential Buildings* (Title 24), was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. Since then, Title 24 has been amended to recognize that energy-efficient buildings require less electricity and reduce fuel consumption, which, in turn, decreases GHG emissions. The current 2016 Title 24 standards were adopted, among other reasons, to respond to the requirements of AB 32. Additionally, Title 24 standards are updated on an approximately three-year cycle. As such, the Project would likely be subject to the upcoming 2019 Title 24 standards which improve upon the 2016 standards. Moreover, new development projects constructed within California after January 1, 2020 are subject to the mandatory planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and environmental quality measures of the 2019 California Green Building Standards (CALGreen) Code (California Code of Regulations, Title 24, Part 11).

(q) Assembly Bill 939 and Assembly Bill 341 (California Waste Management Act of 1989)

AB 939 requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows: (1) diversion of 25 percent of all solid waste by January 1, 1995, through source reduction, recycling, and composting activities; and (2) diversion of 50 percent of all solid waste on and after January 1, 2000, through source reduction, recycling, and composting facilities. AB 341 amended AB 939 to include a provision declaring that it is the policy goal of the state that not less than 75 percent of solid waste generated be source reduces, recycled, or composted by the year 2020, and annually thereafter.

(r) Executive Order S-13-08

Approved and signed by Governor Schwarzenegger in November 2008, Executive Order S-13-08 requires the California Natural Resources Agency to develop a state Climate Adaptation Strategy in coordination with local, regional, state and federal public and private entities. EO-S-13-08 directs these agencies to plan for sea level rise and climate impacts. Key sectors include: Coastal, Land Use and Built Environment, Oceans, Transportation, and Water Resources.

(3) Regional

(a) South Coast Air Quality Management District Policies (SCAQMD)

SCAQMD is principally responsible for comprehensive air pollution control in the Basin, which includes Los Angeles, Orange, and the urbanized portions of Riverside and San Bernardino Counties, including the Project Site. SCAQMD works directly with the Southern California Association of Governments (SCAG), county transportation commissions, and local governments and cooperates actively with all federal and state government agencies to regulate air quality.

In December 2008, the SCAQMD adopted an interim 10,000 $MTCO_2e$ per year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency.[45] The SCAQMD continues to consider adoption of significance thresholds for non-industrial development projects. The most recent proposal issued in September 2010 uses the following tiered approach to evaluate potential GHG impacts from various uses:[46]

> Tier 1: Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.
>
> Tier 2: Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearings and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.
>
> Tier 3: Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 $MTCO_2e$/year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 $MTCO_2e$/year), commercial projects (1,400 $MTCO_2e$/year), and mixed-use projects (3,000 $MTCO_2e$/year). Under option 2 a single numerical screening threshold of 3,000 $MTCO_2e$/year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.

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[45] *SCAQMD, Draft Guidance Document – Interim CEQA Greenhouse Has (GHG) Significance Threshold, October 2008.*

[46] *SCAQMD, Minutes for the GHG CEQA Significance Threshold, Stakeholder Working Group #15, September 28, 2010.*

Tier 4: Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 $MTCO_2e$ per service population for project level analyses and 6.6 $MTCO_2e$ per service population for plan level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.

Tier 5: Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

The thresholds identified above are not adopted by the SCAQMD or distributed for widespread public review and comment, and the working group tasked with developing the thresholds has not met since September 2010. The future schedule and likelihood of threshold adoption is uncertain.

(b) Southern California Association of Governments

On April 7, 2016, the Southern California Association of Governments ("SCAG") Regional Council adopted the 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016 RTP/SCS). The 2016 RTP/SCS charts a course for closely integrating land use and transportation so that the region can grow smartly and sustainably. It was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The 2016 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by state law to lower regional GHG emissions. California law requires the region to reduce per capita GHG emissions in the SCAG region by eight percent by 2020 - compared with 2005 levels - and by 13 percent by 2035. The strategies, programs, and projects outlined in the 2016 RTP/SCS are projected to result in GHG emissions reductions in the SCAG region that meet or exceed these targets (i.e., the plan would reduce per capita transportation emissions by 8 percent by 2020 and 18 percent by 2035).[47] Accordingly, the 2016 RTP/SCS is expected to fulfill and exceed its portion of SB 375 compliance with respect to meeting the state's GHG emission reduction goals.

[47] *SCAG, The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, Executive Summary, adopted April 2016.*

c) Existing Conditions

(1) Existing Statewide GHG Emissions

As reported by the CEC, California contributes approximately one percent of global and 8.2 percent of national GHG emissions.[48] California represents approximately 12 percent of the national population. Approximately 80 percent of GHGs in California are CO_2 produced from fossil fuel combustion. The current California GHG inventory compiles statewide anthropogenic GHG emissions and carbon sinks/storage from years 2000 through 2016.[49] It includes estimates for CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6. The GHG inventory for California for years 2010 through 2016 is presented in Table IV.G-3. As shown therein, the GHG inventory for California in 2016 was 429.35 million $MTCO_2e$, which meets and exceeds the 1990 inventory of 430.7 million $MTCO_2e$.

Table IV.G-3
California GHG Inventory
(million metric tons CO_2e)

	2010	2011	2012	2013	2014	2015	2016
Transportation	**165.07**	**161.51**	**161.22**	**160.90**	**162.28**	**166.14**	**169.38**
On Road	***151.20***	***148.03***	***147.71***	***147.07***	***148.04***	***151.52***	***154.64***
Passenger Vehicles	114.13	111.37	111.77	111.52	112.20	116.33	119.03
Heavy Duty Vehicles	37.07	36.65	35.93	35.55	35.83	35.19	35.62
Ships & Commercial Boats	***3.66***	***3.52***	***3.43***	***3.42***	***3.49***	***3.42***	***3.24***
Aviation (Intrastate)	***3.84***	***3.73***	***3.75***	***3.93***	***3.90***	***4.22***	***4.44***
Rail	***2.24***	***2.38***	***2.38***	***2.38***	***2.38***	***2.38***	***2.37***
Off Road	***2.03***	***2.13***	***2.23***	***2.33***	***2.43***	***2.53***	***2.63***
Unspecified	***2.09***	***1.72***	***1.71***	***1.77***	***2.04***	***2.07***	***2.07***
Industrial	**91.50**	**90.94**	**91.07**	**93.73**	**93.96**	**91.58**	**89.61**
Refineries and Hydrogen Production	***30.46***	***30.12***	***29.88***	***29.22***	***29.40***	***28.21***	***29.61***
General Fuel Use	***17.93***	***18.78***	***18.91***	***19.31***	***19.87***	***19.23***	***18.53***
Natural Gas	13.46	14.50	14.48	14.36	15.56	14.79	14.99
Other Fuels	4.47	4.28	4.43	4.94	4.31	4.45	3.53
Oil & Gas: Production & Processing	***16.80***	***16.73***	***16.73***	***19.11***	***19.47***	***19.58***	***17.93***
Fuel Use	15.01	14.91	14.87	16.99	17.18	17.22	15.66
Fugitive Emissions	1.80	1.82	1.86	2.12	2.29	2.36	2.27
Cement Plants	***5.57***	***6.14***	***6.92***	***7.20***	***7.61***	***7.56***	***7.60***
Clinker Production	3.46	4.08	4.65	4.93	5.27	5.17	5.15
Fuel Use	2.11	2.07	2.26	2.28	2.34	2.39	2.45
Cogeneration Heat Output	***12.61***	***11.15***	***10.81***	***10.99***	***9.64***	***8.98***	***8.00***
Other Fugitive and Process Emissions	***8.13***	***8.02***	***7.81***	***7.90***	***7.98***	***8.01***	***7.95***

[48] *California Energy Commission, Tracking Progress, Greenhouse Gas Emission Reductions. www.energy.ca.gov/renewables/tracking_progress/documents/Greenhouse_Gas_Emissions_Reductions.pdf, December 2017.*

[49] *A carbon inventory identifies and quantifies sources and sinks of greenhouse gases. Sinks are defined as a natural or artificial reservoir that accumulates and stores some carbon-containing chemical compound for an indefinite period.*

Table IV.G-3
California GHG Inventory
(million metric tons CO_2e)

	2010	2011	2012	2013	2014	2015	2016
Natural Gas Transmission & Distribution	3.94	3.92	3.88	3.82	3.87	3.94	3.99
Manufacturing	0.24	0.22	0.19	0.20	0.17	0.18	0.10
Wastewater Treatment	1.87	1.85	1.85	1.85	1.86	1.85	1.85
Other	2.08	2.02	1.90	2.03	2.08	2.04	2.01
Electric Power	**90.34**	**88.06**	**95.09**	**89.65**	**88.24**	**83.67**	**68.58**
In-State Generation	***46.75***	***41.20***	***51.03***	***49.47***	***51.72***	***49.93***	***42.30***
Natural Gas	40.59	35.92	45.77	45.66	46.43	45.16	38.28
Other Fuels	5.05	4.03	4.44	2.91	4.40	3.65	2.55
Fugitive and Process Emissions	1.10	1.25	0.82	0.90	0.90	1.13	1.48
Imported Electricity	***43.59***	***46.86***	***44.07***	***40.17***	***36.51***	***33.74***	***26.28***
Unspecified Imports	13.45	15.52	17.48	11.82	13.44	11.21	9.68
Specified Imports	30.14	31.34	26.59	28.35	23.07	22.52	16.60
Commercial and Residential	**45.05**	**45.50**	**42.89**	**43.54**	**37.37**	**37.94**	**39.36**
Residential Fuel Use	***29.19***	***29.64***	***27.34***	***28.14***	***22.87***	***23.29***	***24.20***
Natural Gas	26.99	27.51	25.76	26.52	21.58	21.90	22.80
Other Fuels	2.21	2.13	1.58	1.62	1.28	1.39	1.40
Commercial Fuel Use	***13.58***	***13.71***	***13.41***	***13.30***	***12.51***	***12.67***	***12.92***
Natural Gas	11.17	11.33	11.25	11.28	10.39	10.50	10.89
Other Fuels	2.41	2.38	2.16	2.02	2.12	2.16	2.03
Commercial Cogeneration Heat Output	***0.92***	***0.78***	***0.76***	***0.71***	***0.58***	***0.56***	***0.81***
Other Commercial and Residential	***1.36***	***1.37***	***1.38***	***1.40***	***1.41***	***1.42***	***1.43***
Agriculture	**34.27**	**34.89**	**36.08**	**34.61**	**35.95**	**34.41**	**33.84**
Livestock	***24.00***	***23.84***	***24.47***	***23.49***	***23.81***	***23.10***	***22.99***
Enteric Fermentation (Digestive Process)	12.13	11.98	12.10	11.78	11.85	11.40	11.35
Manure Management	11.86	11.86	12.38	11.71	11.96	11.70	11.64
Crop Growing & Harvesting	***7.50***	***7.40***	***7.73***	***7.42***	***7.48***	***6.91***	***6.89***
Fertilizers	5.78	5.67	5.93	5.65	5.72	5.28	5.25
Soil Preparation and Disturbances	1.64	1.65	1.73	1.69	1.68	1.56	1.56
Crop Residue Burning	0.08	0.08	0.08	0.08	0.08	0.08	0.08
General Fuel Use	***2.77***	***3.65***	***3.88***	***3.71***	***4.66***	***4.39***	***3.95***
Diesel	1.96	2.52	2.47	2.53	3.54	3.66	3.19
Natural Gas	0.65	0.66	0.70	0.69	0.63	0.64	0.72
Gasoline	0.16	0.48	0.71	0.49	0.49	0.10	0.04
Other Fuels	0.00	0.00	0.00	0.00	0.00	0.00	0.00
High GWP	**13.52**	**14.54**	**15.54**	**16.65**	**17.70**	**18.93**	**19.78**
Ozone Depleting Substance (ODS) Substitutes	***13.20***	***14.21***	***15.25***	***16.38***	***17.42***	***18.37***	***19.24***
Electricity Grid SF6 Losses	***0.24***	***0.25***	***0.24***	***0.18***	***0.14***	***0.42***	***0.37***
Semiconductor Manufacturing	***0.08***	***0.08***	***0.06***	***0.08***	***0.14***	***0.14***	***0.16***
Recycling and Waste	**8.37**	**8.47**	**8.49**	**8.52**	**8.59**	**8.73**	**8.81**
Landfills	***8.11***	***8.19***	***8.20***	***8.22***	***8.28***	***8.40***	***8.47***
Composting	***0.26***	***0.27***	***0.29***	***0.30***	***0.31***	***0.33***	***0.34***
Included Inventory Emissions	***448.11***	***443.91***	***450.38***	***447.59***	***444.10***	***441.40***	***429.35***

Source: California GHG Inventory for 2000–2016, by Category as Defined in the Climate Change Scoping Plan million metric tons of CO_2e (based upon IPCC Fourth Assessment Report's Global Warming Potentials).

(2) Existing Project Site Emissions

The 38.38-acre Project Site contains existing office, fitness center, parking, and light industrial/storage uses. The Project would redevelop portions of the Project Site, largely in the eastern and southern quadrants. Existing uses within the Office Plan Area would not be altered by the Project. As part of the Project, approximately 104,242 square feet of existing light industrial/storage, parking, and office uses would be demolished or repurposed. Although most of the existing uses to be removed from the Project Site as part of the Project are not currently operational, and thus do not currently generate GHG emissions, the Project involves repurposing approximately 10,145 square feet of currently operational office space into residential amenity space. Consistent with the Project's Traffic Impact Analysis,[50] this analysis accounts for the emissions currently generated by the 10,145 square feet of office space to be repurposed, but does not assume any current GHG generation for the other existing non-operational land uses on-site. The other existing operational uses on the Project Site within the Office Plan Area (additional office and fitness center uses) would not be affected or altered by the proposed Project and are not considered in this analysis as their GHG emissions would not change due to Project development. This analysis addresses only the GHG emissions from the portions of the Project Site that are to be redeveloped under the Project.

The GHG emissions generated by the existing office space to be repurposed are shown in Table IV.G-4. As shown, the operational GHG emissions generated by the office space are approximately 203.71 metric tons of CO_2e per year ($MTCO_2e$/year).

Table IV.G-4
Existing GHG Emissions: Project Site Areas Proposed for Redevelopment

Emissions Source	Estimated CO_2e Emissions (Metric Tons per Year)
Energy (Electricity & Natural Gas)	56.21
Mobile (Motor Vehicles)	128.88
Solid Waste Generation	4.74
Water Demand	13.88
Existing Uses Total	**203.71**
Calculation data and results provided in Appendix H to this Draft EIR.	

[50] *Kimley-Horn and Associates, Inc., Traffic Impact Analysis, The Villages at the Alhambra Development, April 2019. (See Draft EIR Appendix E)*

3. Project Impacts

a) Methodology

CARB recommends consideration of direct and indirect emissions to provide a complete picture of the GHG footprint of a facility. Annually reported indirect energy use aids the conservation awareness of a facility and provides information to CARB to be considered for future strategies.[51] For example, CARB has proposed requiring the calculation of direct and indirect GHG emissions as part of the AB 32 reporting requirements. Additionally, the Office of Planning and Research has noted that lead agencies "should make a good-faith effort, based on available information, to calculate, model, or estimate… GHG emissions from a project, including the emissions associated with vehicular traffic, energy consumption, water usage and construction activities."[52] Therefore, direct and indirect emissions have been calculated for the Project.

The California Emissions Estimator Model (CalEEMod) is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California. Data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is considered by the SCAQMD to be an accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California.[53]

(1) Construction

The Project's construction emissions were calculated using CalEEMod 2016.3.2. CalEEMod calculates emissions from off-road equipment use and on-road vehicle travel associated with haul, delivery, and construction worker trips. GHG emissions during construction were forecasted by assuming a conservative construction schedule provided by the Project Applicant (see **Section II, Project Description**, of the Draft EIR) and applying the mobile-source emissions factors derived from CalEEMod. The

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[51] *CARB, Initial Statement of Reasons for Rulemaking, Proposed Regulation for Mandatory Reporting of Greenhouse Gas Emissions Pursuant to the California Global Warming Solutions Act of 2006 (AB 32), Planning and Technical Support Division Emission Inventory Branch, October 19, 2007, website: www.arb.ca.gov/regact/2007/ghg2007/isor.pdf, accessed: December 2018.*

[52] *OPR Technical Advisory, page 5.*

[53] *SCAQMD, Air Quality Modeling, http://www.aqmd.gov/home/regulations/ceqa/air-quality-modeling; see also: www.caleemod.com.*

calculations of the emissions generated during Project construction activities reflect the types and quantities of construction equipment that would be used to remove the structures to be demolished, excavate and grade the Project Site, and construct the proposed buildings and related improvements. In accordance with the SCAQMD's guidance, GHG emissions from construction were amortized (i.e., averaged) over the lifetime of the Project. The SCAQMD defines the lifetime of a project as 30 years.[54] Therefore, in accordance with SCAQMD's guidance, total construction GHG emissions were divided by 30 to determine an annual construction emissions estimate and to ensure the construction emissions are evaluated in a quantitative sense with operations.

(2) Operation

Similar to construction, CalEEMod is used to calculate potential GHG emissions generated by new land uses on the Project Site, including on-road mobile vehicle traffic, off-road emissions from landscaping equipment, natural gas use, electricity use, water use, and solid waste disposal. Mobile source emission calculations associated with operation of the new land uses use a projection of the vehicle trips provided in the Project's Traffic Impact Analysis. Specifically, mobile emissions were analyzed using the trip generation calculations detailed within the Traffic Impact Analysis which accounts for trip reductions due to drive ratio (i.e. residential trips completed by public transit, biking, or walking), and internal capture due to multiple land uses on the Project Site. CalEEMod calculates GHG emissions from all other sources based on the size and square footage of the Project. As discussed previously, existing GHG emissions were only assumed for the existing office uses that are proposed to be repurposed as residential amenity space under the Project. These GHG emissions were subtracted from the emissions estimated for the proposed new development to arrive at the total net GHG emissions associated with the Project. The continuing office and fitness center uses on the Project Site were not included in this analysis as they would not be affected by the Project.

(3) Consistency with Applicable Plans and Policies

A consistency analysis has been provided that describes the Project's compliance with or exceedance of performance-based standards, and consistency with applicable plans and policies adopted for the purpose of reducing GHG emissions, included in the applicable portions of the Climate Team Action Report, the *Climate Change Scoping Plan*, and the 2016–2040 RTP/SCS.

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[54] *SCAQMD, Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, 2008, website: www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2, accessed: December 2018.*

As part of the *Climate Change Scoping Plan*, a statewide emissions inventory was developed as required by AB 32 which directs CARB to develop and track GHG emissions reductions to document progress towards the state GHG target. The emissions inventory also takes into account GHG emissions reduction measures developed by CARB to achieve state targets. Consistency with the *Climate Change Scoping Plan* is evaluated by comparing the Project's GHG reduction measures to those contained in the Scoping Plan.

As noted in CEQA Guidelines Section 15064.4(b)(3), consistency with such plans and policies "must reduce or mitigate the project's incremental contribution of greenhouse gas emissions." To demonstrate such incremental reductions, this section estimates reductions of Project-related GHG emissions resulting from consistency with plans. Consistent with evolving scientific knowledge, approaches to GHG quantification may continue to evolve in the future.

(4) SCAQMD Draft Tiered Approach

As mentioned previously, the SCAQMD has issued a proposal to evaluate potential GHG impacts for industrial, residential, commercial, and mixed-use projects using a tiered approach. For informational purposes, the SCAQMD efficiency metric is applied. The SCAQMD proposed a project-level 2020 4.8 $MTCO_2e$ per service population and a 2035 3.0 $MTCO_2e$ per service population Tier 4 threshold. Using interpolation method, the Tier 4 threshold would be approximately 3.8 $MTCO_2e$ per service population for project level analyses in 2028, which is the expected operational year for the Project.[55] This approach is provided for informational purposes and is not a threshold of significance as these thresholds have been not adopted by the SCAQMD.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

Consistent with Appendix G of the State CEQA Guidelines, a project may be deemed to have a significant adverse impact on GHG emissions if it results in any of the following:

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

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[55] *Per SCAQMD, GHG reductions by the SB 375 target date of 2035 would be approximately 40 percent. This 40 percent reduction was applied to the 2020 targets, resulting in an efficiency threshold for plans of 4.1 $MTCO_2e$/yr and an efficiency threshold at the project level of 3.0 $MTCO_2e$/yr. An interpolation calculation for the Project's 2028 buildout year has been included in Appendix G to this Draft EIR. Source: SCAQMD GHG CEQA Significance Threshold Stakeholder Working Group #15, September 28, 2010.*

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

(2) State CEQA Guidelines Section 15064

As described in Section 15064.4(b) of the State CEQA Guidelines, the following factors, among others, should be considered when assessing the significance of impacts from GHG emissions on the environment:

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

Note that Section 15064.4 does not establish a threshold of significance. Lead agencies are called on to establish significance thresholds for their respective jurisdictions in which a lead agency may appropriately look to thresholds developed by other public agencies, or suggested by other experts, such as the California Air Pollution Control Officers Association (CAPCOA), as long as any threshold chosen is supported by substantial evidence (see CEQA Guidelines Section 15064.7(c)). Although GHG emissions can be quantified, CARB, SCAQMD and the City of Alhambra have yet to adopt project-level significance thresholds for GHG emissions that would be applicable to the Project.

The State CEQA Guidelines amendments also clarify that the effects of GHG emissions are cumulative, and should be analyzed in the context of CEQA's requirements for cumulative impact analysis. Per State CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project will comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of greenhouse gas

emissions.[56] Put another way, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with program and/or other regulatory schemes to reduce GHG emissions.

(3) Project Significance Threshold

State CEQA Guidelines Appendix G and Section 15064.4, as well as Executive Orders S-3-05 and B-30-15, SB 375, and SCAG's 2016 RTP/SCS, all apply to the Project and are all intended to reduce GHG emissions to meet the statewide targets set forth in AB 32 and SB 32. Thus, in the absence of any adopted, quantitative threshold, the following threshold of significance has been developed for purposes of this analysis:

a) The project would have a significant effect on the environment if it is found to be inconsistent with applicable regulatory plans and policies to reduce GHG emissions, including: State CEQA Guidelines Appendix G and Section 15064.4, Executive Orders S-3-05 and B-30-15; Climate Change Scoping Plan, SB 375, and SCAG's 2016 RTP/SCS.

c) Project Design Features

The following Project Design Features (PDFs) are applicable to the Project with regard to GHG emissions:[57]

- **GHG-PDF-1**: The Project proposes 864 new trees to be planted on the Project Site, resulting in carbon sequestration. Street trees would also be provided in a manner consistent with City requirements.
- **GHG-PDF-2**: For interior and exterior architectural coatings, the Project would utilize coatings with a VOC content of up to 50 grams per liter.
- **GHG-PDF-3**: The Project would provide on-site bicycle spaces which would help to reduce VMT.
- **GHG-PDF-4**: The Project would provide on-site electric vehicle spaces supporting and promoting the use of alternative fuels.
- **GHG-PDF-5**: The Project would reduce water demand due to installation of low-flow and/or high efficiency water fixtures, such as low-flow toilets, urinals, showerheads, faucets, and high-efficiency clothes-washers and dishwashers.

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[56] *14 California Code of Regulations Section 15064(h)(3).*

[57] *GHG-PDF-5 and GHG-PDF-7 were included in the modeling of GHG emissions for the Project. Calculation data and results are provided in Appendix H of this Draft EIR.*

- **GHG-PDF-6**: The Project would comply with the City's Water Efficient Landscape Ordinance and include drought-tolerant landscaping and would implement efficient landscape irrigation techniques, such as "smart" irrigation technology, to reduce water use and its associated GHG emissions. "Smart" irrigation systems rely on weather, climate and soil moisture information to adjust watering frequency, thus, maintaining adequately moist vegetation while conserving water.
- **GHG-PDF-7**: The Project would include high-efficiency lighting, energy-efficient appliances, and infrastructure to support solar panels.

d) Analysis of Project Impacts

Threshold a) ***Would the project be inconsistent with applicable regulatory plans and policies to reduce GHG emissions, including: State CEQA Guidelines Appendix G and Section 15064.4, SB 32, Executive Orders S-3-05 and B-30-15; Climate Action Scoping Plan, SB 375, and SCAG's 2016 RTP/SCS?***

(1) Impact Analysis

(a) Construction

The Project involves the demolition of 104,242 square feet of existing uses and the construction of 36 townhomes, 480 condominiums, 545 apartments, and 2,547 new parking spaces provided in parking garages. For purposes of analyzing impacts associated with GHG emissions, this analysis assumes a total construction schedule of approximately 36 months, with construction beginning in 2020. This assumption is conservative and yields the maximum daily impacts. Construction activities associated with the Project would be undertaken in three main steps: (1) demolition, (2) grading/foundation preparation and (3) building construction.

Two different Project buildout scenarios are being considered. Under Buildout Scenario 1, the Project would be developed as a single entity with completion and operation projected for 2028. Under this scenario, demolition would occur for approximately 3 months and would require the demolition and removal of 104,242 square feet of existing uses. Grading/soil export and foundation preparation would occur for approximately 7 months and 120,000 cubic yards of soil export would be required. Building construction would occur for approximately 26 months and would include the construction of the proposed structures, connection of utilities, laying irrigation for landscaping, architectural coatings, paving, and landscaping the Project Site. Due to the eight-year buildout period, the 36 months of construction activities would not occur continuously but would be episodic across the entire buildout period. For this analysis, a construction schedule lasting continuously from 2020 to 2022 was assumed.

Under Buildout Scenario 2, the Project would be phased. Phase I involves the demolition of 42,576 square feet of existing uses, and the construction of 480 condominium and 36 townhouse units, and 1,625 parking spaces, built and operational by 2024. Under this phase, demolition would occur for approximately 1 month. Grading/soil export and foundation preparation would occur for approximately 3.5 months and 60,000 cubic yards of soil export would be required. Building construction would occur for approximately 13 months. Phase II would involve the demolition of 61,666 square feet of existing uses, and the construction of 545 apartment units and 922 parking spaces, built and operational by 2028. Under this phase, demolition would occur for approximately 2 months. Grading/soil import and foundation preparation would occur for approximately 3.5 months and 60,000 cubic yards of soil export would be required. Building construction would occur for approximately 13 months.

Emissions of GHGs were calculated for each Buildout Scenario using CalEEMod 2016.3.2 for each year of construction of the Project. The results of this analysis are presented in Tables IV.G-5 and IV.G-6 for Buildout Scenarios 1 and 2, respectively. As shown in Table IV.G-5, total construction GHG emissions under Buildout Scenario 1 would be 7,266.41 $MTCO_2e$/year. As shown in Table IV.G-6, total construction GHG emissions under Buildout Scenario 2 would be 4,591.90 $MTCO_2e$/year. Consistent with SCAQMD recommendations and to ensure construction emissions are assessed in a quantitative sense, construction GHG emissions have been amortized over a 30-year period and have been added to the annual operational GHG emissions of the Project identified in Tables IV.G-7 and IV.G-8.

Table IV.G-5
Buildout Scenario 1 - Project Construction-Related GHG Emissions

Year	CO_2e Emissions (Metric Tons per Year)
2020	1,605.21
2021	2,745.64
2022	2,915.56
Total Scenario 1 Construction GHG Emissions	**7,266.41**
GHG Emissions Amortized Over 30 Years	**242.21**
Calculation data and results are provided in Appendix H of this Draft EIR.	

Table IV.G-6
Buildout Scenario 2 - Project Construction-Related GHG Emissions

Year	CO_2e Emissions (Metric Tons per Year)
Phase I	
2020	1,611.47
2021	839.25

Phase II	
2021	706.92
2022	1,434.26
Total Scenario 2 Construction GHG Emissions	**4,591.90**
GHG Emissions Amortized Over 30 Years	**153.06**
Calculation data and results are provided in Appendix H of this Draft EIR.	

(b) Operation

Upon completion, Project operation would generate GHG emissions from the usage of on-road motor vehicles, electricity, natural gas, water, and generation of solid waste and wastewater. Emissions of operational GHGs under each buildout scenario are shown in Table IV.G-7 and Table IV.G-8. As shown, the net increase in GHG emissions generated under Buildout Scenario 1 would be approximately 10,219.25 $MTCO_2e$/year, and the net increase in GHG emissions generated under Buildout Scenario 2 would be approximately 10,419.00 $MTCO_2e$/year. Per capita emissions, as shown in the tables, are based on a residential Project service population of 2,525 persons at full buildout in 2028 (see **Section IV.L, Population and Housing** of the Draft EIR for details on the calculation of this estimate). As noted previously, under Buildout Scenario 1, the entire Project would become operational in 2028. Under Buildout Scenario 2, Phase I would become operational in 2024 and Phase II in 2028.

Table IV.G-7
Buildout Scenario 1- Project Operational GHG Emissions

Emissions Source	Estimated Project Generated CO_2e Emissions (Metric Tons per Year)
Area Sources	249.04
Energy Demand (Electricity & Natural Gas)	4,057.44
Mobile (Motor Vehicles)	5,383.52
Solid Waste Generation	61.36
Water Demand	429.39
Construction Emissions [a]	242.21
Scenario 1 Total	***10,422.96***
Less Existing Portion of Project Site to be Redeveloped	(203.71)
Project Net Increase	**10,219.25**
Per Capita Emissions	**4.05**

[a] The total construction GHG emissions were amortized over 30 years and added to the operation of the Project, per SCAQMD guidance.
Calculation sheets are provided in Appendix H of this Draft EIR.

Table IV.G-8
Buildout Scenario 2 - Project Operational GHG Emissions

Emissions Source	Estimated Project Generated CO_2e Emissions (Metric Tons per Year) [a]	
	Phase I	Phase II
Area Sources	121.13	127.91
Energy Demand (Electricity & Natural Gas)	2,371.38	1,686.06
Mobile (Motor Vehicles)	3,085.14	2,587.27
Solid Waste Generation	29.84	31.52
Water Demand	208.83	220.57
Construction Emissions [b]	81.69	71.37
Phase Totals:	***5,898.01***	***4,724.70***
Scenario 2 Total	***10,622.71***	
Less Existing Portion of Project Site to be Redeveloped	(203.71)	
Project Net Increase	**10,419.00**	
Per Capita Emissions	**4.13**	

[a] Note that Phase I was modeled to become operational in 2024 and Phase II was modeled to become operational in 2028.
[b] The total construction GHG emissions were amortized over 30 years and added to the operation of the Project, per SCAQMD guidance.
Calculation sheets are provided in Appendix H of this Draft EIR. Per Capita Targets and Project rates are provided therein.

(c) SCAQMD Draft Tiered Approach Analysis

As noted previously, the SCAQMD has released a draft guidance document regarding interim CEQA GHG screening criteria. The SCAQMD proposes a tiered approach, whereby the level of detail and refinement needed to determine significance increases with a project's total GHG emissions. The SCAQMD Tier 4 threshold proposes a 2020 4.8 $MTCO_2e$ per service population to determine whether a land use project could presumptively have less than significant GHG impacts if it produced less GHGs than the screening criteria. Moreover, SCAQMD proposes a 3.0 $MTCO_2e$ per service population for project level analyses in 2035 (Tier 4). Using interpolation method, the Tier 4 threshold would be approximately 3.8 $MTCO_2e$ per service population for project level analyses in 2028, which is the expected operational year for the Project. Discussion of this draft approach is provided for informational purposes and is not being utilized as a threshold of significance for purposes of determining Project impacts.

The Project would generate a residential population of approximately 2,525 residents. This results in 4.05 $MTCO_2e$ per service population per year emissions for the Project under Buildout Scenario 1 and 4.13 $MTCO_2e$ per service population per year emissions for the Project under Buildout Scenario 2.

(d) Consistency with Applicable Plans, Policies & Regulations

The following describes the Project's consistency with applicable regulatory plans and policies intended to reduce GHG emissions, including Executive Orders S-3-05 and B-30-15, *Climate Change Scoping Plan*, SB 375, and SCAG's 2016 RTP/SCS. As shown below, the Project would be generally consistent with the applicable GHG reduction plans, policies, and regulations.

(i) Consistency with SB 32 and Executive Orders S-3-05 and B-30-15

Executive Orders S-3-05 and B-30-15 are orders from the state's Executive Branch for the purpose of reducing GHG emissions. As previously discussed, the goal to reduce GHG emissions to 1990 levels by 2020 was codified by the Legislature as AB 32. And, SB 32 requires the CARB to approve GHG emissions limits equivalent to 40% below the 1990 level by 2030 and 80% below the 1990 level by 2050.

Executive Order S-3-05 also directed the CalEPA to report every two years on the state's progress toward meeting the Governor's GHG emission reduction targets. As a result of this executive order, the California Climate Action Team was formed to provide recommendations and strategies for reducing GHG emissions and reaching the targets established in this Executive Order.[58] According to the California Climate Action Team, smart land use is an umbrella term for strategies that integrate transportation and land-use decisions. Such strategies generally encourage jobs/housing proximity, promote transit-oriented development, and encourage high-density residential development along transit corridors.

The Project Site is served by several transit lines including Alhambra Community Transit, Los Angeles County Metropolitan Transportation Authority (Metro), and University of Southern California (USC) Transit. Specifically, the Project area is served by Alhambra Community Transit Blue and Green Lines, Metro Lines 258 and 485, and USC Transit Alhambra Route. The Project involves the construction and operation of residential uses within walking distance of existing bus lines, and will provide bicycle parking, which would maximize the potential for mobility and accessibility for people. Pedestrian access to the Project Site would be provided via the existing sidewalks. The Project would provide opportunities for residents to walk to other retail businesses within and near the Project Site. A discussion of the Project's consistency with the California Climate Action Team strategies for reducing GHG emissions is provided below in Table IV.G-9.

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[58] *California Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006.*

Table IV.G-9
Project Consistency with Climate Action Team Report

Strategies for Reducing GHG Emissions	Project Consistency
Diesel Anti-Idling	
Reduce GHG emissions from diesel-fueled commercial motor vehicle idling by reducing idling times and electrifying truck stops.	**Consistent**. Per California Code of Regulation, Title 13, Section 2480 the idling of all diesel fueled commercial vehicles (weighing over 10,000 pounds) during construction and operation (delivery trucks) would be limited to 5 minutes at any location.
Alternative Fuels: Biodiesel Blends and Ethanol	
Increase the use of alternative fuels that are less GHG-intensive, by adopting regulations to require the use of biodiesel to displace California diesel fuel, increasing the number of flexible fueled vehicles present in California, and increasing the percentage of ethanol used in gasoline.	**Consistent**. The Project would provide on-site electric vehicle charging stations consistent with the CALGreen Code, supporting and promoting the use of alternative fuels. Specifically, 3% of total provided parking spaces shall be EV Capable to support future installation of electric vehicle supply equipment (EVSE).
Achieve 50 Percent Statewide Recycling Goal	
Achieve California's 50 percent waste diversion mandate (AB 939, Integrated Waste Management Act of 1989) to reduce GHG emissions associated with virgin material extraction. AB 939 required each city or county plan to include an implementation schedule that showed 50 percent diversion of all solid waste by January 1, 2000 through source reduction, recycling, and composting. Additionally, AB 341 amended AB 939 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source reduced, recycled, or composted by the year 2020, and annually thereafter.	**Consistent**. The Project would be consistent with AB 939 and all regulations associated with solid waste. Specifically, the Project shall only contract for waste disposal services with a company that recycles solid waste in compliance with AB 341, and the Project would provide recycling bins at appropriate locations to promote recycling of paper, metal, glass, and other recyclable material. See Section IV.P (Utilities and Service Systems) of this Draft EIR for a complete discussion on solid waste and the Project's regulatory compliance.
Urban Forestry	
Increase carbon sequestration by planting five million trees in urban areas statewide by 2020.	**Consistent**. Per Project Design Feature GHG-PDF-1, the Project proposes 864 new trees to be planted on the Project Site, resulting in carbon sequestration. Street trees would also be provided in manner consistent with City requirements.
Water Use Efficiency	
Implement efficient water management practices and incentives, as saving water saves energy and GHG emissions.	**Consistent**. In compliance with the CALGreen Code, the Project would reduce water demand due to low-flow and/or high efficiency water fixtures, such as low-flow toilets, urinals, showerheads, faucets, and high-efficiency clothes-washers and dishwashers. In addition, the Project would comply with the City's Water Efficient Landscape Ordinance and include drought-tolerant landscaping and would implement efficient landscape irrigation techniques, such as

Table IV.G-9
Project Consistency with Climate Action Team Report

Strategies for Reducing GHG Emissions	Project Consistency
	"smart" irrigation technology, to reduce water use and its associated GHG emissions. "Smart" irrigation systems rely on weather, climate and soil moisture information to adjust watering frequency, thus, maintaining adequately moist vegetation while conserving water.
Building Energy Efficiency Standards in Place and in Progress	
Reduce GHG emissions from electricity by reducing energy demand. The California Energy Commission updates building energy efficiency standards that apply to newly constructed buildings and additions to and alterations to existing buildings. Both the Energy Action Plan and the Integrated Energy Policy Report call for ongoing updating of the standards.	**Consistent**. Project compliance with the CALGreen Code would ensure energy savings. The Project would also include high-efficiency lighting, energy-efficient appliances, and infrastructure to support solar panels.
Appliance Energy Efficiency Standards in Place and in Progress	
Reduce GHG emissions from electricity by reducing energy demand. The California Energy Commission updates appliance energy efficiency standards that apply to electrical devices or equipment sold in California. Recent policies have established specific goals for updating the standards; new standards are currently in development.	**Consistent**. Consistent with the 2016 Building Energy Efficiency Standards, the Project would include energy-efficient appliances such as refrigerators, dishwashers and clothe washing machines.
Measures to Improve Transportation Energy Efficiency	
Advance cleaner transportation and reduce GHG emissions by providing incentives, enhancing outreach and educational programs to bring a coordinated message of sustainable transportation and root causes of GHG emissions, diversifying the transportation energy infrastructure, and slowing the rate of VMT growth.	**Consistent.** The Project would develop residential uses within walking distance of existing bus lines and provide bicycle parking, which would help reduce VMT. The Project would provide opportunities for residents to walk to other retail businesses within and near the Project Site. In addition, the Project would provide on-site electric vehicle charging stations consistent with the CALGreen Code, supporting and promoting the use of alternative fuels. Thus, while the Project would not directly advance cleaner transportation, the Project would slow VMT growth through use of existing public transit and pedestrian/bicycle access.
Note: This analysis focuses on the Climate Action Team strategies most applicable to the Project.	

(ii) Consistency with Climate Change Scoping Plan

As noted previously, CARB adopted the *Climate Change Scoping Plan* to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions for various categories of

emissions. CARB determined that achieving the 1990 emission level by 2020 would require an approximately 28.5 percent reduction of GHG emissions in the absence of new laws and regulations (referred to as "business as usual" or "No Action Taken"). The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction measures by both entities, and identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. As noted previously, the updated 2017 *Climate Change Scoping Plan* addresses the 2030 horizon and has a range of GHG reduction actions that include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation fee to fund the program.

Table IV.G-10 provides an evaluation of the Project's consistency with applicable reduction actions/strategies outlined in the *Climate Change Scoping Plan*. As discussed therein, the Project would be consistent with the GHG reduction-related actions and strategies of the *Climate Change Scoping Plan*.

Table IV.G-10
Project Consistency with Climate Change Scoping Plan

Strategies for Reducing GHG Emissions	Project Consistency
California Light-Duty Vehicle Greenhouse Gas Standards. Implement adopted Pavley standards and planned second phase of the system. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	**Consistent**. The Project would be consistent with this regulation and would not conflict with implementation of the vehicle emissions standards.
Energy Efficiency. Maximize energy efficiency building and appliance standards and pursue additional efficiency efforts including new technologies, and new policy and mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	**Consistent**. Project compliance with the CALGreen Code would ensure energy efficiency. The Project would also include high-efficiency lighting, energy-efficient appliances, and infrastructure to support solar panels.
Renewable Portfolio Standard. Achieve 33 percent renewable energy mix statewide.	**Consistent**. The Project would be served by Southern California Edison which is actively increasing its use of renewable sources. (See also **Section IV.E, Energy**, of the Draft EIR).
Low-Carbon Fuel Standard. Develop and adopt the Low Carbon Fuel Standard.	**Consistent.** The Project would be consistent with this regulation and would not conflict with implementation of the transportation fuel standards.
Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	**Consistent**. Project compliance with the CALGreen Code would ensure energy efficiency. The Project would also include high-efficiency lighting, energy-efficient appliances, and infrastructure to support solar panels.
Recycling and Waste. Reduce methane	**Consistent.** The Project would be consistent with AB

Table IV.G-10
Project Consistency with Climate Change Scoping Plan

Strategies for Reducing GHG Emissions	Project Consistency
emissions at landfills. Increase waste diversion, composting and other beneficial uses of organic materials and mandate commercial recycling. Move toward zero waste.	341 which sets forth a mandate to divert 75% of solid waste from landfills. Specifically, the Project shall only contract for waste disposal services with a company that recycles solid waste in compliance with AB 341, and the Project would provide recycling bins at appropriate locations to promote recycling of paper, metal, glass, and other recyclable material. See **Section IV.P.3** (**Utilities and Service Systems – Solid Waste**) of the Draft EIR.
Water. Continue efficiency programs and use cleaner energy sources to move and treat water.	**Consistent.** The Project would be consistent with the CALGreen Code to reduce water consumption. In addition, the Project would include water-efficient landscaping.
Note: This analysis focuses on the Scoping Plan GHG emissions reduction strategies most applicable to the Project.	

(iii) Consistency with SB 375 and 2016-2040 RTP/SCS

As previously discussed, SB 375 requires integration of planning processes for transportation, land-use and housing. Each Metropolitan Planning Organization is required to adopt a SCS to encourage compact development that reduces passenger VMT and trips so that the region will meet the target provided in the Scoping Plan for reducing GHG emissions. SB 375 requires SCAG to direct the development of the SCS for the southern California region. For a discussion of Project consistency with the 2016-2040 RTP/SCS, please refer to Table IV.J-2 in **Section IV.J, Land Use and Planning**, of the Draft EIR. As demonstrated therein, the Project would be consistent with the applicable goals, including those pertaining to reductions in GHG emissions, in the 2016-2040 RTP/SCS.

(e) Impact Conclusion

Given that the Project would redevelop the currently unutilized (and underutilized) portions of the Project Site, while retaining the currently fully utilized uses on the remainder of the Project Site, the Project would generate a net increase in Project Site GHG emissions as compared to existing conditions. However, as demonstrated above, the Project would be consistent with applicable regulatory plans and policies to reduce GHG emissions, including Executive Orders S-3-05 and B-30-15, Climate Change Scoping Plan, SB 375, and SCAG's 2016-2040 RTP/SCS. Therefore, the Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs and would be consistent with applicable

regulatory plans and policies to reduce GHG emissions and impacts with respect to GHGs would be **less than significant**.

(2) Mitigation Measures

No significant impacts related to GHG emissions have been identified. No mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to GHG emissions would be **less than significant**.

e) Cumulative Impacts

(1) Impact Analysis

As explained above, the analysis of a project's GHG emissions is inherently a cumulative impacts analysis because climate change is a global problem and the emissions from any single project alone would likely be negligible. Accordingly, the analysis above takes into account the potential for the Project to contribute to the cumulative impacts of global climate change.

Although the Project is expected to emit GHGs, the emission of GHGs by a single project into the atmosphere is not necessarily an adverse environmental effect. As discussed in recent CEQA case law,[59] the global scope of climate change and the fact that CO_2 and other GHGs, once released into the atmosphere, are not contained in the local area of their emission means that the impacts to be evaluated are also global rather than local. For many air pollutants, the significance of their environmental impact may depend greatly on where they are emitted; for GHGs, it does not.

For individual developments, like the Project, this fact gives rise to an argument that a certain amount of GHG emissions is as inevitable as population growth. Under this view, a significance criterion framed in terms of efficiency is superior to a simple numerical threshold because CEQA is not intended as a population control measure. Meeting statewide GHG reduction goals does not preclude all new development. Rather, the Scoping Plan - the state's roadmap for meeting AB 32's target - assumes continued growth and depends on increased efficiency and conservation in land use and transportation from all Californians. To the extent a project incorporates efficiency and conservation measures sufficient to contribute its portion of the overall GHG reductions necessary, one can reasonably argue that the Project's impact is not

[59] *Center for Biological Diversity et al. v. California Department of Fish and Wildlife (2015) 62 Cal.4th 204, 219-220.*

cumulatively considerable, because it is helping to solve the cumulative problem of GHG emissions as envisioned by California law.[60]

As discussed above, the Project would reduce GHGs in a manner consistent with applicable regulatory plans and policies to reduce GHG emissions, including Executive Orders S-3-05 and B-30-15, Climate Change Scoping Plan, SB 375, and SCAG's 2016-2040 RTP/SCS.

Similar to the Project, the cumulative projects identified in the Draft EIR (see **Section III, Environmental Setting**) and all future projects in the state would be reviewed for consistency with applicable state, regional and local plans, policies, or regulations for the reduction of GHGs. Therefore, based on the discussion above, and consistent with State CEQA Guidelines Section 15064(h)(3), the Project's generation of GHG emissions would not be cumulatively considerable because the Project would not conflict with an applicable plan, policy, or regulation for the purposes of reducing the emissions of GHGs. Therefore, the Project's cumulative impact would be **less than significant**.

(2) Mitigation Measures

No significant cumulative impacts related to GHG emissions have been identified. No mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts related to GHG emissions would be **less than significant**.

[60] *Addressing the Significance of Greenhouse Gas Emissions, supra, 4 Golden Gate U. Envtl. L.J. at page 210.*

IV. Environmental Impact Analysis

H. Hazards and Hazardous Materials

1. Introduction

This section addresses the potential for the Project to result in impacts related to hazards and hazardous materials. The analysis and information presented in this section is based primarily on the following report, which is included as **Appendix I** of the Draft EIR:

I Phase I Environmental Site Assessment, 1000 South Fremont Avenue, Alhambra, California, prepared by HARO Environmental, February 12, 2018.

2. Environmental Setting

a) Regulatory Framework

A variety of laws and regulations governing the management and control of hazardous substances have been established at the federal, state, and local levels to protect the environment.

(1) Hazardous Materials and Waste Management

The use and storage of hazardous materials and wastes are governed by various federal, state, and local regulations whose jurisdictions and responsibilities sometimes overlap.

(a) Federal

The Federal Resource Conservation and Recovery Act (RCRA) (Title 40 of the Code of Federal Regulations [CFR]) gives the U.S. Environmental Protection Agency (U.S. EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste by "large-quantity generators" (1,000 kilograms/month or more). Under RCRA regulations, hazardous wastes must be tracked from the time of generation to the point of disposal. At a minimum, each generator of hazardous waste must register and obtain a hazardous waste activity identification number. If hazardous wastes are stored for more than 90 days or treated or disposed at a facility, any treatment, storage, or disposal unit must be permitted under the RCRA. Additionally, all hazardous waste transporters are

required to be permitted and must have an identification number. The RCRA allows individual states to develop their own program for the regulation of hazardous waste, as long as it is at least as stringent as the RCRA. In California, the California Environmental Protection Agency's (CalEPA) Department of Toxic Substances Control (DTSC) administers and enforces RCRA.

The Federal Occupational Safety and Health Act of 1970, which is implemented by the Federal Occupational Safety and Health Administration (OSHA), contains provisions with respect to hazardous materials handling. Federal OSHA requirements, as set forth in Title 29 of the CFR, are designed to promote worker safety, worker training, and a worker's right–to-know. OSHA has delegated the authority to administer OSHA regulations to the State of California.

The Hazardous Materials Transportation Act of 1975 specifies additional requirements and regulations with respect to the transport of hazardous materials, which are codified in Title 49 of the CFR. Title 49 of the CFR requires that every employee who transports hazardous materials receive training to recognize and identify hazardous materials and become familiar with hazardous materials requirements. Drivers are also required to be trained in function and commodity specific requirements. In addition, vehicles transporting certain types or quantities of hazardous materials must display placards (warning) signs. As previously indicated, transporters of hazardous wastes must be permitted and have an identification number.

(b) State

At the state level, authority for the statewide administration and enforcement of the RCRA rests with CalEPA's DTSC. While DTSC has primary state responsibility in regulating the generation, storage, and disposal of hazardous materials, DTSC may further delegate enforcement authority to local jurisdictions. In addition, DTSC is responsible and/or provides oversight for contamination cleanup and administers statewide hazardous waste reduction programs. DTSC operates programs to accomplish the following: (1) deal with the aftermath of improper hazardous waste management by overseeing site cleanups; (2) prevent releases of hazardous waste by ensuring that those who generate, handle, transport, store, and dispose of wastes do so properly; and (3) evaluate soil, water, and air samples taken at sites.

The California OSHA (Cal/OSHA) program is administered and enforced by the Division of Occupational Safety and Health (DOSH). Cal/OSHA is very similar to the Federal OSHA program. For example, both programs contain rules and procedures related to exposure to hazardous materials during demolition and construction activities. In addition, Cal/OSHA requires employers to implement a comprehensive, written Injury

and Illness Prevention Program (IIPP). An IIPP is an employee safety program for potential workplace hazards, including those associated with hazardous materials.

The Hazardous Waste Source Reduction and Management Review Act of 1989 require generators of 12,000 kilograms/year of typical/operational hazardous waste to conduct an evaluation of their waste streams every four years and to select and implement viable source reductions alternatives. This Act does not apply to non-typical hazardous waste (such as asbestos and polychlorinated biphenyls [PCBs]). The California Vehicle Code also states that every motor carrier transporting hazardous materials (for which the display of hazardous materials placards are required or in excess of 500 pounds, transported for a fee, which would require placarding if shipped in greater amounts in the same manner) must have a Hazardous Materials Transportation License issued by the California Highway Patrol.

The management of medical wastes is further governed by regulations of the Medical Waste Management Act. Under these regulations, medical waste generators are required to be registered. Furthermore, all medical waste transporters doing business in California must report information regarding business ownership, location, vehicles, and clients to the California Department of Public Health (CDPH). Only medical waste transporters listed with the CDPH are allowed to transport medical waste. All medical waste transporters must carry paperwork issued by the CDPH in each vehicle while transporting medical waste.

(c) Local

At the local level, the Alhambra Fire Department (AFD) monitors the storage of hazardous materials in the City for compliance with local requirements. Specifically, businesses and facilities which store more than threshold quantities of hazardous materials as defined in Chapter 6.95 of the California Health and Safety Code are required to file an Accidental Risk Prevention Program with the AFD. This program includes information such as emergency contacts, phone numbers, facility information, chemical inventory, and hazardous materials handling and storage locations. The AFD also has delegated authority to administer and enforce Federal and State laws and local ordinances for underground storage tanks (USTs). Plans for the construction/installation, modification, upgrade, and removal of USTs are reviewed by AFD Inspectors.

(2) Underground Storage Tanks

USTs are regulated under Subtitle I of the RCRA and its implementing regulations, which establish construction standards for new UST installations, as well as standards for upgrading existing USTs and associated piping. After 1998, all non-conforming tanks were required to be either upgraded or closed.

The State's UST program regulations include, among others, permitting USTs, installation of leak detection systems and/or monitoring of USTs for leakage, UST closure requirements, release reporting/corrective action, and enforcement. Oversight of the statewide UST program is assigned to the State Water Resources Control Board (SWRCB), which has delegated authority to the Regional Water Quality Control Board (RWQCB) and typically on the local level, to the AFD. The AFD administers and enforces federal and state laws and local ordinances for USTs within its service area. Plans for the construction/installation, modification, upgrade, and removal of USTs are reviewed by AFD Inspectors.

(3) Asbestos-Containing Materials

The U.S. EPA has enacted requirements on the use, handling, and disposal of asbestos-containing materials (ACM) under the Toxic Substances Control Act (TSCA). These regulations include the phase out of friable asbestos and ACM in new construction materials beginning in 1979. Thus, any building, structure, surface asphalt driveway, or parking lot constructed prior to 1979 could potentially contain ACM.

The U.S. EPA has also established National Emission Standards for Hazardous Air Pollutants (NESHAP) that govern the use, removal, and disposal of ACM as a hazardous air pollutant. The NESHAP regulations mandate the removal of friable ACM before a building is demolished and include notification requirements prior to demolition. Responsibility for implementing these requirements has been delegated to the State of California, which in turn has delegated the responsibility to the South Coast Air Quality Management District (SCAQMD).

California classifies ACM as hazardous waste if it is friable and contains one percent or more asbestos. Non-friable bulk asbestos-containing waste is considered non-hazardous regardless of its asbestos content and is not subject to regulation. The CalEPA DTSC regulates the packaging, on-site accumulation, transportation, and disposal of asbestos when it is a hazardous waste. In California, any facility known to contain asbestos is required to have a written asbestos management plan (also known as an Operations and Maintenance Program [O&M Program]).

SCAQMD implements the NESHAP through its Rule 1403, Asbestos Emissions from Renovation/Demolition Activities. Rule 1403 regulates asbestos as a toxic material and controls the emissions of asbestos from demolition and renovation activities by specifying agency notifications, appropriate removal procedures, and handling and clean-up procedures. Rule 1403 applies to owners and operators involved in the demolition or renovation of ACM-containing structures, asbestos storage facilities, and waste disposal sites. Rule 1403 regulations require that the following actions be taken: (1) a survey of the facility prior to issuance of a permit by SCAQMD; (2) notification of

SCAQMD prior to construction activity; (3) asbestos removal in accordance with prescribed procedures; (4) placement of collected asbestos in leak-tight containers or wrapping; and (5) proper disposal.

(4) Lead-Based Paint

While adults can be affected by excessive exposure to lead, the primary concern for lead exposure is the adverse health effects on children. If not detected early, children with high levels of lead can suffer from damage to the brain and nervous system; behavior and learning problems such as hyperactivity, slowed growth, hearing problems; and headaches. Adults can suffer from lead-related effects such as reproductive problems (in both men and women), high blood pressure and hypertension, nerve disorders, memory and concentration problems, and muscle and joint pain.

The demolition of buildings containing lead-based paints (LBPs) is subject to a comprehensive set of California regulatory requirements that are designed to assure the safe handling and disposal of these materials. Cal/OSHA has established limits of exposure to lead contained in dusts and fumes, which provides for exposure limits, exposure monitoring, and respiratory protection, and mandates good working practices by workers exposed to lead, particularly since demolition workers are at greatest risk of adverse health exposure. Lead-contaminated debris and other wastes must also be managed and disposed of in accordance with applicable provisions of the California Health and Safety Code.

(5) Oil and Gas

Worker exposure to methane is regulated by OSHA. This section regulates worker exposure to a “hazardous atmosphere” within confined spaces where the presence of flammable gas vapor or mist is in excess of 10 percent of the lower explosive limit. Cal/OSHA regulates worker exposure to airborne contaminants (such as hydrogen sulfide) during construction; which compounds are considered a health risk and the exposure limits associated with such compounds; and the protective equipment, workplace monitoring, and medical surveillance required for compliance.

b) Existing Conditions

(1) Historic Land Use

According to the Phase I Environmental Site Assessment (Phase I ESA) (see **Appendix I** of the Draft EIR), in approximately the late 1800s the first improvement was completed at the Project Site and included a road. By the early 1920s, the majority of the Project Site was developed with the CF Braun & Company manufacturing plant and associated

railroad, as well as research, design, and administrative offices. The eastern portion of the Project Site, along Date Avenue was occupied by smaller commercial/industrial uses and residences. By the 1950s, the CF Braun & Company facility extended farther east across the Project Site. A Southern California Edison (SCE) shipping/receiving and storage facility with a small shop occupied an area in the northeastern portion of the Project Site. In addition, separate commercial/industrial uses, such as, woodworking, warehouse, ink and paint manufacturing, machine shop, gas station and auto repair, sheet metal working, light wood and steel manufacturing, and foundry, occupied the eastern portion of the Project Site along Date Avenue. CF Braun & Company was sold in the early 1980s. Industrial uses continued on the eastern portion of the Project Site until the late 1990s and has since then operated as a mixed-use office, commercial, and educational complex.

(2) Existing Uses

(a) Project Site

The Project Site consists of the entire block bounded by Fremont Avenue on the west, Mission Road on the south, Date Avenue on the east, and Orange Street on the north. The total area that composes the Project Site is approximately 1,671,725 square feet (or 38.38 acres). The Project Site is zoned PO (Professional Office) and is designated for Office Professional uses in the City's General Plan. An Urban Residential overlay zone also applies to the entire Project Site. The Project Site is fully developed with office, warehouse, storage, utility substation, and surface parking lot/parking structure uses. As proposed, the Project Site is being divided into five plan areas: Office, North, East, South, and Corner.

(b) Surrounding Properties

To the west across Fremont Avenue, from north to south, are (i) a two-story business park/office building and surface parking; (ii) a one-story towing service building and attached parking lot; (iii) a vacant parcel; (iv) a one-story retail/commercial complex featuring fast-food restaurants and a café (with a pedestrian bridge over Fremont Avenue connecting to the Project Site); and (v) a Kohl's department store with associated surface parking lot.

To the east across Date Avenue, from north to south, are (i) a one-story warehouse/shipping and receiving center with associated surface parking; (ii) a one-story Carpet King warehouse/office with associated surface parking; (iii) a one-story office/warehouse building; (iv) a one-story office complex with carport; (v) a two-story printing/copying center with associated surface parking (on the north side of Chestnut Street); (vi) a two-story office building (on the south side of Chestnut Street); (vii) a one-story concrete office/warehouse complex with associated surface parking; (viii) a two-

story stucco office building with associated surface parking; and (ix) a three-story concrete office development with associated surface parking.

To the north across Orange Street, from west to east, are (i) asphalt surface parking lots and (ii) the approximately 25-story Los Angeles County Public Works office building and associated surface parking lots.

To the south across Mission Road are (i) the below-grade, dual Union Pacific Railroad tracks and (ii) a one-story storage and moving supplies business, located between Mission Road and the railroad corridor across from the Project Site's southeastern frontage.

The nearest existing residential uses to the Project Site are the single-family homes to the south along Front Street, across the railroad tracks from Mission Road, each approximately 200 feet away from the edge of the Site.

(3) Sensitive Receptors

Pursuant to 23 CFR 772, sensitive receptors are considered to be areas with potential to contain children under 14, the elderly over 65, or the sick/disabled, including, but not limited to, churches, schools, residential uses, day care centers, and hospitals. The nearest hazards-sensitive receptors consist of existing residential uses to the south along Front Street, across the railroad tracks from Mission Road, approximately 220 feet away from the edge of the Project Site. There are additional residential uses and schools; however, these are located further in distance from the Project Site than those identified above.

(4) Site Reconnaissance

As part of the Phase I ESA (included in **Appendix I** of the Draft EIR), HARO Environmental performed a site reconnaissance, from which key observations are described below.

(a) General Site Conditions

As discussed previously, the Project Site is currently developed with multiple commercial buildings. Project Site uses include offices, classrooms, storage buildings, maintenance areas within the basement, and a fitness gym. The current uses contained within the buildings on the Project Site do not indicate a risk of a recognized environmental condition (REC) being present.

(b) Project Site Structure

The majority of the Project Site is currently developed as The Alhambra consisting of multiple commercial buildings of varying height, several storage buildings, two parking structures, and parking areas. The southwest corner of the Project Site, 2215 West Mission Road, is developed with a two-story commercial building and associated parking. A solid waste collection area is located southeast of the parking garage and includes two former spray booths.

(c) Potable Water Supply

Potable water is supplied to the Project Site by the City of Alhambra.

(d) Sewage Disposal System

Sewage generated at the Project Site is discharged to the City of Alhambra's sewer system.

(e) Hazardous Substances and Petroleum Products

Various container types and quantities of hazardous substance and petroleum products were observed at multiple locations at the Project Site and included:

- Diesel fuel for backup generators.
- HVAC treatment compounds were stored in the basement and near the cooling towers and included 5- and 30-gallon containers of algaecide and chlorine. No significant leaks or spills were noted.
- Janitorial chemicals were observed at several locations throughout the Project Site and no significant leaks or spills were observed.
- Paints, lubricants, small quantities of gasoline, and cleaners were observed with a storage room in the basement beneath Building A4. The majority of the chemicals were stored in chemical cabinets. No significant leaks or spills were observed.

(f) Storage Tanks

Evidence of USTs or above-ground storage tanks (ASTs) was not observed on the Project Site. During the site reconnaissance, HARO Environmental observed several above-ground storage tanks (ASTs) to support the backup generators. This included one approximately 5,000-gallon diesel AST south of Building A13, one approximately 2,000-gallon diesel belly AST northwest of Building B1, and one approximately 2,000-

gallon diesel belly AST along the western edge on top of the parking structure. No indications of leaks or spills were observed.

During the site reconnaissance, HARO Environmental did not observe evidence of USTs at the Project Site.

(g) Drums

Several 30-gallon drums were observed in the basement and are used to store treatment chemicals for the cooling towers. No significant leaks or spills were observed in the area of the drums.

HARO Environmental did not observe evidence of drums on any other areas of the Project Site.

(h) Unidentified Substance Containers

Unidentified substance containers suspected of containing hazardous substances or petroleum products were not observed on the Project Site.

(i) Odors

Strong, pungent, or noxious odors were not observed on the Project Site.

(j) Pools of Liquid

Pools of liquid were not observed on the Project Site.

(k) PCB-Containing Equipment

During the Project Site reconnaissance, HARO Environmental noted several transformers and electrical equipment cabinets located throughout the Project Site. These were associated with either hydraulic elevators or the transformers west of Building B12 or were the dry type. No significant staining of the floor or spills was noted in the area of the transformers or other electrical equipment. It should be noted that the electrical transformers west of Building B12 first appeared in historic records in 1950, and therefore may contain PCBs.

During the site reconnaissance, HARO Environmental observed the locations of multiple elevators. Of those, several were of the mechanical type and would not pose an environmental concern to the Project Site. Several hydraulic elevators were observed and included Buildings A3, A9, and A11 and two at parking garage B2. No significant staining of the floor or spills was noted in the area of the elevator control room at these locations.

Thus, during the site reconnaissance, HARO Environmental did not observe any additional evidence of PCBs.

(l) Pits, Ponds, and Lagoons

Pits, ponds, or lagoons were not observed on the Project Site.

(m) Stained Soil or Stained Pavement

Stained soil or stained pavement was not observed on the Project Site.

(n) Stressed Vegetation

Stressed vegetation was not observed on the Project Site.

(o) Solid Waste

Solid waste was not observed to be stored on the Project Site.

(p) Wastewater

Wastewater was not observed to be stored or treated on the Project Site.

(q) Septic Systems

Evidence of an on-site septic system or cesspool was not observed on the Project Site.

(r) Heating and Cooling Systems

Heating and cooling systems within the building on the Project Site are powered with electricity and/or natural gas.

(s) Interior Drains or Sumps

Storm drains were observed in the parking area, landscaped areas, and common areas throughout the Project Site. The floor drains discharge to the stormwater conveyance system. No staining or evidence of spills were noted in the areas of the storm drains.

Additionally, multiple floor drains were observed within the basement. These floor drains convey to a sump pump which discharges to the municipal sewer system. No significant leaks or spills were noted in the area of the floor drains.

(t) Surface Water Drainage

Surface water at the Project Site flows into several exterior catch basins and drains adjoining the buildings located on-site. The catch basins drain to the City's stormwater

conveyance system (for a more detailed discussion, see **Section IV.I, Hydrology and Water Quality**, of the Draft EIR).

(5) Database Records Search

Government agency database records are sources of information that may be helpful in evaluating activities that may have contributed to a release of hazardous substances or petroleum products to soil and/or groundwater. HARO Environmental contracted a government agency database search from Environmental Database Records (EDR). A copy of the EDR report is included as an appendix to the Phase I ESA (see **Appendix I**). Overall, the Project Site had 46 listings on the regulatory databases searched by EDR. Although numerous nearby off-site properties are listed in the databases within the approximate minimum search distances as defined in the American Society for Testing and Materials (ASTM) Standard, because the Project Site lies within the boundaries of U.S. EPA Area 3 Operable Unit (discussed below), and because the Project Site has institutional controls in place to mitigate for potential health risks to current and future site users, the presence of release cases near the site is not expected to pose an environmental concern to soil, soil vapor, and or/or groundwater beneath the Project Site exceeding those already mitigated for by the existing institutional controls.

The Project Site is located within the southwest portion of the San Gabriel Valley Superfund Fund Site – Area 3 Operable Unit (Area 3). Area 3 is one of 8 Operable Units identified by U.S. EPA for the San Gabriel Valley Superfund Sites and is known as the San Gabriel Valley Area 3 Superfund Site. Discovery of contamination in water purveyor production wells led the U.S. EPA to designate Area 3 as a National Priorities List (NPL) site in 1984. Volatile organic compounds (VOCs) have been detected in production wells and safeguards are in place to ensure acceptable drinking water quality. Area 3 groundwater is contaminated with VOCs (most commonly tetrachloroethene [PCE] and trichloroethene [TCE]), perchlorate, and nitrate at concentrations exceeding state and federal water quality standards. Multiple addresses at the Project Site, based on historic operations, have been identified as possible sources contributing to the Area 3 groundwater contamination. The Los Angeles Regional Water Quality Control Board (LARWQCB) working with the U.S. EPA has developed a list of these possible sources of contamination through a well investigation program (WIP) database. Based on a prioritization of the properties, several were investigated further by opening a case for the property overseen by the SLIC group within the LARWQCB.

Of the above seven listed SLIC cases, five of those are closed. For the closed 1000 South Fremont Avenue case, the property was divided into two sites, Site A and Site B (see **Appendix I** for location details). Site A encompasses the majority of the 1000 South Fremont property and has been closed with unrestricted future land use, which

means that all uses can be proposed for this location. Site B is located near the southeast corner of the property adjacent to the north of the 2215 West Mission property and has been closed with restricted future land use. Restrictions include the type of land use that can be built on the site, such as no residential uses.

The two open SLIC cases consist of Dickinson Ink Corporation at 625 South Date Avenue and Crown Pattern Works at 815 South Date Avenue, to the east of the Project Site. The 625 South Date address is not associated with a current APN; however, it is located within the aforementioned Site A of 1000 South Fremont. A case manager with the LARWQCB was contacted and indicated that the open status of the case is an administrative error and will be corrected in the near future to reflect a status of "Completed – Case Closed". Crown Pattern Works at 815 South Date Avenue has been transferred to the U.S. EPA for regulatory oversight. As a result, a remedial project manager with the U.S. EPA was contacted and indicated that although the case remains open, the U.S. EPA has no plans to require investigation and/or remediation in the near future.

(6) Summary and Conclusion

As mentioned above, the Project Site investigation revealed no significant spills, stains, or other indications that a surficial release has occurred at the site. Additionally, no strong, pungent, or noxious odors were evident during the site reconnaissance and no pools of liquid, pits, ponds, or lagoons were observed on the site. No drains, sumps, or clarifiers, other than those associated with stormwater drainage, were observed on the Project Site. No stressed vegetation was observed. No additional environmental hazards, including landfill activities or radiological hazards, were observed. Therefore, the Phase I ESA concluded that no evidence of RECs in connection with existing uses on the Project Site is currently present.

3. Project Impacts

a) Methodology

To assist in evaluating the potential impacts associated with hazards and hazardous materials that could occur as a result of construction and/or operation of the Project, a Phase I ESA was prepared by HARO Environmental for the Project Site (included in **Appendix I** of the Draft EIR). The ESA included a review of local, state, and federal records and databases, including historic City directories, building permits, and fire insurance maps, to evaluate present and historic uses on the Project Site, and site reconnaissance to determine if any RECs currently exist at the Project Site.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In 2015, the California Supreme Court in *CBIA v. BAAQMD* held that CEQA generally does not require a lead agency to consider the impacts of the existing environment on the future residents or users of a project.[1] The revised thresholds are intended to comply with this decision. Specifically, the decision held that an impact from the existing environment to the project, including future users and/or residents, is not an impact for the purposes of CEQA. However, if the project, including future users and residents, exacerbates existing conditions that already exist, that impact must be assessed, including how it might affect future users and/or residents of the project. For example, if construction of the project on a hazardous waste site will cause the potential dispersion of hazardous waste in the environment, the EIR should assess the impacts of that dispersion to the environment, including to the project's residents.

In accordance with Appendix G of the CEQA Guidelines (Appendix G) and the *CBIA v. BAAQMD* decision, a project would have a significant impact related to hazards and hazardous materials if it would result in one or more of the following:

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 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; or

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[1] *California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369, Case No. S213478.*

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

In assessing impacts related to hazards and hazardous materials in this section, the City uses Appendix G as the thresholds of significance.

c) Project Design Features

No Project Design Features related to hazards and hazardous materials are proposed.

d) Analysis of Project Impacts

Threshold a): Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

(1) Impact Analysis

(a) Construction

Construction of the Project would involve the temporary transport, use, or disposal of potentially hazardous materials, including paints, adhesives, surface coatings, cleaning agents, fuels, and oils. All of these materials would be used in a short-term nature during construction activities. Additionally, all potentially hazardous materials would be used and stored in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations, which would ensure that impacts are less than significant.

Additionally, any emissions from the use of such materials would be minimal and localized to the Project Site. Since construction of the Project would comply with applicable regulations and would not expose persons to substantial risk resulting from the release of hazardous materials or exposure to health hazards in excess of regulatory standards, no significant impact associated with the potential release of hazardous substances during construction of the Project would occur. Overall, construction impacts would be **less than significant**.

(b) Operation

The Project would be a mixed-use development consisting of existing commercial, retail, office, and new residential uses. All but one of the existing office buildings (one that is currently vacant) on the site would be retained as part of the Project, all of which would involve the limited use of hazardous materials. Specifically, operation of the residential uses would involve the use and storage of small quantities of potentially hazardous materials in the form of cleaning solvents, paints, and pesticides for

landscaping. Hazardous materials to be used, stored, and disposed of by the Project's office and residential uses would vary depending on the specific use but could include cleaning solvents, waxes, dyes, toners, paints, bleach, grease, and petroleum products. With implementation of hazardous waste reduction efforts on-site (i.e., those required through source reduction, recycling, on-site treatment, etc.), as well as the proper treatment and disposal of such wastes at licensed resource recovery facilities, the Project would not generate significant amounts of hazardous wastes.

Additionally, the transport of hazardous materials and wastes to and from the Project (i.e., paints, adhesives, surface coatings, cleaning agents, fuels, and oils) would be required to occur in accordance with federal, state, and local regulations, including but not limited to the RCRA, Title 49 of the CFR, the California Vehicle Code, and the California Health and Safety Code. In accordance with such regulations, the transport of hazardous materials and wastes would only be performed by transporters who have received training and appropriate licensing. Additionally, hazardous waste transporters would be required to complete and carry with them a hazardous waste manifest. Placarding of vehicles carrying hazardous materials would also occur in accordance with Title 49 of the CFR. Therefore, the Project would not create a significant hazard to the public or the environment through the routine transport of hazardous materials.

Use and disposal of hazardous materials would be required to comply with applicable City, state, and federal regulations related to the handling, storage and disposal of hazardous materials, including but not limited to the RCRA, Title 49 of the CFR, the California Vehicle Code, and the California Health and Safety Code. Compliance with such regulations would ensure that the Project would not create a significant hazard to the public or the environment.

Overall, through required compliance with federal, state, and local regulations, the transport of hazardous materials and wastes during Project construction and operation would not create a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials consistent with existing regulatory framework. Therefore, Project operation impacts related to the transport, use, or disposal of hazardous materials would be **less than significant**.

(2) Mitigation Measures

Impacts related to the routine transport, use, or disposal of hazardous materials would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to the routine transport, use, or disposal of hazardous materials would be **less than significant** without mitigation.

Threshold b): Would the Project 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?

(1) Impact Analysis

(a) PCBs

As discussed previously, during the site reconnaissance, the ESA noted several transformers and electrical equipment located throughout the entirety of the Project Site. As noted, these were associated with either hydraulic elevators (e.g., existing parking structure and office building elevators) or transformers. No significant staining of the floor or spills were noted in the area of transformers or other electrical equipment that serve existing and past uses throughout the Site. Based on the age of existing transformers, PCB-containing oil may be present within the transformers located at the electrical substation to the west of Building B12 (existing parking structure near the southwestern corner of the Project Site). This substation is operated by and is the responsibility of SCE and is not under the control of the Applicant. If these transformers are replaced or leak, SCE should be contacted to coordinate the proper handling and/or disposal in accordance with applicable laws and regulations. Thus, through compliance with existing regulations, the Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of PCBs. Therefore, impacts related to PCBs would be less than significant.

(b) ACMs and LBP

Prior to the issuance of any demolition and/or alteration permits, the Project Applicant would be required to provide a letter to the City from a qualified asbestos abatement consultant indicating that no Asbestos Containing Materials (ACMs) are present on the Project Site. If ACMs are discovered on-site during demolition, proper abatement regulations are required to be followed. Because the Project would be required to comply with SCAQMD Rule 1403, which regulates the removal of ACMs to ensure that asbestos fibers are not released into the air during demolition activities, as well as other applicable state and federal regulations, impacts from ACMs would be less than significant. Further, demolition and removal of buildings would be required to comply with CCR Title 8, Section 1532 et seq., which requires that all LBP be abated and removed by a licensed lead contractor. In addition, standard handling and disposal practice would be implemented pursuant to Cal/OSHA regulations. Prior to issuance of a demolition permit, an LBP survey shall be performed and approved by the City. Thus, through compliance with existing regulations, the Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and

accident conditions involving the release of ACMs or LBP. Therefore, impacts related to ACMs and LBP would be less than significant.

(c) Storage Tanks and Containers

As described above, no storage tanks or containers are known to exist on the Project Site. Thus, the Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials from storage tanks or containers. Therefore, no impact would occur related to on-site storage tanks and containers of hazardous materials.

(d) Soil Contamination

As noted earlier, VOCs were detected in groundwater and soil vapor wells due to the Project Site's location in the San Gabriel Valley Super Fund Area 3. As disclosed in the Phase I ESA, Area 3 groundwater is contaminated with VOCs (most commonly tetrachloroethene [PCE] and trichloroethene [TCE]), perchlorate, and nitrate at concentrations exceeding state and federal water quality standards. To identify the sources of the groundwater contamination and determine what additional cleanup is needed, the State of California has directed and overseen investigations of multiple current and former industrial facilities. The U.S. EPA supplemented these investigations with ground water monitoring wells and soil testing at several industrial facilities identified as possible sources of groundwater contamination. The U.S. EPA is currently using the data generated by these investigations to identify and evaluate groundwater cleanup options. In 2016, the U.S. EPA completed a feasibility study and began the development of a proposed soil and groundwater cleanup plan, and this plan is still being prepared.

According to the Phase I ESA, a Soil Closure Risk Evaluation was performed at the Project Site in 2016 due to this known issue. This included the collection of soil and soil vapor samples for analysis from the Project Site, with the results used to perform a human health risk assessment (HHRA) for the Site. Based on the results of the HHRA, no significant risks were projected to future site users from soil vapors reported in "Site A" (covering the portions of the Project Site proposed for residential uses). The report recommended that Site A be granted the status of "No Further Action" with regards to soil and soil vapor constituents. Potential risks were projected to future site users associated with soil vapors reported in "Site B" (existing office areas and near the proposed Project parking structure) under unrestricted land use conditions. Therefore, the HHRA recommended institutional controls to mitigate potential receptor exposure. A restricted land use condition was deemed viable and consistent with planned future development of Site B as commercial/industrial. Therefore, it was recommended that

Site B be granted the status of "No Further Action" with regard to soil and soil vapor constituents following the implementation of institutional controls limiting future land uses in this area to commercial industrial purposes. As a result, the portion of Site B that is proposed for redevelopment under the Project would be developed with a parking structure. This use is consistent with restricted land use condition identified in the HHRA. Therefore, soil contamination impacts would be less than significant.

(e) Impact Conclusion

In accordance with the foregoing analysis, redevelopment of portions of the Project Site under the Project would not 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. Therefore, impacts related to upset and accident conditions involving the release of hazardous materials into the environment would be **less than significant**.

(2) Mitigation Measures

Impacts related to the future release of potentially hazardous materials would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to the release of potentially hazardous materials would be **less than significant** without mitigation.

Threshold c): Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

(1) Impact Analysis

As discussed above, pursuant to 23 CFR 772, sensitive receptors are considered to be areas with potential to contain children under 14, the elderly over 65, or the sick/disabled including, but not limited to, churches, schools, residential uses, day care centers, and hospitals. No schools exist or are proposed within one-quarter mile of the Project Site. Therefore, the Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school and **no impact** would occur.

(2) Mitigation Measures

No impact related to schools within a quarter mile of the Project Site would occur. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

No impact related to schools within a quarter mile of the Project Site would occur.

Threshold d): Would the Project 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 the Project create a significant hazard to the public or the environment?

(1) Impact Analysis

California Government Code Section 65962.5 requires various state agencies, including, but not limited to, DTSC and the SWRCB, to compile lists of hazardous waste disposal facilities, unauthorized releases from USTs, contaminated drinking water wells and solid waste facilities where there is known migration of hazardous waste, and submit such information to the Secretary for Environmental Protection on at least an annual basis. As discussed previously, the Project Site is included in 46 listings on the referenced regulatory databases. The Project Site is located within the southwest portion of the San Gabriel Valley Superfund Fund Site – Area 3 Operable Unit (Area 3). Area 3 is one of 8 Operable Units identified by U.S. EPA (United States Environmental Protection Agency) for the San Gabriel Valley Superfund Sites and is known as the San Gabriel Valley Area 3 Superfund Site. Seven remediation cases involving portions of the Project Site were opened by the LARWQCB. Six of these cases are now closed.

For the closed 1000 South Fremont Avenue case, the property was divided into two sites, Site A and Site B (see Draft EIR **Appendix I** for locations). Site A encompasses the majority of the 1000 South Fremont property and has been closed with unrestricted future land use. Site B is located near the southeast corner of the property adjacent to the north of the 2215 West Mission property and has been closed with restricted future land use. The Project would redevelop a portion of Site B with a parking structure within the East Plan Area. The proposed parking structure use is consistent with the site use restrictions identified by the LARWQCB in their site closure documentation.

For the remaining open case involving a portion of the Project Site, the U.S. EPA has stated that it has no plans to require investigation and/or remediation in the near future. The remaining listings for the Project Site are representative of non-release facilities, and because no violations were reported in the databases reviewed, and because of the spatially distributed soil and soil vapor sampling data collected from the site (see

Appendix I for a detailed discussion), these listings are not expected to pose a significant environmental concern for redevelopment of the Project Site.[2]

Thus, construction and operation of the Project would not create a significant hazard to the public or the environment, as a result of being on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and impacts would be **less than significant**.

(2) Mitigation Measures

Impacts related to the Project Site's presence on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to the Project Site's presence on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 would be **less than significant** without mitigation.

Threshold 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?***

As discussed in in the Initial Study (see Draft EIR **Appendix A-3**), no public or public use airports are located within two miles of the Project Site, and the Project Site is not located within an area covered by an airport land use plan. Thus, the Project will not have the potential to result in a safety hazard or excessive noise for people residing or working in the Project area (for a study of the Project's noise impacts, see **Section IV.K, Noise**, of the Draft EIR). As such, **no impact** would occur. No further analysis is required.

[2] *Phase I Environmental Site Assessment, 1000 South Fremont Avenue, Alhambra, California, prepared by HARO Environmental, February 12, 2018, Page 16.*

Threshold f): Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

(1) Impact Analysis

(a) Construction

The reuse of existing office buildings and the construction of the Project would occur within the property boundaries of the Project Site. Temporary pedestrian or vehicular public right-of-way closures may be necessary during the construction phase for construction staging, equipment access, and pedestrian safety under the City-approved work zone traffic control plan. However, partial lane closures would not significantly affect emergency vehicles as the drivers of which would normally have a variety of options for dealing with traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. As such, construction of the Project would not substantially impede public access, travel upon a public right-of-way, or interfere with an adopted emergency response or evacuation plan, and impacts would be **less than significant**.

(b) Operation

The Project would include new residential, as well as continuing retail and office land uses and would be required to establish, implement, and maintain on file an emergency response plan, which would be reviewed by the Alhambra Fire Department (AFD). As part of this emergency response plan, evacuation signs would be located in every elevator lobby above and below ground, in other conspicuous floor locations, and in each employee gathering area (including “back of house” office areas). All emergency plans, procedures, and evacuation signs would be submitted to the AFD for inspection and approval prior to their implementation and would be properly maintained. Thus, operation of the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts in this regard would be less than significant.

Overall, through implementation of the Project’s transportation mitigation measures (see **Section IV.N, Transportation**, of the Draft EIR) and compliance with City requirements governing the placement of evacuation signs and the establishment of an emergency response plan, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, Project operation impacts related to emergency evacuation and response plans would be **less than significant**.

(2) Mitigation Measures

Impacts related to emergency response would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to emergency response would be **less than significant** without mitigation.

Threshold g): Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

As discussed in the Initial Study (see Draft EIR **Appendix A-3**), the Project Site is not located within an area subject to wildland fires. Thus, the Project would not have the potential to expose people or structures to a significant risk of loss, injury, or death involving wildland fires. As such, **no impact** would occur. No further analysis is required.

e) Cumulative Impacts

(1) Impact Analysis

A total of nine cumulative projects were identified in the study area (see Table III-2 in **Section III, Environmental Setting** of the Draft EIR). Cumulative growth in the Project area includes these specific known development projects, as well as general ambient growth projected to occur, such as that envisioned in the 2019 General Plan. Some of this growth is anticipated to occur on or around properties in the Project area known to contain hazardous or potentially hazardous conditions, such as hazardous waste generation or handling, or the presence of leaking USTs. While impacts associated with hazards and hazardous materials are typically site-specific and do not cumulatively affect off-site areas, conditions such as contaminated groundwater can affect down-gradient properties. In addition, operation of many of the cumulative projects can reasonably be expected to involve the limited use of potentially hazardous materials typical of those used in residential and commercial developments, including cleaning agents, paints, pesticides, and other materials used for landscaping. Further, some of the cumulative projects propose manufacturing and warehouse uses that may also utilize, handle, store, or generate hazardous materials.

However, regardless of the number and location of the cumulative projects, the Project, together with the cumulative development, would not create an impact that is cumulatively considerable, as each development project would have to comply with site-

specific development standards, as well as federal, state, and local hazardous materials handling and transporting regulations. As a result, it is reasonably expected that all potentially hazardous materials present or used at the cumulative development project sites would be stored and disposed of in accordance with manufacturers' specifications and handled in compliance with applicable standards and regulations. Compliance with these standards and regulations would ensure that cumulative development in the Project area would not result in a cumulatively significant impact with respect to the usage or release of hazards or hazardous materials.

Similarly, as with the Project, the cumulative development projects would be required to prepare and implement construction work zone traffic control plans and would be required to comply with City requirements governing the placement of evacuation signs and the establishment of emergency response plans. Compliance with these requirements would ensure that cumulative development in the Project area would not result in a cumulatively significant impact with respect to the implementation of emergency response or evacuation plans.

As such, cumulative impacts related to hazards and hazardous materials for the concurrent development of the Project and cumulative projects would be **less than significant**, and the Project's overall contribution would not be cumulatively considerable.

(2) Mitigation Measures

The Project's contribution to cumulative impacts related to hazards and hazardous materials would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

The Project's contribution to cumulative impacts related to hazards and hazardous materials would be **less than significant** without mitigation.

IV. Environmental Impact Analysis

I. Hydrology and Water Quality

1. Introduction

This section addresses the potential impacts of the Project on water quality and site drainage. This analysis includes a description of the existing hydrology and the proposed stormwater management features of the Project. This section is based in part on a drainage analysis performed by Fuscoe Engineering, Inc. in April 2019, which is included as **Appendix J** of the Draft EIR.

J Civil Engineering Support Studies for The Villages at The Alhambra, Fuscoe Engineering Inc., April 17, 2019.

2. Environmental Setting

a) Regulatory Framework

(1) Federal

(a) National Flood Insurance Program

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 mandate the Federal Emergency Management Agency (FEMA) to evaluate flood hazards. FEMA provides flood insurance rate maps (FIRMs) for local and regional planners to promote sound land use and floodplain development, identifying potential flood areas based on the current conditions. To delineate a FIRM, FEMA conducts engineering studies referred to as flood insurance studies (FIS). Using information gathered in these studies, FEMA engineers and cartographers delineate special flood hazard areas (SFHA) on FIRMs.

The Flood Disaster Protection Act requires owners of all structures in identified SFHAs to purchase and maintain flood insurance as a condition of receiving federal or federally related financial assistance, such as mortgage loans from federally insured lending institutions. Community members within designated areas are able to participate in the National Flood Insurance Program (NFIP) afforded by FEMA. The NFIP is required to offer federally subsidized flood insurance to property owners in those communities that adopt and enforce floodplain management ordinances that meet minimum criteria

established by FEMA. The National Flood Insurance Reform Act of 1994 further strengthened the NFIP by providing a grant program for state and community flood mitigation projects. The act also established the Community Rating System, a system for crediting communities that implement measures to protect the natural and beneficial functions of their floodplains, as well as manage erosion hazards.

(b) Clean Water Act

The United States Environmental Protection Agency (U.S. EPA) regulates water quality under the Clean Water Act (also known as the Federal Water Pollution Control Act). Enacted in 1972, and significantly amended in subsequent years, the Clean Water Act is designed to restore and maintain the chemical, physical, and biological integrity of waters in the United States. The Clean Water Act provides the legal framework for several water quality regulations, including National Pollutant Discharge Elimination System (NPDES) Permits, effluent limitations, water quality standards, pretreatment standards, anti-degradation policy, non-point source discharge regulation, and wetlands protection.

The Clean Water Act requires NPDES permits for the discharge of pollutants to waters of the United States. In 1987, the Clean Water Act was amended to require that the U.S. EPA establish regulations for permitting of municipal and industrial stormwater discharges under the NPDES permit program. The U.S. EPA published final regulations regarding storm water discharges on November 16, 1990. The regulations require that municipal separate storm sewer system (MS4) discharges to surface waters be regulated by a NPDES permit (discussed in greater detail below).

The U.S. EPA has delegated the responsibility for administration of portions of the Clean Water Act to state and regional agencies. The Clean Water Act requires states to adopt water quality standards for receiving water bodies and to have those standards approved by the U.S. EPA. Water quality standards consist of designated beneficial uses for a particular receiving water body (e.g., wildlife habitat, agricultural supply, fishing, etc.), along with water quality criteria necessary to support those uses. Water quality criteria are prescribed concentrations or levels of constituents, such as lead, suspended sediment, and fecal coliform bacteria, or narrative statements that represent the quality of water that support a particular use.

(c) Safe Drinking Water Act

The Federal Safe Drinking Water Act, established in 1974, sets drinking water standards throughout the country and is administered by U.S. EPA. The drinking water standards established in the Act, as set forth in the Code of Federal Regulations (CFR), are referred to as the National Primary Drinking Water Regulations (Primary Standards, Title 40, CFR, Part 141) and the National Secondary Drinking Water Regulations

(Secondary Standards, 40 CFR Part 143). California passed its own Safe Drinking Water Act in 1986 that authorizes the State's Department of Health Services (DHS) to protect the public from contaminants in drinking water by establishing maximum contaminants levels (MCLs), as set forth in the California Code of Regulations (CCR), Title 22, Division 4, Chapter 15, that are at least as stringent as those developed by the U.S. EPA, as required by the federal Safe Drinking Water Act.

(d) Antidegradation Policy

The Federal Antidegradation Policy (Title 40, CFR §131.12) requires states to develop statewide anti-degradation policies and identify methods for implementing them. Pursuant to this policy, state anti-degradation policies and implementation methods shall, at a minimum, protect and maintain: (1) existing instream water uses; (2) existing water quality where the quality of the waters exceeds levels necessary to support existing beneficial uses, unless the state finds that allowing lower water quality is necessary to accommodate economic and social development in the area; and (3) water quality in waters considered an outstanding national resource. State permitting actions must be consistent with the Federal Antidegradation Policy.

(d) California Toxics Rule

In response to a 1994 state court decision, the U.S. EPA has established water quality criteria for certain toxic substances via the California Toxics Rule. The California Toxics Rule establishes acute (i.e., short-term) and chronic (i.e., long-term) standards for bodies of water such as inland surface waters and enclosed bays and estuaries that are designated by the Los Angeles Regional Water Quality Control Board (LARWQCB) as having beneficial uses protective of aquatic life or human health. Due to the intermittent nature of stormwater runoff, especially in southern California, the acute criteria are considered to be more relevant to stormwater than are the chronic criteria.

(2) State

(a) Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (embodied in the California Water Code) established the principal California legal and regulatory framework for water quality control. The California Water Code authorizes the State Water Resources Control Board (SWRCB) to implement the provisions of the Federal Clean Water Act including the authority to regulate waste disposal sites and to require cleanup of discharges of hazardous materials and other pollutants. The California Water Code also establishes reporting requirements for unintended discharges of hazardous substance, sewage, or oil or petroleum products.

Under the California Water Code, the State of California is divided into nine regions governed by regional water quality control boards (RWQCB) that, under the guidance and review of the SWRCB, implement and enforce provisions of the California Water Code and the Clean Water Act. Each RWQCB must formulate and adopt a water quality control plan (Basin Plan) for its region. The Basin Plan must conform to the policies set forth in the California Water Code and established by the SWRCB in its state water policy. The California Water Code also provides RWQCBs the authority to include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste. Alhambra is located within the jurisdiction of the Los Angeles RWQCB (LARWQCB).

(b) Los Angeles RWQCB Basin Plan

The Los Angeles RWQCB's Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan: (i) designates beneficial uses for surface and ground waters; (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's antidegradation policy; and (iii) describes implementation programs to protect all waters in the Region. In addition, the Basin Plan incorporates (by reference) all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations. Those of other agencies are referenced in appropriate sections throughout the Basin Plan.

(c) Stormwater General Construction Permits

Pursuant to the Clean Water Act Section 402(p), requiring regulations for permitting of certain stormwater discharges, the SWRCB has issued a statewide General Permit for Stormwater Discharges Associated with Construction Activity and Land Disturbance Activities (GCASP) (Order No. 2012-0006-DWQ, adopted by the SWRCB on July 17, 2012). Under this GCASP, discharges of stormwater from construction sites with a disturbed area of one or more acres are required to either obtain individual NPDES permits for stormwater discharges or be covered by the GCASP. Coverage under the GCASP is accomplished by completing and filing permit registration documents, which include a Notice of Intent (NOI), Storm Water Pollution Prevention Plan (SWPPP), and other documents required by the GCASP, and mailing the appropriate permit fee to the State Water Board, prior to the commencement of construction activity.

SWPPPs incorporate erosion control, sediment removal, and construction waste management control measures during construction, site stabilization measures in the short-term post-construction period, and may identify best management practices (BMPs) for post-construction land use.

The SWPPP must do the following:

1. Be developed and implemented by Qualified SWPPP Developers and Practitioners who have taken the appropriate state certified training;
2. Address control of all pollutants and their sources, including sources of sediment, associated with construction activities;
3. Ensure all non-stormwater discharges are identified and either eliminated, controlled, or treated;
4. Include a Monitoring and Reporting Plan (M&RP) to be immediately implemented at the start of construction;
5. Include a description of all post-construction best management practices on a site and a maintenance schedule; and
6. Be available at the construction site during working hours while construction is occurring and shall be made available upon request by a State or Municipal inspector.

Dischargers must file a Notice of Termination (NOT) with the RWQCB when construction is complete and final stabilization has been reached or ownership has been transferred. The discharger must certify that all state and local requirements have been met in accordance with the GCASP. In order for construction to be found complete, the discharger must install post-construction stormwater management measures and establish a long-term maintenance plan.

The LARWQCB has issued a General NPDES Permit and General Waste Discharge Requirements (WDRs) (Order No. R4-2013-0095, NPDES No. CAG994004) governing construction-related dewatering discharges (the GDP). This permit addresses discharges from temporary dewatering operations associated with construction and permanent dewatering operations associated with development. The discharge requirements include provisions mandating notification, sampling and analysis, and reporting of dewatering and testing-related discharges. The GDP authorizes such construction-related activities so long as all conditions of the permit are fulfilled.

(d) Municipal Stormwater Discharge Permit

The State's Municipal Storm Water Permitting Program regulates stormwater discharges from Municipal Separate Storm Sewer Systems (MS4s). Under Phase I of the Program, which started in 1990, the RWQCBs have adopted NPDES stormwater permits for medium (serving between 100,000 and 250,000 people) and large (serving 250,000 people) municipalities. Most of these permits were issued to a group of co-

permittees encompassing an entire metropolitan area. Phase II of the Program extended permitting to smaller municipalities.

In 2012, the LARWQCB issued a new NPDES Permit (CAS004001) and Waste Discharge Requirements (Order No. R4-2012-0175) under the Clean Water Act and the Porter-Cologne Act for discharges of urban runoff in public storm drains in Los Angeles County. The Permit was most recently amended on June 16, 2015 (Order WQ 2015-0075). The Permittees are the Los Angeles County incorporated cities within the coastal watersheds (including the City of Los Angeles but excluding the City of Long Beach) and the County (collectively, the Co-permittees). The City of Alhambra (City) is covered by this Permit.

An important element incorporated into the NPDES MS4 Permit is the set of requirements associated with development or redevelopment of a site. The NPDES MS4 Permit requires new development/redevelopment projects to incorporate permanent (post-construction) stormwater mitigation measures, if the project falls into one of several specific categories. For redevelopment projects such as the Project, these categories are:

1. Land-disturbing activity that results in the creation or addition or replacement of 5,000 square feet or more of impervious surface area on an already developed site on development categories identified in (NPDES Permit) Part VI.D.6.c.

2. Where redevelopment results in an alteration to more than 50 percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction stormwater quality control requirements, the entire project must be mitigated.

3. Where redevelopment results in an alteration of less than 50 percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction stormwater quality control requirements, only the alteration must be mitigated, and not the entire development.

4. Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of facility, or emergency redevelopment activity required to protect public health and safety. Impervious surface replacement, such as the reconstruction of parking lots and roadways which does not disturb additional area and maintains the original grade and alignment, is considered a routine maintenance activity. Redevelopment does not include the repaving of existing roads to maintain original line and grade.

5. Existing single-family dwelling and accessory structures are exempt from the redevelopment requirements unless such projects create, add, or replace 10,000 square feet of impervious surface area.

The MS4 Permit mandates specific performance criteria that new development and redevelopment projects falling into one of the above categories must implement concerning the retention of stormwater runoff and the protection of water quality. The primary purpose of these performance criteria and related best management practices (BMPs) is to reduce the quantity and improve the quality of stormwater runoff that leaves a site.

The MS4 Permit requires each of the Co-permittees to develop a local program to implement the permit requirements, including the adoption of a Low Impact Development (LID) ordinance. The Co-permittees are also required to implement other municipal source detection and elimination programs, as well as maintenance measures. The City's stormwater program, developed in compliance with the MS4 Permit, is discussed below.

(3) Local

(a) City of Alhambra General Plan

The City has recently updated its General Plan in August 2019. A draft of the updated General Plan had been released in July 2018 for public review and a revised draft released in early 2019. The updated General Plan consists of seven elements, including a Land Use Element, Circulation Element, and Open Space Element. Each element addresses its respective subject and the City's 20-year vision for the future. With regard to water quality, the General Plan establishes the following goals and policies:

- **Goal SI-10:** A wastewater and stormwater collection and treatment system that meets the needs of existing and planned development.
- **Goal HS-3:** Proper management of stormwater to minimize the potential effects of flooding on people and property.
    - **Policy R-1E** Maximize stormwater filtration and/or infiltration through use of low-impact development methods.
    - **Policy SI-10A** Maintain, upgrade, and expand wastewater and stormwater collection facilities to ensure that wastewater and stormwater generated in Alhambra can be effectively managed.

- **Policy SI-10E** Require storm drain infrastructure that implements Low-Impact Development practices (bioretention areas, cisterns, and/or rain barrels) and incorporates state-of-the-art best management practices.
- **Policy HS-3A** Minimize injury, loss of life, property damage, and economic and social disruption caused by stormwater, flooding, and other forms of inundation.
- **Policy HS-3B** Address site-specific flood issues through improvements to storm drain infrastructure.
- **Policy HS-3C** Strengthen the City's maintenance program for stormwater detention basins, culverts, and storm drains to minimize future flooding events.

(c) Alhambra Municipal Code

Title XVI, Sewer, and other enforcement sections of the Alhambra Municipal Code (AMC) requires permits and oversees the implementation of any land use or development involving grading activities, or the construction of new structures or paving. AMC Chapter 16.34, Storm Water and Urban Runoff Pollution Control, establishes minimum standards, guidelines, and/or criteria for specific discharges, connections, and/or best management practices (BMPs). Additional measures are required by the City, when applicable, to prevent or reduce the discharge of pollutants to achieve water quality standards and receiving water limitations. The Chapter includes prohibitions for illicit discharges to enter the MS4 system, requires implementation of BMPs, including the installation and maintenance of structural BMPs, and requires stormwater measures.

On February 10, 2003, with subsequent amendments in 2003 and 2013, the City established a requirement that each person applying to the City for a grading or building permit for projects requiring compliance with the GCASP must submit satisfactory proof to the City that the following has been complied with prior to the issuance of a permit on the construction project:

1) That a NOI to comply with GCASP has been filed.

2) That a SWPPP has been prepared.

The City also requires that a copy of the NOI and SWPPP be maintained on-site during grading and construction, and be made available for inspection by a City inspector.

The City's process for BMP selection generally considers four standard elements: sediment control, erosion control, site management, and materials and waste

management. There are both structural BMPs and construction BMPs required by the City for mitigation of long-term and temporary water quality impacts, respectively. Structural BMPs include any structure facility designed to address treatment control and source control (e.g., mechanical filtration, separators, vegetative swales, and biofilters), designed and constructed to mitigate the adverse impacts of stormwater and urban runoff pollution in order to reduce or eliminate long term impacts to water quality.

In December 2002, with subsequent amendments in March 2014, the City adopted AMC Chapter 16.36, Stormwater LID Standards. The LID Standards contain requirements for construction activities and facility operations of development and redevelopment projects to comply with the current MS4 Permit and to lessen the water quality impacts of development using smart growth practices and to integrate LID design principles to mimic predevelopment hydrology through infiltration, evapotranspiration, and rainfall harvest and use.

Alhambra uses the latest edition of the Los Angeles County Hydrology Manual, which includes standards for the development of hydrology and related drainage models for development in the area. The Manual describes the methodologies to be utilized in the calculation of existing and proposed stormwater runoff, based on soil types, density of development, flow path characteristics, and time of concentration. The Manual specifies the design event for which the facility under consideration must be designed (10-year, 25-year, or 50-year frequency event). The Manual contains multiple appendices which provide site specific data on soil characteristics, runoff coefficients, intensity of rainfall versus storm duration, impermeability versus land use, and debris production classification. Soils in the San Gabriel Valley and Alhambra consist of alluvial debris deposited from the weathering of the San Gabriel Mountains, including gravely loams, sandy loams, and clays. Due to the urbanized nature of the City and its fairly level topography, soil erosion generally is not a major issue.

The requirements for design and construction of storm drains and related facilities (debris and detention basins, inlet and outlet structures) are contained in the Los Angeles County Flood Control District's Design Manual (Hydraulic), Debris Basin Manual, and Los Angeles County Sedimentation Manual. The methodologies contained in these Manuals are adopted for use in the City.

The storm drain collection system within Alhambra is largely owned by the City, although Los Angeles County Sanitation Districts sewer lines that receive flow from the City's collection system are not owned by the City (for discussion of sewer lines, see **Section IV.P.1, Utilities and Service Systems – Wastewater**, of the Draft EIR). Connections to County of Los Angeles storm drains are reviewed and approved by the County according to County of Los Angeles Design and Construction standards. The City reviews and approves the storm drain system in conjunction with proposed grading,

paving and roadway plans to ensure compliance of the storm drains with these standards. As the lead agency in project review, the City is co-signatory on the storm drain plans, with the final approval for construction issued by the County under their permit. In some locations, storm drains are privately owned and maintained by Home Owners Associations under specific conditions which are reviewed and approved by the City in association with the project's approval. These conditions pertain to requirements for perpetual maintenance of the storm drain system, detention requirements, and structural water quality mitigation measures, which are in turn incorporated into the project's Covenants, Conditions and Restrictions (CCRs).

b) Existing Conditions

(1) Surface Hydrology

The approximately 38.38-acre Project Site is fully developed with office, warehouse, storage, utility substation, and surface parking lot/parking structure uses. The majority of the Project Site, approximately 95 percent, is covered with impervious surfaces, including buildings, walkways/driveways, and parking lots. The topography of the site is relatively flat, with surrounding grades that generally slope gently to the south and west. Under existing conditions, stormwater runoff from the site is collected via an extensive on-site drainage system and conveyed into collector pipes prior to discharging to the off-site public storm drain system in both Fremont Avenue and Mission Road adjacent to the Project Site.

From the perspective of surface drainage, there is a primary boundary roughly bisecting the site which represents the drainage areas tributary to Fremont Avenue (the Office Plan Area and small portions of the North and South Plan Areas) and Mission Road (the East and Corner Plan Areas and the majority of the North and South Plan Areas). Stormwater runoff from the Project Site, once in the City's storm drain system, ultimately discharges to the Laguna Channel, which eventually discharges to the Los Angeles River via a public outfall that is part of the Los Angeles County Flood Control District system. The Project Site does not directly discharge to any stream or wash.

(2) Flood and Inundation Hazards

The Project Site is not located within an area identified by FEMA as potentially subject to 100-year floods. As indicated on the FEMA FIRM Panel 1635 (Map No. 06037C1635F), dated September 26, 2008,[1] and the Los Angeles County Flood Zone

[1] *FEMA Flood Maps: https://msc.fema.gov/portal*

Determination,[2] the Project Site is located in Flood Zone X, defined as areas located outside the 0.2% annual chance (or "100-year") floodplain.[3]

Tsunamis are large ocean waves generated by sudden water displacement caused by a submarine earthquake, landslide, or volcanic eruption. Review of the County of Los Angeles Flood and Inundation Hazards Map indicates the site does not lie within the mapped tsunami inundation boundaries. Seiches are oscillations generated in enclosed bodies of water that can be caused by ground shaking associated with an earthquake. No bodies of water capable of generating seiches are located near the Project Site. The Project Site is located approximately 22 miles inland from the Pacific Ocean and is not near any other major water bodies and is not considered susceptible to tsunamis.

(3) Groundwater

The City is part of the San Gabriel Valley Municipal Water District (SGVMWD), and has the right to pump groundwater from the main San Gabriel Basin and the Raymond Basin to serve over 90,000 customers. About 80 percent of the City's water comes from nine active wells drawn from the Main San Gabriel Basin. The City has a legal right to pump from the Raymond Basin, but currently does not operate any active wells in this basin due to high nitrate levels, which do not meet state standards. While the City is not a member agency of the Upper San Gabriel Valley Municipal Water District (Upper District), it can purchase treated imported water from the Upper District, and does so to obtain the remaining 20 percent of its water.[4]

The Main Basin underlies most of the San Gabriel Valley. This groundwater basin is bounded by the San Gabriel Mountains to the north, the San Jose Hills to the east, the Puente Hills to the south, and by a series of hills and the Raymond Fault to the west. Principal water-bearing formations of the Main Basin are unconsolidated and semi-consolidated sediments, which range in size from coarse gravel to fine-grained sands. The surface area of the Main Basin is approximately 167 square miles. The fresh water storage capacity of the Main Basin is estimated to be about 8.6 million acre-feet.[5]

Generally, water movement in the Main Basin is from the San Gabriel Mountains on the north side to the Whittier Narrows on the southwest side. The Basin is an unconfined aquifer. The City pumps its groundwater from the westerly portion of the Main Basin,

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[2] *Los Angeles County Flood Zone Determination: http://dpw.lacounty.gov/apps/wmd/floodzone/map.htm*

[3] *Legend: http://dpw.lacounty.gov/wmd/floodzone/docs/FZD_Legend.pdf.*

[4] *2018 Alhambra General Plan Update Draft Environmental Impact Report, July 2018, Page 156.*

[5] *Ibid.*

which is referred to as the Alhambra Pumping Hole (APH). The APH is an area with limited replenishment due to the tightness of the groundwater formations and limited facilities for direct recharge. The Main Basin is replenished by stream runoff from the adjacent mountains and hills, by rainfall directly on the surface of the valley floor, subsurface inflow from the Raymond Basin and the Puente Basin, and by returning flow from water applied for overlying uses. The Basin is also replenished with imported water.[6]

Main Basin management is described in the Basin Watermaster document entitled *Five-Year Water Quality and Supply Plan*. The Basin Watermaster was created in 1973 to resolve water issues that had arisen among water users in the San Gabriel Valley. The Basin Watermaster manages the water supply of the Main Groundwater Basin. Local water agencies adopted a joint resolution in 1989 regarding water quality issues that stated the Basin Watermaster should coordinate local activities to preserve and restore the quality of groundwater in the Main Basin. Updates to the *Five-Year Water Quality and Supply Plan* (Five-Year Plan) and annual updates are submitted to LARWQCB.[7]

The U.S. EPA established Operable Units for the various areas within the Basin that have been contaminated and require groundwater cleanup. The Operable Units include Alhambra (Area 3). The *Five-Year Water Quality and Supply Plan* (Five-Year Plan) describe cleanup efforts of each of the Operable units. The objective of the Five-Year Plan is to coordinate related activities so that both water supply and water quality in the Main Basin are protected and improved; and specifically addresses groundwater contamination and the implementation of cleanup plans. In areas where groundwater supply has been affected by contamination, the Basin Watermaster works with affected Producers and other local water agencies to implement clean up as quickly as possible.[8]

The Area 3 Operable Unit is located in the westerly portion of the Main Basin and includes the Project Site. The U.S. EPA has installed a series of monitoring wells to collect water quality data to supplement data collected from water supply wells and has initiated a Remedial Investigation and Feasibility Study to identify the extent of the contamination and to evaluate appropriate cleanup remedies.[9]

The historically highest groundwater level at the Project Site was established by review of the Los Angeles 7.5-minute quadrangle Seismic Hazard Evaluation Report, Plate 1.2,

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6 *Ibid.*

7 *Ibid.*

8 *Id, Page 157.*

9 *Ibid.*

Historically Highest Ground Water Contours. Review of this plate indicates that the historically highest groundwater level at the site is estimated at 200 feet below ground surface. A copy of this plate is included in the Project Geotechnical Assessment in **Appendix G** of the Draft EIR. Groundwater was not encountered during site exploration to a depth of 50 feet below the ground surface.

3. Project Impacts

a) Methodology

The impact analysis is based on an assessment of baseline conditions for the Project Site, including watershed and surface waters, topography, groundwater, flood hazards, and water quality. This analysis identifies potential impacts based on the predicted interaction between the affected environment and construction, operation, and maintenance activities related to the Project. This section describes impacts in terms of location, context, duration, and intensity, and recommends mitigation measures, when necessary, to avoid or minimize impacts.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with Appendix G of the State CEQA Guidelines, the Project would have a significant impact related to hydrology and water quality if it would:

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

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

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

(i) Result in substantial erosion or siltation on- or off-site;

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

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

(iv) Impede or redirect flood flows; or

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

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

c) Project Design Features

No specific Project Design Features are proposed with regard to hydrology and water quality.

d) Analysis of Project Impacts

Threshold a): Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

(1) Impact Analysis

(a) Construction

The Project involves the redevelopment of approximately 20.62 acres of the 38.38-acre Project Site on land that is currently fully developed with office, warehouse, light industrial, and storage uses as well as paved parking lots. During construction, groundwater dewatering is not anticipated to be required on the Project Site due to the shallow proposed excavation depths of 10-12 feet and the regional groundwater depth of approximately 200 feet below ground surface. However, if any groundwater is encountered during excavation work, it would be removed in compliance with the GDP.

Construction activities associated with the Project would include on-site driveway/roadway improvements, installation and realignment of utilities, demolition of existing structures for replacement, new development, and the replacement and/or improvement of drainage facilities. Water quality degradation from construction would be largely dependent on the length of time soils would be subject to erosion, and the specific construction activities that would be carried out on the site. Temporary soil disturbance would occur as a result of earth-moving activities such as excavation and trenching for foundations and utilities, soil compaction and moving, cut and fill activities, and grading. If not managed properly, disturbed soils would be susceptible to high rates of erosion from wind and rain, resulting in sediment transport via stormwater runoff from the Project Site. The types of pollutants contained in runoff from construction sites in urban areas typically include sediments and contaminants such as oils, fuels, paints, and solvents. Additionally, other pollutants, such as nutrients, trace metals, and

hydrocarbons, can attach to sediment and be transported to downstream drainages and ultimately into collecting waterways, contributing to degradation of water quality.

Areas that disturb one or more acres of land surface are subject to the GCASP. The City requires the preparation of a SWPPP to achieve compliance with the GCASP. Compliance with the permit requires each qualifying development project to file an NOI with the SWRCB. The SWPPP must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Inspection of construction sites before and after storms is also required to identify stormwater discharge from the construction activity and to identify and implement controls, where necessary. The SWPPP requirements would need to be satisfied prior to beginning construction of the Project, as it would redevelop a site greater than one acre.

The Project would also be subject to the NPDES MS4 regulations and the AMC, which would reduce the risk of short-term erosion resulting from drainage alterations during construction. BMPs would be required to reduce the discharge of pollutants to the maximum extent practicable, including the removal and lawful disposal of any solid waste or any other substance which, if it were to be discharged to the MS4, would be a pollutant, including fuels, waste fuels, chemicals, chemical wastes and animal wastes, from all parts of the premises exposed to stormwater. Compliance with the GCASP and implementation of the SWPPP and required BMPs, as well as with the City's discharge requirements, would ensure that construction stormwater runoff would not violate water quality and/or discharge requirements, and Project impacts would be **less than significant**.

(b) Operation

Once the Project has been constructed, urban runoff could include the contaminants typically associated with urban development, including trace metals from pavement runoff and landscape maintenance debris that may be mobilized in storm runoff from driveway areas and landscaping, and in dry-season "nuisance flows" from landscape irrigation. Liquid product spills occurring at the Project Site could also enter the storm drain. Dry product spills could enter the storm drain via runoff in wet weather conditions or dry-season "nuisance flows." Under existing conditions, stormwater runoff from the Project Site contains similar types of urban pollutants and is currently uncontrolled and untreated.

The Project, which consists of a multi-family, campus style redevelopment of the eastern half and southern portion of the Project Site, would substantially reduce the amount of impervious surface area on-site from the current approximately 95 percent

via the introduction of extensive landscaped areas, thereby reducing runoff flows and volumes altogether. Post-development flows and volumes would also be reduced through the implementation of a volumetric retention style stormwater quality treatment system. Further, since the Project Site drains to the ocean exclusively through lined channels, it is not anticipated that detention will be required due to hydromodification requirements.

Even with the reduction in runoff volume from the Project Site, the Project could potentially result in the addition of contaminants into stormwater runoff entering the City's drainage system. If not managed properly, runoff from urban development can contain contaminants such as oil, grease, metals, and landscaping chemicals (pesticides, herbicides, fertilizers, etc.), which could be transported into the City's drainage system and ultimately degrade surface water and groundwater quality.

Water quality discharge requirements meeting area-wide surface water use objectives are established as permit requirements by the LARWQCB. Under the LARWQCB's NPDES permit system, all existing and future municipal and industrial discharges to surface waters within the City would be subject to regulations. NPDES permits are required for operators of MS4s, construction projects, and industrial facilities. These permits contain limits on the amount of pollutants that could be contained in each facility's discharge. Specifically, all development within the City would be subject to the provisions of the MS4 Permit.

The Project would also be subject to the provisions of Sections 16.34.020 and 16.34.030 of the AMC. Under the provisions of Section 16.34.020, no person shall cause any illicit discharge to enter the MS4 unless specific exemptions listed in the section are met. Under the provision of Section 16.34.030, no person shall use or suffer the use of illicit connection to convey an illicit discharge or any pollutant to the MS4 from the premises of which that person is an owner or is the person in charge of day-to-day activities. Discharges of material other than stormwater must be in compliance with an NPDES permit issued for the discharge with appropriate BMPs in place. Section 16.36.060 of the AMC, Source Control Best Management Practices, requires the application of BMPs to storm drains, outdoor storage of materials, outdoor trash areas, loading docks, repair and maintenance bays, wash areas, and restaurants. The Director is authorized to require additional BMPs which are listed in the NPDES MS4 Permit Order No. R4-2012-0175 A-01 on a project-specific basis.

The Project is also required to comply with AMC Chapter 16.36, Stormwater LID Standards, prior to issuance of any permit. Further, as a condition of a certificate of occupancy for a new development or redevelopment project, the Director of Public Works, Utilities Division (Director), shall require the applicant, facility operator, or owner to construct all stormwater pollution control BMPs and structural or treatment control

BMPs shown on the approved project plans and submit a signed certification stating that the Project Site and all structural or treatment control BMPs will be maintained in compliance with this chapter and other applicable regulatory requirements until responsibility for such maintenance is legally transferred. The Project Applicant would also be required to provide, as required by the Director, any other legally enforceable agreement that assigns responsibility for the maintenance of post-construction structural or treatment control BMPs. The final selection of BMPs would be completed through coordination with the City as part of the stormwater plan check process.

Considering that the existing stormwater infrastructure at the Project Site does likely not meet current water quality standards because stormwater quality requirements were not in place at the time the current development on the site was built, the quality of stormwater drainage from the Project Site would likely improve due to Project development. Therefore, implementation of the Project stormwater quality plan as discussed above as part of overall compliance with the City's LID Ordinance and MS4 Permit requirements would ensure that Project water quality impacts during operation would be **less than significant**.

(2) Mitigation Measures

Impacts related to water quality would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to water quality would be **less than significant** without mitigation.

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

(1) Impact Analysis

The Project Site is fully developed with buildings and parking lots. Impervious surfaces cover approximately 95 percent of the Project Site. During a storm event, nearly all stormwater runoff flows to the adjacent roadways where it is directed into the City's storm drain system. As such, the Project Site is not a significant source of groundwater recharge.

As discussed above, the historically highest groundwater level at the Project Site was established by review of the Los Angeles 7.5-minute quadrangle Seismic Hazard Evaluation Report, Plate 1.2, Historically Highest Ground Water Contours. Review of this plate indicates that the historically highest groundwater level at the site is estimated

at 200 feet below ground surface. Groundwater was not encountered during site exploration to a depth of 50 feet below the ground surface.

The Project includes excavation to approximately 10-12 feet below ground surface in an area where groundwater has not been encountered in test borings drilled to 50 feet below ground surface. Although unlikely, any groundwater encountered within this depth would be perched groundwater, which is isolated groundwater trapped within soil or rock. Perched groundwater is typically of poor water quality because of its inability to flow and filter. If perched groundwater is encountered at the Project Site during excavation work, it would be pumped from the ground and removed from the Project Site in accordance with the GDP, as discussed above. No permanent dewatering would be required after Project buildout.

The Project does not propose any permanent groundwater wells or pumping activities. All water supplied to the Project Site would be derived from the City's existing water supply and infrastructure. Additionally, the amount of impervious surface area on the Project Site would decrease following development of the Project due to the extensive landscaping that is proposed. Opportunities for the infiltration of rainfall would be substantially increased as compared to existing conditions at the Project Site. Potential stormwater pollutants at the Project Site would be controlled via the installation of stormwater treatment BMPs in accordance with the City's LID requirements. Thus, Project operation would neither substantially interfere with groundwater recharge nor introduce significant pollutants to groundwater.

Water used during construction for cleaning, dust control, and other uses would be nominal. Thus, construction activities would not substantially deplete groundwater supplies nor interfere substantially with groundwater recharge.

Development of the Project would increase the demand for water at the Project Site, most of which would derive from groundwater sources (for a discussion of the existing status of the City's groundwater supply, refer to **Section IV.P.2, Utilities and Service Systems – Water**, of the Draft EIR). As described in **Section IV.P.2**, due to existing water rights, an adequate supply of water should be available, with normal conservation efforts, for the City's projected demands through 2040. As a result, Project impacts with respect to groundwater supplies and groundwater recharge would be **less than significant**.

(2) Mitigation Measures

Impacts related to groundwater would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to groundwater would be **less than significant** without mitigation.

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

(i) Result in substantial erosion or siltation on- or off-site;

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

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

(iv) Impede or redirect flood flows?

(1) Impact Analysis

(a) Construction

During Project construction, particularly during the excavation and grading phase, stormwater runoff from precipitation events may cause exposed and stockpiled soils to be subject to erosion and convey sediments into off-site storm drain systems. The Project Applicant would be required to prepare a SWPPP and implement BMPs in accordance with the SWPPP to reduce runoff and preserve water quality and prevent flooding issues during construction of the Project. While grading and construction activities may temporarily alter the existing drainage patterns of the Project Site, BMPs such as silt fencing, stockpile covers, matting, and dust control would be implemented to minimize soil erosion impacts during Project grading and construction activities and to ensure compliance with the requirements of the GCASP and the SWPPP. Through implementation of the SWPPP, Project construction would not result in substantial erosion or siltation or flooding on- or off-site.

During Project construction, pollutants and contaminants resulting from the routine use and cleaning of construction equipment would be disposed of in compliance with the

SWPPP and GCASP. Through compliance with the SWPPP and GCASP and the implementation of standard good housekeeping BMPs within the active zones of construction, substantial pollutants would not be introduced to stormwater runoff at the Project Site. Additionally, stormwater runoff during Project construction activities would be less than under existing conditions due to the lack of any significant existing infiltration at the Project Site. Therefore, the Project would not contribute runoff water exceeding the capacity of existing drainage systems or produce a substantial source of polluted runoff during construction activities.

As discussed under Threshold (a) above, the Project would be required to comply with the GCASP, including the preparation of a SWPPP and implementation of BMPs required to minimize soil erosion and prevent sediment from entering the storm drains during the construction period. In addition, the Project would be subject to the City's Stormwater and Urban Runoff Pollution Control regulations (AMC Section 16.34) to ensure pollutant loads from the Project Site would be minimized for downstream receiving waters. Compliance with the MS4 Permit and implementation of the SWPPP and BMPs, as well as the City's discharge requirements, would ensure that construction stormwater runoff would not violate water quality and/or discharge requirements. Construction related impacts would be **less than significant**.

(b) Operation

Development of the Project would necessitate only minor alterations to the existing drainage pattern at the Project Site and would not alter the course of any streams or rivers. Post-development drainage would be substantially similar to existing drainage, although runoff volumes would be reduced due to the additional infiltration that would occur on-site as compared to the existing 95% impervious conditions at the Project Site.

Following Project construction, the Project would be required by the AMC to implement LID principles and associated stormwater BMPs, which would reduce the amount of surface water runoff leaving the Project Site after a storm event. Specifically, the LID Plan would require the implementation of stormwater BMPs to retain or treat the runoff from a storm event producing 3/4-inch of rainfall in a 24-hour period. Therefore, the Project would not result in substantial erosion or siltation on- or off-site. The Project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, nor would the Project impede or redirect flood flows.

During Project operation, runoff from the Project Site would continue to be collected on the Project Site and directed towards existing storm drains in the Project vicinity that have adequate capacity to serve the Project Site. Post-development runoff would be less in volume than existing runoff from the Project Site due to the reduction in

impervious surface area that is being proposed on-site. During Project operation and in compliance with the AMC, stormwater retention would be required as part of the Project's LID implementation features. Pollutants from the Project would be subject to the requirements and regulations of the MS4 Permit and the City's LID requirements. Accordingly, the Project would not create or contribute surface runoff that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

As also discussed under Threshold (a) above, the Project would be required to comply with the City's LID Requirements in AMC Section 16.34. LID Plans are required to include a site design approach and BMPs that address runoff and pollution at the source. Further, to comply with the LID Requirements, the Project would be required to capture and treat the first 3/4-inch of rainfall in accordance with established stormwater treatment priorities. Compliance with the LID Plan, including the implementation of BMPs, would ensure that operation of the Project would not violate water quality standard and discharge requirements or otherwise substantially degrade water quality. As such, Project impacts would be **less than significant** through compliance with applicable State and City laws and regulations.

(2) Mitigation Measures

Impacts related to drainage pattern alteration would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to drainage pattern alteration would be **less than significant** without mitigation.

Threshold d): Would the Project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

As discussed in the Initial Study (Draft EIR **Appendix A-3**), the Project Site is not located within an area identified by FEMA as potentially subject to 100-year floods[10]. As also discussed in the Initial Study (Draft EIR **Appendix A-3**) and under "Existing Conditions" above, the Project Site is not located in a Tsunami Hazard Area, is located at least 22 miles from the Pacific Ocean, and is not near any major water bodies potentially at risk of the effects of seismically-induced tidal phenomena, such as seiches or tsunamis. In addition, the Project Site is in an urbanized portion of the City and is relatively flat, thereby limiting the potential for inundation by mudflow. The Project Site is

[10] *FEMA Flood Maps: https://msc.fema.gov/portal*

not located downslope from any reservoirs or other surface water storage facilities that could result in a potentially significant impact at the Project Site due to dam failure. There are two dams north of the City near the base of the San Gabriel Mountains: one at Devil's Gate Reservoir on the Arroyo Seco (six miles north of the City) and the other at Eaton Wash Reservoir on Eaton Wash (4.2 miles north of the City). The Project Site is not located in the inundation areas for either of these two dams.

As the Project Site is not located within an area of inundation hazard, the Project would not create a risk of pollutant release during periods of inundation. Therefore, **no impact** would occur. No further analysis is required.

Threshold e): Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

(1) Impact Analysis

As discussed previously, the Los Angeles RWQCB's Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. The Project Site does not discharge stormwater runoff directly to any stream channel or other waters of the State. Instead, it discharges to the City's MS4, which ultimately discharges to the Laguna Channel, which eventually discharges to the Los Angeles River via a public outfall that is part of the Los Angeles County Flood Control District system. Thus, stormwater generated at the Project Site is regulated under the Los Angeles County MS4 NPDES Permit.

The NPDES MS4 Permit requires the Project to incorporate permanent (post-construction) stormwater mitigation measures and mandates specific performance criteria that must be achieved concerning the retention of stormwater runoff and the protection of water quality. The primary purpose of these performance criteria and related BMPs is to reduce the quantity and improve the quality of stormwater runoff that leaves a site. The Project, by virtue of its increased infiltration and reduced impervious surface area, would reduce the quantity of stormwater runoff leaving the Project Site as compared to existing conditions. Compliance with the City's LID ordinance in terms of Project site design and the design, installation, and maintenance of on-site stormwater quality BMPs would improve the overall quality of the stormwater leaving the Project Site as compared to existing conditions. As a result of the above, the Project would aid the implementation of the Basin Plan, rather than conflict with or obstruct it.

Development of the Project would increase the demand for water at the Project Site, most of which would derive from groundwater sources (for a discussion of the existing status of the City's groundwater supply, refer to **Section IV.P.2, Utilities and Service Systems – Water**, of the Draft EIR). As described in **Section IV.P.2**, due to existing

water rights, an adequate supply of water should be available, with normal conservation efforts, for the City's projected demands through 2040. Additionally, as described above, the Project would not impact groundwater due to both its shallow excavations and the depth to groundwater beneath the Project Site. As a result, the Project would not conflict with or obstruct the implementation of the Five-Year Plan. Therefore, Project impacts with respect to implementation of water quality control and sustainable groundwater management plans would be **less than significant**.

(2) Mitigation Measures

Impacts related to implementation of water quality control and sustainable groundwater management plans would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to implementation of water quality control and sustainable groundwater management plans would be **less than significant** without mitigation.

e) Cumulative Impacts

(1) Impact Analysis

Implementation of the Project in conjunction with the cumulative projects identified in **Section III, Environmental Setting**, would contribute to the gradual redevelopment of an already fully developed urban region. The Project Site is almost entirely developed with impervious surfaces and the quality of runoff from the area is affected by existing urban land uses and the limited use of stormwater BMPs due to the general age of development in this portion of Alhambra. As discussed above, the Project would have a less than significant impact with respect to all hydrology and water quality issues and its associated incremental impacts are therefore not considered cumulatively considerable.

The Project would implement new BMPs that would control stormwater runoff quantity and quality. Likewise, other cumulative development projects developed in the area would also be required to adhere to regulatory requirements that control stormwater and pollutant discharges. In addition, the Project Site and surrounding areas are serviced by an MS4 system that is designed with capacity to handle 50-year storm flows from all areas in the developed condition. Thus, while the Project and the cumulative projects may change the on-site land uses, they would remain urban developments planned for by the existing MS4 system. Furthermore, future development projects within the Project area are likely to be subject to more stringent BMPs (since BMPs are regularly updated) than what are in use under existing conditions, and would generally improve

the quality of existing stormwater flows that discharge from currently vacant parcels or surface parking lots.

As such, it is likely that future development would improve the quality of water draining from the area as water quality features for the cumulative development projects are implemented as requirements of each project's development. Additionally, similar to the Project, each of the applicants of the cumulative projects within the City would be required to prepare and implement a SWPPP and comply with the City's LID requirements and stormwater discharge regulations and undergo a plan review by the City to determine what drainage improvements and BMPs would be required to ensure that no significant water quality issues emerge as a result of project development. The cumulative projects located within the City of Monterey Park would be subject to that City's analogous requirements.

The Project would not result in any significant hydrology or water quality impacts. Similarly, taken together with the cumulative projects, the Project would not create an impact that is cumulatively considerable because each development project would have to comply with site-specific development standards and state water quality regulations. Compliance with these standards would ensure that the projects would further the objectives of applicable regional water quality plans. Therefore, cumulative impacts to hydrology and water quality would be **less than significant**.

(2) Mitigation Measures

No significant cumulative impacts related to hydrology and water quality have been identified, and no mitigation measures are required.

(3) Level of Significance after Mitigation

Cumulative impacts related to hydrology and water quality would be **less than significant** prior to mitigation.

IV. Environmental Impact Analysis

J. Land Use and Planning

1. Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts with regard to land use and planning. The analysis in this section evaluates whether the Project would physically divide an established community and whether it would be consistent with applicable land use policies. A summary of applicable regulations is also provided in this section. In addition, the potential cumulative impacts related to land use associated with the Project, in combination with all known cumulative projects, are evaluated.

2. Environmental Setting

a) Regulatory Framework

(1) Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the federally designated Metropolitan Planning Organization (MPO) for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The SCAG region encompasses a population exceeding 18 million persons in an area of more than 38,000 square miles. SCAG develops long-range regional transportation plans including sustainable communities strategy and growth forecast components, regional transportation improvement programs, regional housing needs allocations and a portion of the South Coast Air Quality management plans. Applicable SCAG publications are discussed below.

(a) SCAG 2008 Regional Comprehensive Plan

SCAG has prepared the 2008 Regional Comprehensive Plan (2008 RCP) in response to SCAG's Regional Council directive in the 2002 Strategic Plan to define solutions to interrelated housing, traffic, water, air quality, and other regional challenges.[1] The 2008 RCP is an advisory document that describes future conditions if current trends continue,

[1] *2008 Regional Comprehensive Plan, SCAG, http://www.scag.ca.gov/rcp/pdf/finalrcp/f2008RCP.*

defines a vision for a healthier region, and recommends an Action Plan with a target year of 2035. The 2008 RCP may be voluntarily used by local jurisdictions in developing local plans and addressing local issues of regional significance. The plan incorporates principles and goals of the Compass Growth Vision Report and includes nine chapters addressing land use and housing, transportation, air quality, energy, open space and habitat, water, solid waste, economy, and security and emergency preparedness. The action plans contained therein provide a series of recommended near-term policies that developers and key stakeholders should consider for implementation, as well as policies for consideration by local jurisdictions and agencies when conducting project review.

The 2008 RCP replaced the Regional Comprehensive Plan and Guide (RCPG) for use in SCAG's Intergovernmental Review (IGR) process. SCAG's Community, Economic and Human Development Committee and the Regional Council approved the 2008 RCP, which now serves as an advisory document for local governments in the SCAG region for their information and voluntary use in developing local plans and addressing local issues of regional significance. However, as indicated by SCAG, because of its advisory nature, the 2008 RCP is not used in SCAG's IGR process. Rather, SCAG reviews new projects based on consistency with the Regional Transportation Plan (RTP) (discussed below) and the Compass Growth Vision Report.

(b) SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy

On September 30, 2008, SB 375 was passed by the California state legislature to help achieve AB 32 goals related to the statewide reduction of greenhouse gases through regulation of cars and light trucks. SB 375 aligns three policy areas of importance to local government: (1) regional long-range transportation plans and investments; (2) regional allocation of the obligation for cities and counties to zone for housing; and (3) a process to achieve GHG emissions reductions targets for the transportation sector.[2] It establishes a process for the California Air Resources Board (CARB) to develop GHG emissions reductions targets for each region (as opposed to individual local governments or households). SB 375 also requires Metropolitan Planning Organizations to prepare a Sustainable Communities Strategy (SCS) within the Regional Transportation Plan (RTP) that guides growth while taking into account the transportation, housing, environmental, and economic needs of the region. SB 375 uses CEQA streamlining as an incentive to encourage residential projects, which help achieve AB 32 goals to reduce GHG emissions.

[2] *AB 32 was signed into law in 2006 and focuses on achieving GHG emissions equivalent to Statewide levels in 1990 by 2020.*

On September 23, 2010, CARB adopted regional targets for the reduction of GHG emissions applying to the years 2020 and 2035. For the area under the SCAG jurisdiction, including the Project area, CARB adopted Regional Targets for reduction of GHG emissions by eight percent for 2020 and by 13 percent for 2035. On February 15, 2011, CARB's Executive Officer approved the final targets.[3]

On April 7, 2016, the Regional Council of SCAG adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016-2040 RTP/SCS). For the past three decades, SCAG has prepared RTPs with the primary goal of increasing mobility for the region's residents and visitors. Through the 2016-2040 RTP/SCS, SCAG continues to emphasize sustainability and integrated planning, whose vision encompasses three principles that collectively work as the key to the region's future: mobility, economy, and sustainability.

The 2016-2040 RTP/SCS:

- Includes a strong commitment to reduce emissions from transportation sources to comply with SB 375, improve public health, and meet the National Ambient Air Quality Standards (NAAQS) as set forth by the Federal Clean Air Act.
- Contains a regional commitment for the broad deployment of zero- and near-zero-emission transportation technologies in the 2016-2040 time frame and clear steps to move toward this objective.
- Includes a significant consideration of the economic impacts and opportunities provided by the transportation infrastructure plan set forth in the 2016-2040 RTP/SCS, considering not only the economic and job creation impacts of the direct investment in transportation infrastructure, but also the efficiency gains in terms of worker and business economic productivity and goods movement.
- Outlines a transportation infrastructure investment strategy that will benefit Southern California, the State, and the nation in terms of economic development, competitive advantage, and overall competitiveness in the global economy in terms of attracting and retaining employers in the Southern California region.
- Provides a blueprint for improving quality of life for residents by providing more choices for where they will live, work, and play, and how they will move around.

[3] *CARB, Executive Order No. G-11-024, Relating to Adoption of Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375.*

The 2016-2040 RTP/SCS is designed to:

- Promote safe, secure, and efficient transportation systems to provide improved access to opportunities, such as jobs, education, and healthcare.
- Allow residents to lead a healthier, more active lifestyle.
- Create jobs, ensure the region's economic competitiveness through strategic investments in the goods movement system, and improve environmental and health outcomes for its residents by 2040.
- Preserve stable and successful neighborhoods and array of open spaces for future generations.

(2) South Coast Air Quality Management District

(a) Air Quality Management Plan

The Project is located within the South Coast Air Basin (Basin) and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). In conjunction with SCAG, SCAQMD is responsible for formulating and implementing air pollution control strategies, including periodic updates to the Air Quality Management Plan (AQMP), and guidance to local government about how to incorporate these strategies into their land use plans and decisions about development.

SCAG is responsible for generating the socio-economic profiles and growth forecasts on which land use, transportation, and air quality management and implementation plans are based. The growth forecasts provide the socioeconomic data used to estimate vehicle trips and vehicle miles traveled (VMT). Emission estimates are forecasted by SCAQMD based on these projected estimates. Reductions in emissions due to changes in the socio-economic profile of the region are an important way of taking account of changes in land use patterns. For example, changes in jobs/housing balance induced by changes in urban form and transit-oriented development induce changes in VMT by more closely linking housing to jobs. Thus, socio-economic growth forecasts are a key component to guide the Basin toward attainment of the NAAQS.

The current AQMP establishes a comprehensive regional air pollution control program leading to the attainment of State and federal air quality standards in the Basin. In addition to setting minimum acceptable exposure standards for specified pollutants, the AQMP incorporates SCAG's growth management strategies that can be used to reduce vehicle trips and VMT, and hence air pollution. These include, for example, co-location of employment and housing, mixed-use land patterns, and transportation-oriented development that allow the integration of residential and non-residential uses within proximity of transit.

(3) Los Angeles County Metropolitan Transportation Authority

(a) Congestion Management Plan

Within Alhambra, the Los Angeles County Metropolitan Transportation Authority (Metro) is the designated congestion management agency responsible for coordinating the Congestion Management Plan (CMP). The CCMP for Los Angeles County is intended to address vehicular congestion relief by linking land use, transportation, and air quality decisions. The CMP also seeks to develop a partnership among transportation decision-makers to devise appropriate transportation solutions that include all modes of travel, and to propose transportation projects, which are eligible to compete for state gas tax funds.

(4) City of Alhambra

(a) General Plan

As shown on Figure III-2 in **Section III, Environmental Setting**, of the Draft EIR, the Project Site is designated for Office Professional uses in the General Plan. The City has recently updated its General Plan in August 2019. A draft of the updated General Plan had been released in July 2018 for public review and a revised draft released in early 2019. The updated General Plan is intended to allow land use and policy determinations to be made within a comprehensive framework that incorporates public health, safety, and qualities of life considerations. The General Plan consists of seven elements, including a Land Use Element, Circulation Element, and Open Space Element. Each element addresses their respective topic and the City's 20-year vision for the future.

The underlying Professional Office zone covering the Project Site allows residential uses on sites larger than 30 acres in size with a Conditional Use Permit. The Project Site covers 38.38 acres; thus, residential uses are permitted on the Project Site.

(b) Alhambra Municipal Code (Zoning)

All development activity on the Project Site is subject to the City of Alhambra Municipal Code (AMC), particularly Title XXIII, also known as the City of Alhambra Zoning Code (the Zoning Code). The Zoning Code includes development standards for the various districts in the City of Alhambra. As shown on Figure III-1 in **Section III, Environmental Setting**, of the Draft EIR, the entire Project Site is zoned as PO (Professional Office). The PO zone permits a wide range of land uses, including professional office, pharmacies, and educational institutions, among other uses. The PO zone also permits conditional uses such as commercial uses, food sales, and fitness centers, to name only a few. Urban residential (multiple-family residential) uses are only permitted on PO-zoned properties having a minimum size of 30 acres. The maximum height of structures

within the PO zone is five stories or 55 feet in height, and six stories or 75 feet in height for urban residential uses. The PO zone also limits allowable maximum Floor Area Ratio (FAR) to 3.28:1 for urban residential uses if included on a site with a minimum size of 30 acres.

3. Project Impacts

a) Methodology

To evaluate the Project's impacts related to land use and planning, this analysis examines the Project's consistency with the regional and local plans, policies, and regulations that regulate uses on the Project Site.

The legal standard that governs consistency determinations is that a project must only be in "harmony" with the applicable land use plan to be consistent with that plan. (See *Sequoyah Hills Homeowners Assn. v. City of Oakland (*1993) 23 Cal.App.4th 704, 717-18 [upholding a city's determination that a subdivision project was consistent with the applicable general plan]). As the Court explained in *Sequoyah*, "state law does not require an exact match between a proposed subdivision and the applicable general plan." To be "consistent" with the general plan, a project must be "compatible with the objectives, policies, general land uses, and programs specified in the applicable plan," meaning, the project must be "in agreement or harmony with the applicable plan." (see also *Greenebaum v. City of Los* Angeles (1984) 153 Cal.App.3d 391, 406; *San Franciscans Upholding the Downtown Plan, supra*, 102 Cal.App.4th at p. 678.) Further, "[a]n action, program, or project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment." (*Friends of Lagoon Valley v. City of Vacaville* (2007) 154 Cal.App.4th 807, 817.) Courts also recognize that general plans "ordinarily do not state specific mandates or prohibitions," but instead provide "policies and set forth goals." (*Friends of Lagoon Valley*).

As stated, the analysis below examines the Project's consistency with the following regional and local plans, policies, and regulations that regulate uses on the Project Site:

- SCAG RCP
- SCAG 2016-2040 RTP/SCS
- SCAQMD AQMP
- Metro CMP
- City of Alhambra General Plan
- City of Alhambra Zoning Code

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with Appendix G of the State CEQA Guidelines (Appendix G), the Project would have a significant impact in regard to land use and planning if it would result in the following:

(a) Physically divide an established community; or

(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.

In assessing impacts related to land use and planning in this section, the City will use Appendix G as the thresholds of significance.

c) Project Design Features

No specific Project Design Features are proposed with regard to land use beyond the Project improvements discussed in **Section II, Project Description**, of the Draft EIR.

d) Analysis of Project Impacts

Threshold a): Would the Project physically divide an established community?

As discussed in the Initial Study (Draft EIR **Appendix A-3**), a significant impact may occur if a project is sufficiently large enough or otherwise configured in such a way as to create a physical barrier within an established community (a typical example would be a project which involved a continuous right-of-way such as a roadway which would divide a community and impede access between parts of the community). The Project Site is located in a highly urbanized and heterogeneous area of the City and is currently developed with multiple office buildings and a fitness center along with other accessory uses within a campus setting, industrial/warehouse buildings, vehicle storage areas, and both surface and structure parking. Additionally, the Project Site is entirely surrounded by existing retail, commercial, and industrial development, roadways, and a major rail corridor.

The Project would provide a mix of new residential and existing office uses. These land uses would be consistent with other land uses in the surrounding area and compatible with the surrounding community. Development of the proposed multiple-family residential uses on the Project Site would not physically divide an established community as no residences are currently present at the Project Site. No existing

accessways through the Project Site would be obstructed by development of the Project. The Project would represent urban infill providing uses in keeping with the mixed commercial/residential nature of land uses in the surrounding area. As such, the Project would be compatible with and would complement existing uses in the surrounding area and would not be of a density, scale, or height to constitute a physical barrier separating an established community. Thus, the Project would have **no impact**. No additional analysis is required.

Threshold b): ***Would the Project 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?***

(1) Impact Analysis

(a) SCAG Regional Comprehensive Plan (RCP)

A discussion of the Project's consistency with the relevant policies of the SCAG's 2008 RCP is presented in Table IV.J-1 below.

Table IV.J-1
SCAG Regional Comprehensive Plan Project Consistency Analysis

Policy	Consistency Discussion
Land Use and Housing	
LU-4 Local governments should provide for new housing, consistent with State Housing Element law, to accommodate their share of forecast regional growth.	**Consistent.** The Project would provide 1,061 residential dwelling units at the Project Site that would accommodate a large share of the City assigned Regional Housing Needs Assessment (RHNA) units, as required for the forecasted regional growth.
LU-6.2 Developers and local governments should integrate green building measures into project design and zoning such as those identified in the U.S. Green Building Council's Leadership in Energy and Environmental Design, Energy Star Homes, Green Point Rated Homes, and the California Green Builder Program.	**Consistent.** The Project would comply with CalGreen requirements of the California Building Code and incorporates green and conservation features. The Project would also be consistent with the City of Alhambra Building Code, which requires incorporation of features that reduce energy and water use, waste, and overall carbon footprint.
Open Space and Habitat	
OSC-10 Developers and local governments should promote infill development and redevelopment to revitalize existing communities.	**Consistent.** The Project Site is currently developed with an office and commercial building and surface parking lots. The Project includes retention of the existing uses and redevelopment of the Project Site with a residential development, including 1,061 residential dwelling units and associated residential amenities, and up to approximately 716,434 square-feet of open space. The Project would revitalize a currently under-utilized parcel

Table IV.J-1
SCAG Regional Comprehensive Plan Project Consistency Analysis

Policy	Consistency Discussion
	by providing residential and office uses in close proximity to office, entertainment, retail, and other commercial uses.
OSC-11 Developers should incorporate and local governments should include land use principles, such as green building, that use resources efficiently, eliminate pollution and significantly reduce waste into their projects, zoning codes and other implementation mechanisms.	**Consistent.** The Project would incorporate sustainable building practices to use resources efficiently and reduce waste and pollution. As described above, the Project would comply with the CalGreen requirements of the California Building Code. In addition, the Project would aid in reducing vehicle miles traveled by providing a balanced mix of uses (new plus existing) that enhance walkability and connectivity in proximity to existing bus lines.
OSC-12 Developers and local governments should promote water-efficient land use and development.	**Consistent.** The Project would comply with CalGreen requirements of the California Building Code. In addition, as described in **Section IV.P.2, Utilities and Service Systems – Water**, the Project would implement measures to promote efficient water use. Specific measures are listed and include measures such as high efficiency toilets, Energy Star clothes washers, drought tolerant plants, drip/subsurface irrigation, and pool/spa recirculating filtration equipment.
OSC-13 Developers and local governments should encourage multiple use spaces and encourage redevelopment in areas where it will provide more opportunities for recreational uses and access to natural areas close to the urban core.	**Consistent.** The Project would redevelop the Project Site with a mixed-use development, including 1,061 residential dwelling units, residential amenity space, and up to approximately 716,434 square-feet of open space. Project amenities include lobbies, fitness centers, pools, recreational space, and landscaped open spaces. The Project would provide access to natural areas close to the urban core, as the Project includes gardens and landscaped terraces at the street level. Terraces and gardens would provide shared amenity spaces for residents and guests.
OSN-14 Developers and local governments should implement mitigation for open space impacts through the following activities: • Individual projects should either avoid significant impacts to regionally significant open space resources or mitigate the significant impacts through measures consistent with regional open space policies for conserving natural lands, community open space, and farmlands. All projects should demonstrate consideration of alternatives that would avoid or reduce impacts to open space. • Individual projects should include into project	**Consistent.** The Project Site is currently developed with office buildings, industrial structures, a fitness center, and related parking lots and structures. The Project is an urban infill development that avoids significant impacts to regionally significant open space resources, as no open space resources are located on the Project Site. There are no rural, agricultural, recreational, or environmentally sensitive areas on the Project Site. The Project would provide up to approximately 716,434 square-feet of open space. The existing fitness center and most of the office buildings would be retained as part of the Project. In addition, the Project

Table IV.J-1
SCAG Regional Comprehensive Plan Project Consistency Analysis

Policy	Consistency Discussion
design, to the maximum extent practicable, mitigation measures and recommended best practices aimed at minimizing or avoiding impacts to natural lands, including, but not limited to FHWA's Critter Crossings, and Ventura County mitigation guidelines. • Project level mitigation for RTP's significant cumulative and growth-inducing impacts on open space resources will include but not be limited to the conservation of natural lands, community open space and important farmland through existing programs in the region or through multi-party conservation compacts facilitated by SCAG. • Project sponsors should ensure that transportation systems proposed in the RTP avoid or mitigate significant impacts to natural lands, community open space and important farmland, including cumulative impacts and open space impacts from the growth associated with transportation projects and improvements. • Project sponsors should fully mitigate direct and indirect impacts to open space resulting from implementation of regionally significant impacts.	Applicant would be required to pay parkland fees to the City.
Water	
WA-9 Developers and local governments should consider potential climate change hydrology and resultant impacts on available water supplies and reliability in the process of creating or modifying systems to manage water resources for both year-round use and ecosystem health.	**Consistent.** The Project would comply with CalGreen requirements of the California Building Code, which is designed to reduce the Project's water use. In addition, as described in **Section IV.P.2, Utilities and Service Systems – Water**, the Project would implement measures to promote efficient water use such as high efficiency toilets, Energy Star clothes washers, drought tolerant plants, artificial turf in select locations, drip/subsurface irrigation, and pool/spa recirculating filtration equipment.
WA-11 Developers and local governments should encourage urban development and land uses to make greater use of existing and upgraded facilities prior to incurring new infrastructure impacts.	**Consistent.** The Project is an urban infill development that would connect to the City's existing water service infrastructure adjacent to the Project Site. As discussed in **Section IV.P.2 Utilities and Service Systems – Water**, prior to issuance of a building permit, the Project Applicant would confirm with the City of Alhambra that the capacity of the existing water distribution infrastructure could accommodate the Project's projected water consumption. The Project Applicant shall implement any upgrade to the water infrastructure serving the Project Site that is needed to accommodate the Project's water distribution needs, if not accommodated by existing infrastructure.

Table IV.J-1
SCAG Regional Comprehensive Plan Project Consistency Analysis

Policy	Consistency Discussion
WA-12 Developers and local governments should reduce exterior uses of water in public areas, and should promote reduced use in private homes and businesses, by shifting to drought-tolerant native landscape plants (xeriscaping), using weather-based irrigation systems, educating other public agencies about water use, and installing water related pricing incentives.	**Consistent.** The Project would comply with CalGreen requirements of the California Building Code, which contain measures to reduce the Project's water uses, including specified flow rate plumbing fixtures, regulations regarding irrigation controllers and design, and requirements for provision of roof space for future electrical solar systems. In addition, as described in **Section IV.P.2, Utilities and Service Systems – Water**, the Project would comply with the Green Building Code, which imposes water conservation measures in landscaping, to promote efficient water use.
WA-32 Developers and local governments should pursue water management practices that avoid energy waste and create energy savings/supplies.	**Consistent.** The Project would comply with CalGreen requirements of the California Building Code, for water and energy conservation. The Project would exceed Title 24 standards through compliance with the City's Green Building Ordinance.
Energy	
EN-8 Developers should incorporate, and local governments should include the following land use principles that use resources efficiently, eliminate pollution and significantly reduce waste into their projects, zoning codes and other implementation mechanisms: • Mixed-use residential and commercial development that is connected with public transportation and utilizes existing infrastructure. • Land use and planning strategies to increase biking and walking trips.	**Consistent.** The Project is a residential development proximate to existing bus lines. The Project would encourage biking due to the inclusion of bicycle parking spaces.
EN-9 Local governments should include energy analyses in environmental documentation and general plans with the goal of conserving energy through the wise and efficient use of energy. For any identified energy impacts, appropriate mitigation measures should be developed and monitored. SCAG recommends the use of Appendix F, Energy Conservation, of the California Environmental Quality Act.	**Consistent. Section IV.E, Energy** includes an analysis of the Project's impact with respect to energy. As discussed therein, the Project would not result in a wasteful or inefficient use of energy.
EN-10 Developers and local governments should integrate green building measures into project design and zoning such as those identified in the U.S. Green Building Council's Leadership in Energy and Environmental Design, Energy Star Homes, Green Point Rated Homes, and the California Green Builder Program. Energy saving measures that should be explored for new and remodeled buildings include: • Using energy efficient materials in building design,	**Consistent.** The Project would meet or exceed Title 24 standards and would implement specific sustainability measures, including: provision of heat island reduction strategies for hardscape and roofing material; verification that the Project's energy-related systems are installed, calibrated, and perform according to the owner's Project requirements; provision of zero-use chlorofluorocarbon (CFC)-based refrigerants in building heating, ventilating, air conditioning,

Table IV.J-1
SCAG Regional Comprehensive Plan Project Consistency Analysis

Policy	Consistency Discussion
construction, rehabilitation, and retrofit. • Encouraging new development to exceed Title 24 energy efficiency requirements. • Developing Cool Communities measures including tree planting and light-colored roofs. These measures focus on reducing ambient heat, which reduces energy consumption related to air conditioning and other cooling equipment. • Utilizing efficient commercial/residential space and water heaters: This could include the advertisement of existing and/or development of additional incentives for energy efficient appliance purchases to reduce excess energy use and save money. Federal tax incentives are provided online at http://www.energystar.gov/index.cfm?c+Projects.pr_tax_credits. • Encouraging landscaping that requires no additional irrigation: utilizing native, drought tolerant plants can reduce water usage up to 60 percent compared to traditional lawns. • Encouraging combined heating and cooling (CHP), also known as cogeneration, in all buildings. • Encouraging neighborhood energy systems, which allow communities to generate their own electricity. • Orienting streets and buildings for best solar access. • Encouraging buildings to obtain at least 20% of their electric load from renewable energy.	and refrigeration systems; and inclusion of drought tolerant landscaping.
EN-11 Developers and local governments should submit projected electricity and natural gas demand calculations to the local electricity or natural gas provider, for any project anticipated to require substantial utility consumption. Any infrastructure improvements necessary for project construction should be completed according to the specifications of the energy provider.	**Consistent.** As part of the Draft EIR process, service request letters were sent to appropriate electricity and natural gas providers and responses were received (included in Draft EIR **Appendix J**). Any necessary infrastructure improvements required to accommodate the Project would be installed consistent with the requirements of these utilities and of the City of Alhambra.
EN-12 Developers and local governments should encourage that new buildings are able to incorporate solar panels in roofing and tap other renewable energy sources to offset new demand on conventional power sources.	**Consistent.** The Project would comply with the CalGreen requirements of the California Building Code and would include roof space for future solar panels. Although the Project is not required to include solar panels, the Project would receive electricity from Southern California Edison (SCE), which obtains a portion of its electricity supplies from renewable sources. **Section IV.E, Energy** includes a discussion of renewable energy.

Table IV.J-1
SCAG Regional Comprehensive Plan Project Consistency Analysis

Policy	Consistency Discussion
Solid Waste	
SW-14 Developers and local governments should integrate green building measures into project design and zoning including, but not limited to, those identified in the U.S. Green Building Council's Leadership in Energy and Environmental Design, Energy Star Homes, Green Point Rated Homes, and the California Green Builder Program. Construction reduction measures to be explored for new and remodeled buildings include: • Reuse and minimization of construction and demolition (C&D) debris and diversion of C&D waste from landfills to recycling facilities. • An ordinance that requires the inclusion of a waste management plan that promotes maximum C&D diversion. • Source reduction through (1) use of building materials that are more durable and easier to repair and maintain, (2) design to generate less scrap materials through dimensional planning, (3) increased recycled content, (4) use of reclaimed building materials, and (5) use of structural materials in a dual role as finish material (e.g., stained concrete flooring, unfinished ceilings, etc.). • Reuse of existing building structure and shell in renovation projects. Building lifetime waste reduction measures that should be explored for new and remodeled buildings include: • Development of indoor recycling program and space. • Design for deconstruction. • Design for flexibility through use of moveable walls, raised floors, modular furniture, moveable task lighting, and other reusable components.	**Consistent.** The Project would include a demolition and construction waste recycling program, and Project construction materials would be recycled. In addition, the Project would provide recycling storage areas for designation of recycling areas to facilitate recycling. The Project would comply with the CalGreen requirements of the California Building Code, which contains provisions related to construction waste diversion and recycling by Project occupants.
Source: Southern California Association of Governments, Regional Comprehensive Plan, October 2008.	

As illustrated in Table IV.J-1, the Project would be substantially consistent with the applicable policies of the SCAG 2008 RCP. Therefore, impacts would be less than significant.

(b) SCAG 2016-2040 RTP/SCS

A discussion of the Project's consistency with the policies applicable to individual development projects in the 2016-2040 RTP/SCS is presented in Table IV.J-2, below.

Table IV.J-2
SCAG 2016-2040 RTP/SCS Project Consistency Analysis

Goals	Consistency Discussion
2. Maximize mobility and accessibility for all people and goods in the region.	**Partially Consistent.** Project-generated vehicle miles traveled would be reduced by providing higher density infill residential development in proximity to existing bus lines and on the same site as office uses. In addition, the Project would be located near other commercial uses and employment areas in Alhambra and would include bicycle amenities and walkways to facilitate non-automobile dependent mobility and accessibility. On the other hand, as discussed in **Section IV.N, Transportation**, the Project would have a significant and unavoidable impact with respect to intersection Levels of Service (LOS) at 3-5 intersections within the local area. The addition of Project traffic to the local roadway network would increase existing levels of congestion.
6. Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	**Consistent.** Project-generated vehicle miles traveled would be reduced by providing higher density infill residential development in proximity to existing bus lines and on the same site as office uses. In addition, the Project would be located near other commercial uses and employment areas in Alhambra. As discussed in **Section IV.C, Air Quality**, the completed Project would have a less-than-significant impact with respect to local and regional air emissions. The Project would create a pedestrian friendly environment and activate the street frontages along Mission Road, Date Avenue, and Fremont Avenue, and support accessibility for future residents and guests to the area. Finally, the Project would encourage bicycling with the inclusion of bicycle parking spaces.
7. Actively encourage and create incentives for energy efficiency, where possible.	**Consistent.** The Project would comply with CalGreen requirements of the California Building Code, for water and energy conservation. The Project would meet or exceed Title 24 standards. In addition, the Project would also be consistent with the City of Alhambra Building Code, which contains measures to reduce the Project's energy and water uses, including specified flow rate plumbing fixtures, regulations regarding irrigation controllers and design, and requirements for provision of roof space for future electrical solar systems. Finally, the Project would implement specific sustainability measures, including: provision of heat island reduction strategies for hardscape and roofing material; verification that the

Table IV.J-2
SCAG 2016-2040 RTP/SCS Project Consistency Analysis

Goals	Consistency Discussion
	Project's energy-related systems are installed, calibrated, and perform according to the owner's Project requirements; provision of zero-use CFC-based refrigerants in building heating, ventilating, air conditioning, and refrigeration systems; inclusion of drought tolerant landscaping; high efficiency toilets; energy efficient clothes washers; artificial turf in certain locations; drip/subsurface irrigation; and pool/spa recirculating filtration.
8. Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	**Consistent.** Project-generated vehicle miles traveled would be reduced by providing higher density infill residential development in proximity to existing bus lines and on the same site as office uses. In addition, the Project would be located near commercial uses and employment areas in Alhambra and would also include residential amenity space. Finally, the Project would create a pedestrian friendly environment and activate the street frontages along Mission Road, Date Avenue, and Fremont Avenue, and would support accessibility for future residents and guests to the area and encourage bicycling with the inclusion of bicycle parking spaces.
Source: Southern California Association of Governments, Regional Transportation Plan/Sustainable Communities Strategy, April 2016.	

While the 2016-2040 RTP/SCS focuses on transportation investments in the SCAG region, as demonstrated in Table IV.J-2, the Project would be consistent with the applicable 2016-2040 RTP/SCS policies and as such, the Project's impacts would be less than significant.

(c) Air Quality Management Plan (AQMP)

The Project's consistency with the region's AQMP is discussed in **Section IV.C, Air Quality**, of the Draft EIR. As discussed therein, the Project would be consistent with the AQMP, and impacts would be less than significant.

(d) Congestion Management Plan (CMP)

Consistency of the Project with the CMP is discussed in **Section IV.N, Transportation**, of the Draft EIR. As discussed therein, the Project would be consistent with the CMP, and impacts would be less than significant with the implementation of Project mitigation.

(e) Alhambra General Plan

For a discussion of Project consistency with applicable policies contained in the General Plan Noise Element, see **Section IV.K, Noise**, of the Draft EIR. For a discussion of Project consistency with applicable policies contained in the General Plan Housing Element, see **Section IV.L, Population and Housing**, of the Draft EIR.

As shown in Table IV.J-3, the Project would be substantially consistent with the applicable policies of the recently updated General Plan and, therefore, the Project's impacts would be less than significant.

Table IV.J-3
2019 Alhambra General Plan Project Consistency Analysis

Draft Objective/Policy	Project Consistency
Land Use Chapter	
Goal LU-1: Preservation of the character of existing single-family neighborhoods	
LU-1B: Protect and enhance the unique character and identity of single-family neighborhoods.	**Consistent:** The Proposed Project would be built to the north of an existing single-family residential neighborhood but would be separated from it by both an existing rail corridor and roadway. Although the Project would not develop any single-family homes, the inclusion of 1,061 more residential units within this particular area of the City would focus growth within a designated urban node, thus preserving existing single-family neighborhoods.
LU-1C: Tailor building height and scale to be sensitive to surrounding residential and commercial uses.	**Consistent:** The Project is an infill development near existing office, commercial, and residentially zoned lands and uses. The development of residential units would not create a conflict of compatibility in and around the Project Site. Nonetheless, the Project would include structures that are lower in height than existing uses on the Project Site and surrounding commercial zoned lots. In particular, the maximum Proposed Project height of roughly 67 feet for the new development is lower than the code allowed maximum height for this particular area of the City.
LU-1D: Encourage land use patterns that minimize incompatibility between uses.	**Consistent:** Project design, parking, and circulation will all be developed in accordance with City regulations, which will also help to eliminate any potential conflict between uses. The Project is an infill development near existing office, commercial, and residentially zoned lands and uses. The development of residential units would not create a conflict of compatibility in and around the Project Site.
LU-1E: Discourage scattered multi-family development and encourage the preservation of existing, stable single-family neighborhoods.	**Consistent:** The Project would create a new multi-family neighborhood. The Project would be constructed on a single site near existing commercial, retail, and restaurant land uses and would not divide or disrupt neighboring single-family areas.
Goal LU-2: Enhancement of commercial and industrial areas to attract jobs and expand the City's tax base.	

Draft Objective/Policy	Project Consistency
LU-2A: Promote the use of high-quality design, materials, landscaping, and pedestrian connections.	**Consistent:** The Project would enhance the existing office campus of the Project Site by blending the new residential community into the overall site plan with a consistent landscaping theme and the installation of pedestrian pathways. The design of the Project pays close attention to the existing historic and contemporary building scale, massing, and style present at the Project Site and utilizes high-quality materials intended to create a well-integrated mixed-use urban community.
LU-2C: Design parking and loading areas as an integral part of the total project design. Locate parking and loading areas so that the visual impacts of these areas on adjacent development and the public right-of-way are minimized, and screen them attractively using a combination of fencing and landscaping.	**Consistent:** The Project would utilize approximately 1,800 existing parking spaces within two existing parking structures in the Office Plan Area for the existing office buildings that are to remain. A 490-space parking structure is proposed in the East Plan Area to also serve the parking needs of the Office Plan Area. With the construction of this parking garage, there would be 2,290 parking spaces provided for the exclusive use of the Office Plan Area, which exceeds the maximum daily parking demand for the buildings. The proposed residential areas will require a total of 2,057 additional resident and guest parking spaces, which would be provided in six-level above grade garages that would be wrapped with the residential units (in the South and Corner Plan Areas), as well as in 2.25 below grade garage levels in the North Plan Area. Each of the residential plan areas is self-sufficient for parking. Neither the proposed loading areas nor the new residential parking would be visible from off-site locations.
LU-2E: Encourage the development of commercial land uses that enhance the community's share of the regional retail sales market.	**Partially Consistent:** Although the Proposed Project would not develop any additional commercial uses at the Project Site, the development of a residential community that retains existing on-site office land uses and enhances and invigorates a 38-acre parcel in the City is likely to have a beneficial impact on existing commercial uses in the surrounding area.
Goal LU-3: A high-quality overall community appearance and identity.	
LU-3A: Foster new development that is consistent with the established land use type, intensity, character, and scale of the area.	**Consistent.** The Project would redevelop the Project Site with a mixed-use development, including 1,061 residential dwelling units, residential amenity space, and up to approximately 716,434 square-feet of open space. The Project Site is designated as "Activity Node C" in the General Plan.[4] Activity Nodes A through D are identified by the General Plan as locations within the City envisioned as capturing retail, office, and hotel "leakage", containing distinctive streetscapes, retaining a core industrial area, encouraging development of regional commercial, and developing residences to serve the local workforce.

[4] *City of Alhambra, Draft General Plan, July 2018, Figure 1: Vision Plan, p. 3.*

Draft Objective/Policy	Project Consistency
LU-3D: Incorporate streetscape design improvements for important corridors, such as Atlantic, Fremont, Valley, Main, and Garfield.	**Consistent.** As stated above, active uses would be featured along street frontages in order to avoid blank walls and visible parking areas. Streetscape improvements would be provided, which include new landscaping, walkways, trees, and wayfinding signs along the Project's Fremont Avenue and Mission Road frontages. Additionally, the Project would provide landscaped areas close to the urban core, as the Project includes gardens and landscaped terraces at the street level.
Goal LU-7: Maintenance and development of vital, attractive, and functional corridors and activity nodes.	
LU-7A: Enhance commercial areas, including façade improvements, enriched streetscapes and landscaping, unified signage programs, and improved pedestrian access.	**Consistent.** As stated above, active uses would be featured along street frontages in order to avoid blank walls and visible parking areas. Streetscape improvements would be provided along Orange Street, Date Avenue, Mission Road, and Fremont Avenue, which include new landscaping, walkways, trees, and wayfinding signs. Additionally, the Project would provide access to landscaped areas close to the urban core, as the Project includes gardens and landscaped terraces at the street level. Terraces and gardens would provide shared amenity spaces for residents and guests to the area. Pedestrian linkages would be provided between the existing Alhambra office campus and the proposed residential community.
LU-7B: Properly scale a building's height and mass to the primary street it fronts on (e.g., taller buildings on larger boulevards and smaller buildings on narrower streets).	**Consistent:** The new five-story residential buildings in the North Plan Area would be a maximum of 60 feet in height above street grade along Orange Street and Date Avenue, while the new five-story residential buildings in the Corner Plan Area would be a maximum of 62 feet in height above street grade along Date Avenue. The new six-story residential buildings in the South Plan Area would be a maximum of nearly 67 feet in height above street grade along Mission Road, while the new five-level parking structure in the East Plan Area would be approximately 40 feet in height above street grade along Date Avenue. Generally, the proposed height regime would be consistent with this policy with the tallest new structure being adjacent to the largest of the four streets bordering the Project Site (Mission Road) and the shortest being adjacent to the mid-block portion of Date Avenue, the narrowest of the streets bordering the Project Site.
LU-7C: Provide appropriate buffers between commercial and residential uses.	**Consistent:** Although the development includes multi-family planned units, the Project itself would be built in accordance with applicable City land use designations and underlying zoning. The Project would be constructed on a single site near existing commercial, retail, and restaurant land uses and would not divide or disrupt neighboring single-family areas. The office and residential uses within the Project Site would be separated by landscaped buffer areas that would also constitute an open space amenity for residents.
Goal LU-8: Maintenance and development of quality public spaces.	

Draft Objective/Policy	Project Consistency
LU-8B: Ensure that signs, lighting, and other potential nuisances are sensitive to existing residential neighbors.	**Consistent:** Small directional signs would be placed at the various driveway entrances. The design of the Project endeavors to minimize impacts to adjacent off-site properties with respect to lighting and signage.
LU-8C: Enhance the open space network around corridors and activity nodes by providing paseos, courtyards, plazas, larger parkways, and landscaped setbacks.	**Consistent.** The Project would feature paseos, recreational courtyards, plazas, small landscaped park areas and setbacks as a fundamental component of the residential community and office campus design plan. Landscaped setbacks and pedestrian pathways would connect the Office Plan Area with the proposed new residential community.
LU-8D: Integrate group gathering spaces, drought-tolerant landscaping, trees, picnic areas, and community gardens into existing and future public spaces.	**Consistent.** The Project as proposed would include outdoor gathering/eating spaces, drought-tolerant landscaping, abundant trees, and garden areas for the use of residents and visitors. Terraces and gardens would provide shared amenity spaces for residents and guests.
Resources Chapter	
Goal R-6: Preservation of the cultural identity of Alhambra as a diverse residential and commercial city with distinct single-family neighborhoods.	
R-6C: Promote and maintain the unique history and architectural character of individual neighborhoods.	**Consistent:** The existing buildings of the CF Braun & Company Historic District within the Office Plan Area would be retained and linked to the new residential community via pedestrian pathways through landscaped gardens and open areas. The architectural design of the new structures within the South, Corner, and North Plan Areas utilizes themes from the CF Braun campus to promote and maintain the architectural character of the Project Site and extend it across the site's eastern portion.
Source: City of Alhambra, General Plan Update (Vision 2040), 2019.	

(f) Alhambra Zoning Code

As discussed previously, the Project Site is zoned PO (Professional Office) (refer to Figure III-1 in **Section III, Environmental Setting**, of the Draft EIR). The Project includes development of the Project Site with 1,061 residential dwelling units, over 10,000 square-feet of residential amenity space, and retention of approximately 902,001 square-feet of existing office space. All land uses proposed as part of the Project are allowed under the PO zoning for the Project Site either with or without a conditional use permit.

Discretionary approvals requested by the Project Applicant include the following:

1. Pursuant to Alhambra Municipal Code (AMC) Chapter 23.62, Residential Planned Development Permit;
2. Pursuant to AMC Chapter 23.66, Conditional Use Permit for Urban Residential development in the PO Zone;

3. Pursuant to AMC Chapter 22.48, Vesting Tentative Tract Map for a 10-lot subdivision for condominium purposes;
4. Pursuant to AMC Chapter 23.68, Variance to permit reduced and shared parking;
5. Pursuant to AMC Chapter 23.64, Design Review; and
6. Pursuant to AMC Chapter 23.71, Development Agreement with a term of 10 years.

Additionally, the Project would comply with the City's bicycle parking and open space requirements, respectively. The Project would comply with all setback and height requirements and would not request a zone change or zoning administrator adjustment. As such, the Project would be substantially consistent with the City's Zoning Code, and the Project's impacts would be less than significant.

(g) Impact Conclusion

As discussed in the above compatibility analyses, the Project would generally be consistent with the applicable and relevant policies and objectives of the SCAG Regional Comprehensive Plan, the SCAG 2016-2040 RTP/SCS, the Air Quality Management Plan, Metro's Congestion Management Plan, the City of Alhambra's General Plan, and the City's Zoning Code. Therefore, impacts would be **less than significant**.

(2) Mitigation Measures

Impacts related to the Project's consistency with applicable land use plans, policies, and regulations would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to the Project's consistency with applicable land use plans, policies, and regulations would be **less than significant** without mitigation.

e) Cumulative Impacts

(1) Impact Analysis

Cumulative land use impacts could occur if any of the known cumulative projects or forecasted growth for the area would result in land uses that are inconsistent with adopted land use plans when combined with the impacts of the Project. As previously stated in **Section III, Environmental Setting** (see Table III-2), there are nine

cumulative projects located within proximity to the Project Site, six of which are within the City of Alhambra and three of which are within the City of Monterey Park.

Given the built-out conditions of the greater Los Angeles region and the City of Alhambra, including the Project area, cumulative development would likely convert existing underutilized properties to higher-density developments to respond to the need for housing, sources of employment, and associated retail land uses. The Project would assist in implementing multiple local and regional planning goals and policies for the southern California area, which would in turn assist the City in achieving short- and long-term planning goals and objectives related to increasing the housing stock, reducing urban sprawl, efficiently utilizing existing infrastructure, and helping the City meet its housing needs. This cumulative development is generally consistent with SCAG, SCAQMD, and City policies for promoting more intense land uses near transit corridors and job centers, providing a variety of housing options, and increasing the number of retail and commercial uses within walking distance of housing and employment. Further, all cumulative projects in the City would be subject to the same local development standards and potential mitigation requirements as the Project. Accordingly, the Project would not combine with the cumulative projects to create a cumulatively significant land use impact, and impacts would be considered **less than significant**.

(2) Mitigation Measures

Cumulative impacts related to land use and planning would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to land use and planning would be **less than significant** without mitigation.

IV. Environmental Impact Analysis

K. Noise

1. Introduction

This section evaluates the noise and groundborne vibration impacts resulting from the construction and operation of the Project. Noise monitoring data and calculations are included in **Appendix K** of the Draft EIR.

a) Fundamentals of Sound and Environmental Noise

Sound is described in terms of amplitude (i.e., loudness) and frequency (i.e., pitch). The standard unit of sound amplitude measurement is the decibel (dB). The dB scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted dB scale (dBA) provides this compensation by emphasizing frequencies in a manner approximating the sensitivity of the human ear.

Noise, on the other hand, is typically defined as unwanted sound audible at such a level that the sound becomes an undesirable by-product of society's normal day-to-day activities. Sound becomes unwanted when it interferes with normal activities, causes actual physical harm, or results in adverse health effects. The definition of noise as unwanted sound implies that it has an adverse effect, or causes a substantial annoyance, to people and their environment. However, not every unwanted audible sound interferes with normal activities, causes harm, or has adverse health effects. For unwanted audible sound (i.e., noise) to be considered adverse, it must occur with sufficient frequency and at such a level that these adverse impacts are reasonably likely to occur. Thresholds of significance, discussed below, differentiate between benign unwanted audible sound and significant adverse unwanted audible sound.

A typical noise environment consists of a base of steady ambient noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background, noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise, such as traffic on a major highway. Table IV.K-1 illustrates representative noise levels in the environment.

Several rating scales have been developed to analyze the adverse effects of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Those that are applicable to this analysis are:

- **L_{eq}** - An Leq, or equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the Leq of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- **L_{max}** - The maximum instantaneous noise level experienced during a given period of time.
- **L_{min}** - The minimum instantaneous noise level experienced during a given period of time.
- **CNEL** - The Community Noise Equivalent Level (CNEL) is a 24-hour average Leq with a 5 dBA "weighting" during the hours of 7:00 P.M. to 10:00 P.M. and a 10 dBA "weighting" added to noise during the hours of 10:00 P.M. to 7:00 A.M. to account for noise sensitivity in the evening and nighttime, respectively. The logarithmic effect of these additions is that a constant 60 dBA 24 hour L_{eq} would result in a CNEL of 66.7 dBA.

Table IV.K-1
Representative Environmental Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	—110—	Rock Band
Jet Fly-over at 100 feet		
	—100—	
Gas Lawnmower at 3 feet		
	—90—	
		Food Blender at 3 feet
Diesel Truck going 50 mph at 50 feet	—80—	Garbage Disposal at 3 feet
Noisy Urban Area during Daytime		
Gas Lawnmower at 100 feet	—70—	Vacuum Cleaner at 10 feet
Commercial Area		Normal Speech at 3 feet
Heavy Traffic at 300 feet	—60—	
		Large Business Office
Quiet Urban Area during Daytime	—50—	Dishwasher in Next Room
Quiet Urban Area during Nighttime	—40—	Theater, Large Conference Room (background)
Quiet Suburban Area during Nighttime		
	—30—	Library
Quiet Rural Area during Nighttime		Bedroom at Night, Concert Hall (background)
	—20—	
		Broadcast/Recording Studio
	—10—	
Lowest Threshold of Human Hearing	—0—	Lowest Threshold of Human Hearing

Note: Colors are for illustrative purposes only.
Source: California Department of Transportation, Technical Noise Supplement, Page 2-20, September 2013.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day, night, or over a 24-hour period. For residences, environmental noise levels are generally considered to be low when the CNEL is below 60 dBA, moderate in the 60 to 70 dBA range, and high above 70 dBA. Frequent exposure to noise levels greater than 85 dBA over time can cause temporary or permanent hearing loss.[1] Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet suburban residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and

[1] *U.S. Department of Health and Human Services, National Institute on Deafness and Other Communication Disorders (NIDCD), Noise-Induces Hearing Loss, February 2017, website: https://www.nidcd.nih.gov/health/noise-induced-hearing-loss, accessed: December 2018.*

commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or mixed residential/commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA).

Small changes in noise exposure of 1 to 2 dBA are usually imperceptible to the average person and are insignificant regardless of the absolute level. Changes of 3 dBA are barely noticeable and may not be significant depending upon the absolute level. A 5 dBA CNEL increase is readily noticeable to most people, while the human ear perceives a 10 dBA CNEL increase as a doubling of sound. However, there is no direct correlation between increasing or even doubling noise-generating sources and what is detectable by the human ear as an increase in noise level. The human ear perceives a 10 dB(A) increase in sound level to be a doubling of sound volume, but doubling the sound energy (i.e., the noise-generating activity) only results in a 3 dB(A) increase in sound. This means that a doubling of sound wave energy (e.g., doubling the volume of traffic on a roadway) would result in a barely perceptible change in sound level to the human ear. Thus, relatively sizeable increases in baseline noise generation are not necessarily perceived as substantial noise increases by the human ear.

Noise levels from a particular source generally decline as distance to the receptor increases. Other factors, such as the weather and reflective barriers, also help intensify or reduce the noise level at any given location. A commonly used rule of thumb for roadway noise is that for every doubling of distance from the source (assume a starting point of 50 feet), the noise level is reduced by about 3 dBA at acoustically “hard” locations (i.e., the area between the noise source and the receptor is nearly complete asphalt, concrete, hard-packed soil, or other solid materials) and 4.5 dBA at acoustically “soft” locations (i.e., the area between the source and receptor is normal earth or has vegetation, including grass). Noise from stationary or point sources is reduced by about 6 to 7.5 dBA for every doubling of distance at acoustically hard and soft locations, respectively.

b) Fundamentals of Environmental Groundborne Vibration

Vibration is an oscillatory motion that can be described in terms of displacement, velocity, and acceleration. Unlike noise, vibration is not a common environmental issue, as it is unusual for vibration from vehicles sources to be perceptible. Common sources of vibration may include trains, construction activities, and certain industrial operations.

This analysis discusses vibration in terms of Peak Particle Velocity (PPV). PPV is commonly used to describe and quantify vibration impacts to buildings and other

structures. PPV levels represent the maximum instantaneous peak of a vibration signal and are generally measured in inches per second (in/sec).[2]

High levels of vibration may cause damage to buildings or even physical personal injury. However, vibration levels rarely affect human health outside the personal operation of certain construction equipment or industrial tools. Instead, most people consider environmental vibration to be an annoyance that may affect concentration or disturb sleep. Background vibration in residential areas is usually not perceptible, and perceptible indoor vibrations are generally caused by sources within buildings themselves, such as slamming doors or heavy footsteps. Vibration from traffic on smooth roadways is rarely perceptible, even from larger vehicles such as buses or trucks. The threshold of human perception of vibration is approximately 0.01-0.02 in/sec PPV.[3]

2. Environmental Setting

a) Existing Conditions

(1) Existing Ambient Noise Levels

The Project Site is relatively flat and is developed with a light industrial/storage, office buildings, a fitness center, and structure and surface parking lot uses. To establish baseline noise conditions, existing noise levels were monitored at four locations near the Project Site. The locations of the noise measurements are shown on Figure IV.K-1. The results of the measurements are summarized in Table IV.K-2. The noise monitoring outputs are provided in **Appendix K** of the Draft EIR. As shown in Table IV.K-2, the ambient recorded noise levels ranged from 46.5 dBA Leq to 67.0 Leq dBA near the Project Site.

[2] *Federal Transit Administration, Transit Noise and Vibration Impact Assessment, September 2018.*

[3] *Caltrans, Transportation and Construction Vibration Guidance Manual, September 2013.*

Table IV.K-2
Existing Ambient Noise Levels

No.	Location	Primary Noise Sources	Noise Levels[a]		
			L_{eq}	L_{max}	L_{min}
1	Near the southwest frontage of the Project Site, along Fremont Avenue.	Traffic and pedestrian activity along Fremont Avenue.	67.0	79.0	52.8
2	Near the northeast frontage of the Project Site, along Date Avenue.	Traffic and pedestrian activity along Date Avenue.	65.8	75.6	48.8
3	Near the center of the Project Site.	Parking and pedestrian activity on Project Site.	46.5	57.2	38.1
4	South of the Project Street along Front Street, near residential sensitive receptors.	Traffic and residential/pedestrian activity along Front Street.	60.1	76.6	41.1

[a] *Noise measurements were taken on October 2, 2018 at each location for a duration of 15 minutes. See Appendix K for noise data.*
Source: Pomeroy Environmental Services, 2018.

(2) Existing Roadway Noise Levels

Existing roadway noise levels were calculated for roadway segments that are expected to be most directly impacted by Project-related traffic, which, for the purpose of this analysis, include the roadways that are nearest to the Project Site and would convey the most Project-generated trips (see **Section IV.N, Transportation**, of the Draft EIR). These roadways, when compared to roadways located farther away from the Project Site, would experience the greatest increase in traffic generated by the Project. Calculation of the existing roadway noise levels was accomplished using the Federal Highway Administration's Traffic Noise Model 2.5 (TNM 2.5) and traffic volumes from the Project's Traffic Impact Analysis (in **Appendix E** of the Draft EIR).

Source: Pomeroy Environmental Services, 2019.

Figure IV.K-1
Noise Monitoring and Sensitive Receptor Map

TNM 2.5 calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and environmental conditions. The average daily noise levels along study area roadway segments are presented in Table IV.K-3.

Table IV.K-3
Existing Roadway Noise Levels

Roadway	Roadway Segment	Primary Existing Land Uses	Distance from Roadway Centerline (feet)	dBA L_{dn}
Fremont Avenue	North of Orange St.	Commercial Mix	50 feet E	74.9
			35 feet W	75.5
	South of Orange St.	Commercial Mix	40 feet E	75.7
			55 feet W	73.5
	South of Mission Rd.	Residential	45 feet E	75.9
			55 feet W	74.7
Date Avenue	North of Orange St.	Commercial/ Industrial Mix	40 feet E	67.4
			40 feet W	67.7
	South of Orange St.	Commercial/ Industrial Mix	45 feet E	64.3
			45 feet W	65.1
	North of Mission Rd.	Commercial/ Industrial Mix	40 feet E	64.4
			40 feet W	65.1
Orange Street	East of Fremont Ave.	Commercial Mix	60 feet N	62.0
			60 feet S	61.7
Mission Road	East of Date Ave.	Commercial Mix	40 feet N	70.6
			40 feet S	71.1
	West of Date Ave.	Commercial Mix	40 feet N	70.6
			40 feet S	70.9
	West of Fremont Ave.	Commercial Mix	50 feet N	69.8
			50 feet S	70.4

Traffic data: Traffic Impact Analysis, The Villages at the Alhambra Development, Kimley-Horn, June 2019. Data sheets provided in Appendix K.
Source: Pomeroy Environmental Services, 2019.

(3) Existing Groundborne Vibration Levels

No sources of groundborne vibration were perceptible at any noise measurement location during the course of the field noise study. It is likely that perceptible groundborne vibrations could occasionally be generated by sources such as garbage trucks and other large vehicles (e.g. semi-trucks, buses, cement trucks, etc.), or by trains utilizing the railway south of Mission Road. However, groundborne vibration levels surrounding the Project site are by and large imperceptible, suggesting that groundborne vibration levels are generally below the 0.01-0.02 PPV threshold of perception for humans.

(4) Noise & Vibration Sensitive Land Uses

Noise-sensitive land uses (sometimes also called "sensitive receptors") include residences, transient lodgings, schools, libraries, churches, hospitals, nursing homes, auditoriums, concert halls, amphitheaters, playgrounds, and parks. In addition, for purposes of this analysis, vibration-sensitive uses include historical buildings or buildings that are extremely susceptible to vibration damages, and uses that may be sensitive in terms of human annoyance and operational interference resulting from vibration. As shown on Figure IV.K-1, the nearest sensitive receptors to the Project Site are residences to the south (220 feet from the Project Site) along Front Street.

b) Regulatory Framework

(1) Federal

(a) Noise

There are no federal noise standards that directly regulate environmental noise related to the construction or operation of the Project. However, the Office of Safety and Health Administration (OSHA) regulations safeguard the hearing of workers exposed to occupational noise.

(b) Vibration

For the evaluation of construction-related vibration impacts, FTA guidelines and recommendations are used given the absence of applicable federal, County, or City standards specific to temporary construction activities and their effect on nearby buildings and other structures.

Though not regulatory in nature, the FTA has established vibration impact criteria for buildings and other structures, as building and structural damages are generally the foremost concern when evaluating the impacts of construction-related vibrations. Table IV.K-4 shows the FTA's vibration criteria for building and structural damage.

Table IV.K-4
Construction Vibration Damage Criteria

Building Category	PPV (in/sec)
I. Reinforced-concrete, steel or timber (no plaster)	0.50
II. Engineered concrete and masonry (no plaster)	0.30
III. Non-engineered timber and masonry buildings	0.20
IV. Buildings extremely susceptible to vibration damage	0.12
Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, September 2018.	

(2) State

(a) 2017 General Plan Guidelines

The State of California's 2017 General Plan Guidelines propose county and city standards for acceptable exterior noise levels based on land use. These standards are incorporated into land use planning processes to prevent or reduce noise and land use incompatibilities. The State's suggested compatibility considerations are not regulatory in nature, but recommendations intended to aid communities in determining their noise-acceptability standards. State guidelines for land use and noise exposure compatibility are shown in Table IV.K-5.

Table IV.K-5
Community Noise Exposure (dBA CNEL)

Land Use	Normally Acceptable[a]	Conditionally Acceptable[b]	Normally Unacceptable[c]	Clearly Unacceptable[d]
Single-Family, Duplex, Mobile Homes	50 - 60	55 - 70	70 - 75	above 75
Multi-Family Homes	50 - 65	60 - 70	70 - 75	above 75
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 - 70	60 - 70	70 - 80	above 80
Transient Lodging – Motels, Hotels	50 - 65	60 - 70	70 - 80	above 80
Auditoriums, Concert Halls, Amphitheaters	---	50 - 70	---	above 65
Sports Arena, Outdoor Spectator Sports	---	50 - 75	---	above 70
Playgrounds, Neighborhood Parks	50 - 70	---	67 - 75	above 72
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 - 75	---	70 - 80	above 80
Office Buildings, Business and Professional Commercial	50 - 70	67 - 77	above 75	---
Industrial, Manufacturing, Utilities, Agriculture	50 - 75	70 - 80	above 75	---

Note: Colors are for illustrative purposes only.
[a] Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
[b] Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
[c] Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
[d] Clearly Unacceptable: New construction or development should generally not be undertaken.
Source: California Office of Planning and Research, General Plan Guidelines – Noise Element Guidelines (Appendix D), Figure 2, 2017.

(3) Local

(a) City of Alhambra General Plan Noise Element

As discussed previously, California Government Code Section 65302(g) requires that a noise element be included in the general plan of each county and city in the state. The City is currently updating their General Plan. However, the Noise Element contained in the Alhambra General Plan establishes interior noise thresholds and identifies acceptable noise levels for various land uses types. The City's Noise and Land Use Compatibility Standards are presented in Table IV.K-6. As shown in Table IV.K-6, the guidelines recommend an exterior noise exposure of less than 60 dB L_{dn} for residential uses as "clearly compatible" and up to 70 dB L_{dn} are considered "normally compatible" and may be permitted if noise mitigation is included in the design. Because commercial uses are not considered sensitive, the allowable noise exposures are more lenient.

The City has recently updated its General Plan in August 2019. A draft of the updated General Plan had been released in July 2018 for public review and a revised draft released in early 2019. The updated General Plan retains the land use designation of Office Professional for the Project Site and contains the following policies and goals related to noise that are relevant to the Project or Project Site:

- **Goal HS-6** Minimization of exposure to excessive noise.
    - **Policy HS-6A** Avoid or reduce excessive noise impacts on noise-sensitive receptors through land use planning, review of new development proposals, and physical interventions such as noise insulation in building design, setbacks, or noise barriers when necessary.
    - **Policy HS-6B** Comply with and enforce applicable City Municipal Code standards related to noise.
    - **Policy HS-6C** Use the land use/noise compatibility matrix on page 94 to determine the compatibility of proposed new development in the City with ambient noise levels.

Table IV.K-6
City of Alhambra Noise/Land Use Criteria

Land Use Categories		Day Night Noise Level (LDN or CNEL, dB)						
Categories	**Uses**	**<55**	**60**	**65**	**70**	**75**	**80>**	
Residential	Single-Family, Duplex, Multi-Family	A	A	B	B	C	D	D
	Mobile Home	A	A	B	C	C	D	D
Commercial Regional, District	Hotel, Motel, Transient Lodging	A	A	B	B	C	C	D
Commercial Regional, Village District, Special	Commercial Retail, Bank, Restaurant, Movie Theater	A	A	A	A	B	B	C
Commercial Industrial Institutional General	Office Building, Research and Development, Professional Offices, City Office Building	A	A	A	B	B	C	D
Commercial Recreational Institutional Civic Center	Amphitheater, Concert Hall Auditorium, Meeting Hall	B	B	C	C	D	D	D
Commercial Recreation	Children's Amusement Park, Miniature Golf Course, Go-Cart Track, Equestrian Center, Sports Club	A	A	A	B	B	D	D
Commercial General, Special Industrial, Gen . Man. Institutional	Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities	A	A	A	A	B	B	B
Institutional General	Hospital, Church, Library, Schools, Classroom	A	A	B	C	C	D	D
Open Space	Parks	A	A	A	B	C	D	D
Open Space	Golf Course, Cemeteries, Nature Centers, Wildlife, Reserves, Wildlife Habitat	A	A	A	A	A	A	A
Agriculture	Agriculture	A	A	A	A	A	A	A

Zone A-Clearly Compatible: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
Zone B-Normally Compatible: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
Zone C-Normally Incompatible: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
Zone D-Clearly Incompatible: New construction or development should generally not be undertaken.
Source: City of Alhambra, General Plan, June 1987.

(b) Alhambra Municipal Code: Ch. 18.02 – Noise and Vibration Control Regulations

Chapter 18.02 of the Alhambra Municipal Code (AMC) contains noise and vibration control regulations that would have a limited applicability to the Project's construction noise sources, as the AMC exempts construction noises and vibrations from the chapter's provisions during the daytime hours when the Project's construction activities would occur. Specifically, Section 18.02.060(C) exempts "[n]oise sources associated with or vibration created by construction, repair, remodeling or grading of any real property…provided the activities do not take place between the hours of 7 p.m. and 7 a.m. on weekdays including Saturday, or at any time on Sunday or a federal holiday, and provided any vibration created does not endanger the public health, welfare and safety."

For other, non-exempt, noise sources, the following noise standards are instituted by AMC Section 18.02050(A) and are shown in Table IV.K-7, below:

Table IV.K-7
City of Alhambra Noise Ordinance Limits

Noise Zone[1]	Allowable Noise Level
Residential	55 dBA
Commercial	70 dBA
Mixed-Use	60 dBA

[1] Section 18.02.040 defines the noise zones accordingly:

Residential Noise Zone. All single, double- and multiple-family residential properties (R-1, R-2, R-3, or R-4), excluding dwelling units in the Mixed Use District.

Commercial Noise Zone. All commercial, manufacturing, and industrial properties (C-1, C-2, M-1, M-2 and the like).

Mixed Use Noise Zone. All dwelling units in the Mixed Use District.

Source: City of Alhambra Municipal Code, Section 18.02.050.

AMC Section 18.02.050 instructs that the allowable noise levels are not to be exceeded at the receiving property "as measured inside any dwelling unit or commercial structure at a point at least four feet from the wall, ceiling or floor nearest the noise source with windows and doors opening to the exterior of the structure in a closed position." For instances when the ambient noise level exceeds the allowable noise level standard, Section 18.02.050 instructs that the maximum allowable noise level should be represented by the maximum ambient noise level.

AMC Section 18.02.100 prohibits groundborne vibrations that are "perceptible without instruments at any point on any affected property adjoining the property on which the vibration source is located." It goes on to specify that "the perception threshold shall be

presumed to be more than 0.05 inches per second RMS vertical velocity." As Section 18.02.060(C) would exempt the Project's construction sources from this provision, the applicability of Section 18.02.100's vibration standard would be limited to the Project's operations.

3. Environmental Impacts

a) Methodology

AMC Section 18.02.060(C) would ultimately exempt construction noises from the chapter's provisions provided that the noise-generation activities occur within the stated hours of exemption. As the Project's construction activities would conform to these exempted hours, the Project would not result in a significant construction noise impact. Nevertheless, this analysis provides construction noise projections for nearby noise-sensitive receptors for informational purposes to demonstrate that the Project would not expose these receptors to unhealthy or otherwise considerable levels of construction noise. The Project's construction noise impacts associated with on-site construction activities was evaluated by logarithmically adding the Project's construction noise levels to existing ambient noise levels measured at or near sensitive receptor locations. Results were then analyzed by noting the increase in noise levels that on-site construction activities could produce. Reference equipment noise levels were obtained from the Federal Highway Administration's Roadway Construction Noise Model, version 1.1 (FHWA RCNM 1.1). Ambient noise levels were obtained from field measurement data. Construction noise levels were calculated based on the standard point source noise-distance attenuation factor of 6 dBA for each doubling of distance (inverse square law). Adjustments were conservatively applied in instances where factors such as ground surface or intervening structures/terrain could provide additional noise attenuation.

Off-site construction noise levels from haul trucks and other construction vehicles were estimated using the FHWA's TNM 2.5 noise model and then compared with existing ambient noise conditions along nearby roadways. However, as discussed above, the Project's construction activities would ultimately be exempted from the City's noise ordinance standards by conforming to the allowable hours set forth by AMC Section 18.02.060(C).

The Project's potential to result in significant noise impacts from on-site operational noise sources was assessed by identifying likely on-site noise sources and considering the impacts they could produce given the nature of the source (i.e., loudness and/or whether noise would be generated during daytime or more-sensitive nighttime hours), distances to nearby receptors, surrounding ambient noise levels, the presence of similar noise sources in the vicinity, and maximum allowable noise levels permitted by AMC Section 18.02.050. Noise levels associated with the proposed parking garage were estimated in

accordance with principles and guidelines recommended by the FTA in its 2018 Transit Noise and Vibration Impact Assessment manual.

The Project's off-site operational noise impact from its related traffic generation was estimated using the FHWA's TNM 2.5 noise model. Project-related roadside noise levels were estimated with TNM 2.5 and then compared with existing and future baseline roadside noise conditions along nearby roadways to determine significance.

The Project's potential to generate damaging levels of groundborne vibration was analyzed by identifying construction vibration sources and estimating the maximum vibration levels that they could produce at nearby buildings and structures, all based on the principles and guidelines recommended by the FTA in its 2018 Transit Noise and Vibration Impact Assessment manual. Vibration levels were then compared with the manual's suggested damage criteria for various building categories (see Table IV.K-4). Vibration levels were also compared with the manual's annoyance criteria for various land uses in order to determine the Project's potential to result in significance nuisance impacts from construction-related groundborne vibrations.

With regard to operational vibration impacts, significant sources of operational vibration are generally limited to heavy equipment or industrial operations. The Project would not include these uses.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

Consistent with Appendix G of the State CEQA Guidelines, a project will normally be deemed to have a significant adverse environmental impact on noise if it results in any of the following:

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; or

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

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?

(2) City of Alhambra - Construction Noise

AMC Section 18.02.060(C) exempts construction noise from its provisions so long as construction activities are limited to between 7:00 A.M. and 7:00 P.M. on weekdays (including Saturday). Construction occurring outside of these time periods would be subject to the City's allowable noise levels, which are shown in Table IV.K-7 and discussed above. Therefore, to result in a significant impact from construction noise sources, the Project would have to generate construction noises outside the exempted hours set forth by AMC Section 18.02.060(C) that are in exceedance of the allowable noise levels laid out by AMC Section 18.02.050 and shown in Table IV.K-7.

Neither the City's General Plan Noise Element nor 2019 General Plan contain any quantitative construction noise thresholds or other standards that would apply to the Project's construction activities.

(3) City of Alhambra - Construction Vibration

As discussed earlier, there are no federal, State, County, or City standards that would regulate the Project's vibration impacts to buildings and structures from temporary construction activities, nor are there quantitative thresholds. As a result, the criteria identified by the FTA in its 2018 Transit Noise and Vibration Impact Assessment manual (see Table IV.K-4) are used where applicable and relevant to assist in analyzing the Project's groundborne vibration impacts as they pertain to Appendix G checklist question (b).

With respect to human annoyance, AMC Section 18.02.100 prohibits groundborne vibrations that are "perceptible without instruments at any point on any affected property adjoining the property on which the vibration source is located". However, as discussed earlier, AMC Section 18.02.060(C) would exempt the Project's construction sources from this provision so long as vibration levels do not endanger public health and safety, and the applicability of Section 18.02.100's vibration standard would be limited to the Project's operations. The Project's construction-related groundborne vibrations would have no potential to endanger public health and safety. Health-associated vibration impacts are generally limited to the personal operation of construction equipment (e.g. jackhammers).

(4) City of Alhambra - Operational Noise

The following criteria are adopted to assess the impacts of the Project's operational noise sources:

- Project operations (on- and off-site sources) would cause ambient noise levels at off-site locations to increase by 3 dBA CNEL or L_{dn} or more to within "normally incompatible" or "clearly incompatible" noise and land use categories, as defined by the City's General Plan Noise Element (see Table IV.K-6).

- Project operations (on- and off-site sources) would cause any 5 dBA or greater noise increase.[4]

- Project operations (on-site sources) would result in exceedances of the allowable noise levels set forth by AMC Section 18.02.050 (see Table IV.K-7 and related discussion).

c) Project Design Features

The Project would implement the following Project Design Features (PDFs) to avoid or minimize adverse noise and vibration impacts:

- **NOI-PDF-1**: All construction work shall be restricted to hours of lesser noise sensitivity with heavy equipment to operate from 7 A.M. to 7 P.M. during the week and on Saturdays. Construction is not permitted on Sundays or Federal Holidays.
- **NOI-PDF-2**: On-site mechanical equipment will be designed such that it would be shielded, and appropriate noise-muffling devices will be installed on the equipment to reduce noise.
- **NOI-PDF-3**: All amenity space shall be perimeter-enclosed with plexiglass, concrete/masonry walls, the building envelope, or vegetation.
- **NOI-PDF-4**: The Project's courtyards shall not include live bands or amplified music above ambient background noise levels (i.e., amplified noise sources would be limited so residents and guests could hold a conversation).
- **NOI-PDF-5**: Concrete, not metal, shall be used for construction of parking ramps.
- **NOI-PDF-6**: The interior parking ramps shall be textured to prevent tire squeal at turning areas.

d) Analysis of Project Impacts

Threshold a): ***Would the project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general***

[4] *As a 3 dBA increase represents a barely noticeable change in noise level, this threshold considers any increase in ambient noise levels to or within a land use's "normally unacceptable" or "clearly unacceptable" noise/land use compatibility categories to be significant so long as the noise level increase can be considered barely perceptible. For instances when the noise level increase would not necessarily result in "normally incompatible" or "clearly incompatible" noise/land use compatibility, a readily noticeable 5 dBA increase would still be considered significant. Increases less than 3 dBA CNEL/L_{dn} are unlikely to result in noticeably louder ambient noise conditions and would therefore be considered less than significant.*

plan or noise ordinance, or applicable standards of other agencies.

(1) Impact Analysis

(a) Construction

Construction of the Project would generate noise during the estimated eight years of buildout. However, the Project would adhere to the exempted construction hours set forth by AMC Section 18.02.060(C). As a result, the Project's construction noise would not exceed or otherwise violate the City's noise ordinance standards, and the Project's noise impact from construction sources, both on-site and off-site, would be considered **less than significant**. Nevertheless, the following analysis evaluates the noise levels that could occur as a result of the Project's construction activities to demonstrate that the Project would not expose nearby noise-sensitive receptors to unhealthy or otherwise substantial levels of construction noise such that these considerations would override the less than significant determination based on the Project's code compliance.

Two primary Project Buildout Scenarios are considered, as described in **Section II, Project Description** of the Draft EIR. Overall, the construction noise impacts of Buildout Scenario 1 and Buildout Scenario 2 would not vary substantially. Buildout Scenario 1 would commence with the construction of all Project Plan Areas simultaneously, and full buildout would occur by 2028. However, construction work would nevertheless be episodic over the course of the Project's development; in all, approximately 36 months of construction would take place. Buildout Scenario 2 would break construction into two distinct phases. First, the North and East Plan Areas would be constructed and made operational by 2024 (Phase I). Following this, the South and Corner Plan Areas would be constructed and made operational by 2028 (Phase II). Buildout Scenario 2 would also require approximately 36 months of construction in all: 17.5 months for Phase I and 18.5 months for Phase II. As a result, the timing of each construction phase and/or Plan Area construction could vary, but ultimately the same work would occur at some point and for the same duration prior to full buildout in 2028. Both Buildout Scenarios would require similar phases of construction and similar construction vehicles, equipment, and tools. For each Buildout Scenario, the construction activities with the greatest potential to affect nearby noise-sensitive land uses would be related to construction of the South and Corner Plan Areas. The only residential land uses in the vicinity of the Project are located in the neighborhood south of Mission Road, along Front Street, and the South and Corner Plan Areas are the only Plan Areas that would directly face these residential land uses. Other Plan Areas are located in excess of 600 feet from these residences. At this distance, it is unlikely that on-site construction noise levels would contribute to substantial noise increases at these residences. Given these considerations, this analysis focuses on the impact potential of South and Corner Plan Area construction, as the construction of all

other Plan Areas would have lesser impacts to the residential neighborhood south of the Project.

Noise from demolition and grading activities are typically the foremost concern when evaluating a project's construction noise impact, as these activities often require the use of heavy-duty, diesel-powered earthmoving equipment. The types of heavy equipment required for South and Corner Plan demolition activities would include excavators, loaders, backhoes, bulldozers, or other similar vehicles; for grading activities, graders and scrapers would additionally be required.

For this analysis, noise impacts to the residential neighborhood were modeled using the noise reference levels of excavators, as these vehicles would be utilized extensively to demolish and grade for the South and Corner Plan Areas. Excavators can produce average noise levels of 76.7 dBA L_{eq} at a reference distance of 50 feet. Additionally, excavators often operate in relatively stationary locations, sometimes in close proximity to one another. Such clustering can result in what amounts to a relatively fixed point source of noise that may operate continuously at minimum or reduced Project-to-receptor distances. Conversely, though vehicles such as graders and scrapers may have reference noise levels that exceed those of excavators, graders and scrapers do not work in stationary positions. Rather, graders and scrapers operate by driving across land back and forth to level earth, and their work is mobile by nature. As a result, there is no potential for graders or scrapers to operate continuously in stationary positions at the minimum Project-to-receptor distance as there is for excavators. A grader or scraper may drive past an individual household at the minimum distance, momentarily resulting in a noise impact greater than that generated by an excavator, but it would move on in short order and its noise levels would attenuate accordingly. The Project is unlikely to require "push-loading" or other tandem scraping activities.

Additionally, even excavators would not work exactly at the minimum Project-to-receptor distance for the entire duration of South and Corner Plan Area construction. Work would move across the large site from hour to hour and day to day, and noise levels at the receptor would wax and wane accordingly.

As shown in Table IV.K-8, residences along Front Street that face the Project could experience construction-related exterior noise increases of 7.6 dBA as a result of grading activities associated with South and Corner Plan Area development. Though the Project's construction noises would be exempt from the City's noise ordinance provisions, this noise level also would not expose any residence to interior noise levels that are in excess of AMC Section 18.02.050's 55 dBA allowable noise level for residential noise zones. Assuming a standard exterior to interior noise reduction factor of 20 dB for "light frame"

buildings with closed "sash" windows[5] (consistent per Section 18.02.050's measurement instructions), the Project's construction-related noise level of 67.7 dBA L_{eq} would equate to an interior noise level of 47.7 dBA L_{eq}, well below the 55 dBA standard. Given these considerations, the Project's construction noise impact at Front Street residences would not be substantial, nor would they conflict with the less-than-significant impact conclusion. Nevertheless, Mitigation Measures NOI-MM-1 through NOI-MM-9 are proposed to institute standard, industry-wide "best practices" for construction in urban or otherwise noise-sensitive areas and to moderate the Project's construction noise impacts.

Table IV.K-8
Estimated Exterior Construction Noise at Sensitive Receptors

Sensitive Land Uses[a]	Distance to Project Site (feet)	Existing Monitored Ambient Noise Levels (dBA L_{eq})	Estimated Peak Construction Noise Levels (dBA L_{eq})	Noise Level Increase
1. Front Street Residences	220	60.1	67.7	7.6

[a] See Figure IV.K-1 (Noise Monitoring and Sensitive Receptor Location Map).
Source: Pomeroy Environmental Services, 2019.

With regard to off-site construction noise sources, trucks and other construction-related vehicles would access the Project over the course of all construction phases. The Project's peak off-site construction noise impact is likely to occur during its excavation phases. During the Buildout Scenario 1 and Buildout Scenario 2 excavation phases, the Project would generate approximately 98 haul trucks trips per day (49 inbound and 49 outbound). It is anticipated that these trucks would travel south along Fremont Avenue to the I-10 Freeway. As such, noise-sensitive land uses along the haul route may be impacted by noise from haul trucks. Conservatively assuming that haul trucks would access the site during off-peak traffic hours between 10:00 A.M. and 3:00 P.M., the Project could result in an average of approximately 20 truck trips per hour during this five-hour window. According to FHWA TNM 2.5 modeling, 20 truck trips per hour would be capable of generating roadside noise levels of just 61.0 dBA L_{eq} along Fremont Street at a conservative 40-foot setback. As field noise measurements and additional TNM 2.5 modeling indicate that daytime ambient noise levels along Fremont range from 67 dBA L_{eq} and upwards, the Project's off-site construction noise levels from trucks along Fremont Avenue would not be capable of increasing its roadside ambient noise levels by a discernable degree.

[5] *Caltrans, Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013.*

(b) Operation

(i) Traffic Noise

Off-site locations would experience an increase in noise resulting from the additional traffic generated by the Project. The increases in noise levels at roadway segments located near the Project Site are identified in Table IV.K-9. Existing (2018) and Future (2028) year with- and without-Project scenarios were modeled to determine the effect that Project traffic could have both individually and cumulatively on roadside noise levels in the Project's vicinity.

As shown in Table IV.K-9, Project-related traffic would have a nominal impact on roadside ambient noise levels in the Project's vicinity, below the minimum 3 dBA L_{dn} threshold of significance. As a result, this impact would be **less than significant**.

(ii) Parking Noise

A majority of the proposed parking areas of the Project would be located within fully enclosed parking podium structures, residential garages, or otherwise contained within or by the massing of proposed buildings. Considering that the majority of the Project site is currently improved with outdoor surface parking, the relocation of parking areas to interior and/or enclosed spaces would by and large result in a reduction of parking-related noises (e.g. doors slamming, engines starting, etc.) across the entire site. The one area that could experience increased parking-related noises is the East Plan Area, which is proposed to be developed with an un-enclosed 5-story parking structure containing 490 parking stalls. According to FTA equations for the prediction of parking garage noise impacts, a parking garage with an hourly activity of 490 trips would be expected to produce a noise level of 53.3 dBA L_{eq} at a reference distance of 50 feet. First, there are no noise-sensitive land uses in the vicinity of the proposed parking garage. The nearest residential land uses along Front Street are located approximately 650 feet south of the proposed parking garage and would have no more than a limited line of sight to its facilities. Second, field noise measurements indicate that existing daytime noise levels during non-peak traffic hours along Date Avenue are 65.8 dBA L_{eq}. The addition of parking garage noises to this noise environment would not result in discernable noise increases. Third, it is unlikely that the parking garage would ever have an hourly activity equal to its total vehicle capacity: its noise levels during peak hours of activity would not approach 53.3 dBA L_{eq}, and its noise levels during late evening, early morning, and other non-commuting hours would be greatly reduced. Fourth, the East Plan Area currently contains 306 surface parking spaces that presumably generate existing parking noise levels, as well as additional noises from the 21,700 square feet of warehouse/shipping and receiving space. Given these considerations, the proposed parking garage is unlikely to result in more than nominal noise increases at surrounding land uses, let alone noise increases exceeding the minimum 3 dBA CNEL/L_{dn} noise increase threshold, which would

represent a doubling of the existing surface parking noise sources over a 24-hour period. As a result, the Project's parking garage noise impact would be **less than significant**.

(iii) Stationary Noise Sources

As part of the Project, new mechanical equipment, HVAC units, and exhaust fans would be installed for the proposed uses. Although the operation of this equipment would generate noise, the design of all mechanical equipment would be required to comply with AMC Section 18.02.050, which prohibits noise levels that would exceed noise standards set for residential, commercial, and mixed-use uses. Furthermore, the on-site equipment would be shielded, and appropriate noise-muffling devices would be installed on the equipment to reduce noise, in conformance with Project Design Feature NOI-PDF-2. Given the relatively quiet operation of modern HVAC systems, distances to surrounding land uses, and surrounding ambient noise levels, it is unlikely that the Project's HVAC systems would be capable of increasing off-site noise levels by a discernable degree. Furthermore, it should be noted that most land uses in the vicinity of the Project also contain rooftop-mounted HVAC and other equipment. Mechanical noise from pool pumping and filtering equipment is also minimal and would be unlikely to be audible at off-site land uses, especially considering that all pool areas are either enclosed by the Project's massing or oriented towards high-noise areas (i.e. Fremont Avenue). As such, impacts related to stationary noise sources would be **less than significant**.

Table IV.K-9
Off-Site Roadway Noise Levels (L_{dn})

Roadway	Segment		Existing (2018)	Existing + Project	Net Increase	Significant Increase?	Future (2028)	Future + Project	Total Increase	Significant Increase?
Fremont Ave.	N of Orange St.	50ft E	74.9	75.0	0.1	No	75.4	75.5	0.6	No
		35ft W	75.5	75.6	0.1	No	76.0	76.1	0.6	No
	S of Orange St.	40ft E	75.7	75.8	0.1	No	76.2	76.3	0.6	No
		55ft W	73.5	73.6	0.1	No	74.0	74.1	0.6	No
	S of Mission Rd.	45ft E	75.9	76.2	0.3	No	76.4	76.6	0.7	No
		55ft W	74.7	75.0	0.3	No	75.2	75.4	0.7	No
Orange St.	E of Fremont Ave.	60ft N	62.0	62.6	0.6	No	62.5	63.1	1.1	No
		60ft S	61.7	62.4	0.7	No	62.3	62.9	1.2	No
Date Ave.	N of Orange St.	40ft E	67.4	67.6	0.2	No	68.2	68.3	0.9	No
		40ft W	67.7	68.0	0.3	No	68.5	68.6	0.9	No
	S of Orange St.	45ft E	64.3	64.7	0.4	No	65.1	65.4	1.1	No
		45ft W	65.1	65.4	0.3	No	65.8	66.1	1.0	No
	N of Mission Rd.	40ft E	64.4	65.7	1.3	No	65.3	66.3	1.9	No
		40ft W	65.1	66.0	0.9	No	65.9	66.7	1.6	No
Mission Rd.	E of Date Ave.	40ft N	70.6	70.9	0.3	No	71.1	71.4	0.8	No
		40ft S	71.1	71.4	0.3	No	71.7	71.8	0.7	No
	W of Date Ave.	40ft N	70.6	71.0	0.4	No	71.2	71.5	0.9	No

		40ft S	70.9	71.3	0.4	No	71.4	71.7	0.8	No
	W of Fremont Ave.	50ft N	69.8	69.8	0.0	No	70.3	70.4	0.6	No
		50ft S	70.4	70.5	0.1	No	70.9	71.0	0.6	No
Source: Noah Tanski Environmental Consulting (see Draft EIR Appendix K for noise monitoring data and calculations).										

(iv) Outdoor Spaces

The Project would include useable open space including: roof decks, private balconies and porches, and landscaped areas. Noise associated with the outdoor open spaces would consist primarily of people talking, which would be consistent with the existing activity on the Project Site. This would have a nominal effect on surrounding noise levels. Noise from speech and conversation averages between 55 and 67 dBA at a reference distance of one meter.[6] At the nearest off-site uses across Date Avenue, approximately 80 feet away, noises associated with on-site speech/conversation are unlikely to exceed 40 dBA and would most likely be inaudible. Additionally, community gathering spaces within the Project with the greatest potential to result in speech and conversation noise sources would be mostly centralized and/or enclosed by the massing of the Project's proposed structures. As a result, noise from these areas are almost certain to be inaudible at off-site receptors, and the effect on 24-hour CNEL/L_{dn} noise levels at off-site receptors would be below a 1 dBA increase. Normal and reasonable use of the Project's outdoor spaces would not result in discernable noise increases at off-site locations, let alone exceedances of the minimum 3 dBA CNEL/L_{dn} noise increase threshold that represents a doubling of daily 24-hour noise sources. The City's noise ordinance would provide a means to address any nuisances related to outdoor spaces, should they occur. As a result, noise impacts related to the Project's useable open space would be **less than significant**.

(2) Mitigation Measures

The following mitigation measures are recommended to reduce construction noise levels to the maximum extent feasible:

- **NOI-MM-1**: Noise and groundborne vibration-generating construction activities whose specific location on the Project Site may be flexible (e.g., operation of compressors and generators, cement mixing, general truck idling) shall be conducted as far as possible from the nearest off-site land uses.
- **NOI-MM-2**: Construction and demolition activities shall be scheduled so as to avoid operating several pieces of equipment simultaneously, as feasible.
- **NOI-MM-3**: Flexible sound control curtains shall be placed around all drilling apparatuses, drill rigs, and jackhammers when in use.
- **NOI-MM-4**: The Project contractor shall use power construction equipment with the appropriate manufacturer-recommended shielding and muffling devices.
- **NOI-MM-5:** Temporary noise barriers shall be erected along the Project's southern property line that faces the residential neighborhood south of the Project. These

[6] *EPA, Speech Levels in Various Noise Environments, May 1977.*

noise barriers shall be at least 7 feet in height and constructed of a material with a transmission loss value (TL) of at least 20 dBA. Alternatively, the existing masonry wall that runs the majority of the length of the Project's southern boundary may be maintained throughout all construction phases associated with the South and Corner Plan Area development. The height and structure of this existing wall would be capable of matching or exceeding the mitigation provided by the recommended temporary noise barriers. Any gaps in the masonry wall or other missing segments should be filled with temporary noise barriers meeting the criteria herein.

- **NOI-MM-6:** Temporary noise barrier "penalty boxes" shall be installed for truck-mounted cranes, concrete pumping trucks, concrete mixing trucks, and any other construction vehicles that may be permitted to temporarily operate from adjacent parking spaces or public right-of-way. These noise barriers shall be at least 7 feet in height and constructed of a material with a TL of at least 20 dBA.
- **NOI-MM-7**: Two weeks prior to the commencement of construction at the Project Site, notification shall be provided to the immediate surrounding off-site properties that discloses the construction schedule, including the various types of activities and equipment that would be occurring throughout the duration of the construction period.
- **NOI-MM-8**: Construction staging areas for each phase shall be located as far from sensitive receptors as possible.
- **NOI-MM-9**: Generators, compressors, and other noisy equipment shall be placed within acoustic enclosures or behind baffles or screens, especially when such equipment has line of sight to nearby noise-sensitive receptors.

(3) Level of Significance After Mitigation

As shown in Table IV.K-10, implementation of Mitigation Measures NOI-MM-1 through NOI-MM-9 would reduce the Project's construction-related noise increase at the Front Street residences to just 4 dBA. Though construction noises may be audible at this receptor, these noise levels would not necessarily result in noticeably louder ambient noise conditions, based on the projected 4 dBA increase. The noise barriers required by NOI-MM-2 would reduce off-site construction noise levels by 5 dBA, conservatively. The Project's construction noises would still be considered **less than significant** based on compliance with AMC Section 18.02.060(C).

Table IV.K-10
Estimated Exterior Construction Noise at Sensitive Receptors - Mitigated

Sensitive Land Uses[a]	Distance to Project Site (feet)	Existing Monitored Ambient Noise Levels (dBA L_{eq})[b]	Estimated Construction Noise Levels (Mitigated) (dBA L_{eq})	Noise Level Increase	Potentially Significant Impact?
1. Front St. Residences	220	60.1	64.1	4.0	No

[a] See Figure IV.K-1 (Noise Monitoring and Sensitive Receptor Location Map).
Source: Pomeroy Environmental Services, 2019.

Threshold b): Would the project generate excessive groundborne vibration or groundborne noise levels?

(1) Impact Analysis

(a) Construction

As discussed earlier, construction of the Project would require heavy-duty earthmoving vehicles such as excavators, loaders, bulldozers, scrapers, and graders. Auger drill rigs may also be required. Auger drill rigs and large, track-mounted grading vehicles can produce vibration levels of 0.089 inches per second PPV at a reference distance of 25 feet. Other construction vehicles and equipment would have lesser impacts. The Project would not require impact or vibratory pile driving. Table IV.K-11 shows the Project's estimated vibration impacts at the nearest surrounding buildings. As shown, the Project's construction activities would not be capable of generating groundborne vibration levels in excess of FTA building damage criteria for nearby buildings, and the Project's impact would be **less than significant**. Section 18.02.060(C) of the AMC would exempt the Project's construction-related groundborne vibrations from Section 18.02.100's vibration standard, as the Project's construction hours would conform to the exempted time periods outlined by AMC Section 18.02.060(C).

Grading for the Project's Fremont Avenue driveway and access road could occur within up to 15 feet of the CF Braun & Company Historic District Building A1 (Building A0 would be relocated prior to construction activities, see **Section IV.D, Cultural Resources** of the Draft EIR). Despite this building's historical designation, it is a modern structure and does not contain any vibration-sensitive architectural elements or other features.

Table IV.K-11
Estimated Vibration Levels at Nearest Buildings

Sensitive Land Uses	Distance to Construction (feet)	Condition	Estimated Vibration Levels in PPV (in/sec)	Significant?
1. Front Street Residences	220	I. Reinforced concrete, steel, or timber	0.003	No
2. CF Braun & Company Historic District – Building A1	15	I. Reinforced concrete, steel, or timber	0.191	No

Source: Pomeroy Environmental Services, 2019.

(b) Operation

The Project would not include any stationary equipment that would cause excessive vibration levels during operations. Groundborne vibration at the Project Site and immediate vicinity currently occurs from heavy-duty vehicle travel (e.g., refuse trucks and transit buses) on local roadways. While the Project would result in a slight increase in refuse truck activities to serve the proposed land uses at the Project Site, these increases would be minor and would not result in perceptible changes to future vibration levels. Furthermore, while refuse trucks would be used for the disposal of solid waste generated at the Project Site, these truck trips are typical for urban areas, are already occurring with the existing uses on the Project Site, and only occur once a week. Similarly, the number of transit buses that travel along adjacent roadways would also not substantially increase due to the Project. Thus, vibration impacts associated with operation of the Project would be **less than significant**.

Threshold 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?***

As discussed in in the Initial Study (see Draft EIR **Appendix A-3**), the Project Site is not located within an area covered by an airport land use plan and is not located within two miles of a public or public use airport. Therefore, the Project would have **no impact** with respect to Threshold (c). No further analysis is required.

e) Cumulative Impacts

This cumulative impact analysis considers development of the Project in combination with ambient growth and other development projects within the vicinity. As noise is a localized phenomenon and decreases in magnitude as distance from the source increases, only

projects and ambient growth within 500 feet and having a direct line-of-sight to the Project Site could combine with the Project to result in cumulatively considerable noise impacts.

(1) Impact Analysis

(a) Construction

As discussed previously, construction activities would temporarily increase ambient noise levels at nearby noise-sensitive uses, specifically residences along Front Street that face the Project. Any other future developments that are built concurrently with the Project could further contribute to these temporary increases in ambient noise levels. However, the closest such project, Cumulative Project No. 4 (307 Date Avenue), is located approximately 1,015 feet north of the Project and over 2,500 feet north of Front Street residences. Given these distances, there is no potential for the on-site construction noises of Cumulative Project No. 4 to be audible at Front Street residences, and thus no impact from cumulative on-site construction noises would occur.

With regard to off-site construction noise impacts from haul trucks and other construction vehicles, as discussed earlier, the Project's peak truck usage is not estimated to result in discernable roadside ambient noise level increases along Fremont Avenue between the Project and the I-10 Freeway. Additionally, the Project's construction would conform to Section 18.02.060(C) of the AMC and, as a result, any noise impacts would be exempt from the ordinance's noise provisions. Therefore, the Project would not contribute to cumulatively considerable off-site construction noise impacts.

(b) Operation

The Future year (2028) with- and without-Project scenarios modeled in Table IV.K-9 incorporate traffic from the cumulative projects as well as from ambient traffic growth. As shown, the Project's cumulative traffic-related noise increases on nearby roadways would be nominal and less than significant.

In addition to cumulative mobile source noise levels, operation of the Project in combination with the cumulative projects could result in an increase in operational noise and vibration in this heavily urbanized area of the City. There are no cumulative projects within 500 feet of the Project Site. The closest cumulative project is Cumulative Project No. 4 (307 Date Avenue) which is located approximately 1,015 feet north of the Project Site. It is unlikely noise impacts from Cumulative Project No. 4 would combine with the Project to create a cumulative noise impact. Moreover, this cumulative project and all of the cumulative projects would be subject to the regulations within the AMC and potential project-specific mitigation related to the generation of on-site noise sources associated with mechanical equipment, parking, and outdoor spaces. As previously discussed, operational noise and vibration impacts would be less than significant for the Project, and on-site cumulative noise levels associated with the cumulative projects would be

regulated by the AMC and associated project mitigation, as needed. As such, cumulative on-site operational noise impacts would be **less than significant**.

(2) Mitigation Measures

The Project's contribution to cumulative noise impacts would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

The Project's contribution to cumulative noise impacts would be **less than significant** without mitigation.

IV. Environmental Impact Analysis

L. Population and Housing

1. Introduction

This section evaluates the Project in terms of the Southern California Association of Governments' (SCAG) population and housing growth forecasts for the City of Alhambra Subregion, as well as the projections and data provided in the City's 2013 Housing Element Update. It also evaluates whether the Project would cause growth that exceeds projected or planned growth for the City. The potential cumulative impacts related to population growth and housing needs in combination with all known cumulative projects are also evaluated.

2. Environmental Setting

a) Regulatory Framework

(1) Regional

(a) Southern California Association of Governments

SCAG is the federally designated metropolitan planning organization for six Southern California counties including the County of Los Angeles. SCAG prepared and adopted the 1996 Regional Comprehensive Plan and Guide (RCPG), the 5th Cycle for 2014-2021 Regional Housing Needs Assessment (2014-2021 RHNA) (approved November 26, 2012), the 2008 Regional Transportation Plan (RTP), and the Regional Transportation Improvement Program (RTIP) to address regional growth and measure progress toward achieving regional planning goals and objectives. SCAG has released its 2008 Regional Comprehensive Plan (RCP), as an update to the adopted 1996 RCPG. In April 2016, SCAG adopted the 2016-2040 Regional Transportation Plan/Sustainable Community Strategy (2016-2040 RTP/SCS) based, in part, on data from the 2010 U.S. Census.

(b) 2008 Regional Comprehensive Plan (SCAG)

SCAG prepared and issued the 2008 RCP in response to the SCAG's Regional Council directive in the 2002 Strategic Plan to define solutions to interrelated housing, traffic, water, air quality, and other regional challenges.

The 2008 RCP serves as a policy framework for implementation of short-term strategies and long-term initiatives to improve regional mobility and sustainability, while also directly addressing the interrelationships between natural resource sustainability, economic prosperity, and quality of life. The 2008 RCP incorporates principles and goals of the 2004 Compass Blueprint Growth Vision, as discussed below. The 2008 RCP includes nine different chapter areas: Land Use and Housing, Transportation, Air Quality, Energy, Open Space and Habitat, Water, Solid Waste, Economy, and Security and Emergency Preparedness. Each chapter is organized into three sections: goals, outcomes, and action plans.

The RCP chapters that are relevant to population and housing are the Growth Management and Housing Chapters. The purpose of the Growth Management Chapter is to present forecasts which establish the socioeconomic context for the RCPG, particularly the Regional Mobility and Air Quality Chapters. It also addresses issues related to growth and land consumption by encouraging local land use actions that could ultimately lead to the development of an urban form that will help minimize development costs, save natural resources, and enhance the quality of life in the region.

The Housing Chapter includes advisory strategies for bringing housing costs and decent shelter within reach of more households in order to support the economic health and social vitality of the region. Its goals include providing for decent and affordable housing for all people; an adequate supply and availability of housing; housing stock maintenance and preservation; and promoting a mix of housing opportunities region wide.

(c) Regional Housing Needs Assessment (SCAG)

The RHNA is a key tool for SCAG and its member governments to plan for growth. The 2014-2021 RHNA quantifies the need for housing within each jurisdiction between 2014 and 2021. Communities then plan, consider, and decide how they will address this need through the process of completing the housing elements of their general plans. The RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate growth, so that they can grow in ways that enhance quality of life, and improve access to jobs, transportation and housing, without adversely impacting the environment. The RHNA is produced periodically by SCAG, as mandated by State law, to coincide with the region's schedule for preparing housing elements. It consists of two measurements of housing need: (a) existing need, and (b) future need.

The existing need assessment is based on data from the most recent U.S. Census to measure ways in which the housing market is not meeting the needs of current residents. These variables include the number of low-income households paying more than 30 percent of their income for housing, as well as severe overcrowding.

The future need for housing is determined primarily by the forecasted growth in households in a community, based on historical growth patterns, job creation, household formation rates, and other factors to estimate how many households will be added to each community over the projection period. The housing need for new households is then adjusted to account for an ideal level of vacancy needed to promote housing choice, maintain price competition, and encourage acceptable levels of housing upkeep and repair. The RHNA also accounts for units expected to be lost due to demolition, natural disaster, or conversion to non-housing uses. The sum of these factors - household growth, vacancy need, and replacement need - form the "construction need" assigned to each community. There is no process for allocating the citywide total to subareas within a city. Finally, the RHNA considers how each jurisdiction might grow in ways that will decrease the concentration of low-income households in certain communities. The need for new housing is distributed among income groups so that each community moves closer to the regional average income distribution.

(d) 2016-2040 Regional Transportation Plan/Sustainable Community Strategy (SCAG)

On September 30, 2008, SB 375 was instituted to help achieve AB 32 goals through regulation of cars and light trucks. SB 375 aligns three policy areas of importance to local government: (1) regional long-range transportation plans and investments; (2) regional allocation of the obligation for cities and counties to zone for housing; and (3) a process to achieve GHG emissions reductions targets for the transportation sector. It establishes a process for the CARB to develop GHG emissions reductions targets for each region (as opposed to individual local governments or households). SB 375 also requires Metropolitan Planning Organizations to prepare a Sustainable Communities Strategy (SCS) within the RTP that guides growth while taking into account the transportation, housing, environmental, and economic needs of the region. SB 375 uses CEQA streamlining as an incentive to encourage residential projects, which help achieve AB 32 goals to reduce GHG emissions.

On September 23, 2010, CARB adopted regional targets for the reduction of GHG emissions applying to the years 2020 and 2035. For the area under the SCAG jurisdiction, including the Project Site, CARB adopted Regional Targets for reduction of GHG emissions by eight percent for 2020 and by 13 percent for 2035. On February 15, 2011, CARB's Executive Officer approved the final targets.

On April 4, 2012, the Regional Council of SCAG adopted the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (2012-2035 RTP/SCS). SCAG updates the RTP/SCS every four years. Through the conduct of a continuing, comprehensive, and coordinated transportation planning process in conformance with

all applicable federal and state requirements, SCAG developed and prepared its latest RTP/SCS, the Final 2016-2040 RTP/SCS. The 2016-2040 RTP/SCS sets forth the long-range regional plan, policies and strategies for transportation improvements and regional growth throughout the SCAG region through the horizon year of 2040, includes a regional growth forecast that was developed by working with local jurisdictions using the most recent land use plans and policies and planning assumptions, and establishes a financially constrained plan and a strategic plan. The constrained plan includes transportation projects that have committed, available, or reasonably available revenue sources, and thus are probable for implementation. The strategic plan is an illustrative list of additional transportation investments that the region would pursue if additional funding and regional commitment were secured.

The 2016-2040 RTP/SCS includes a sustainable communities strategy which sets forth a forecasted development pattern for the region, which, when integrated with the transportation network, and other transportations measures and policies, if implemented, will reduce the GHG emissions from automobiles and light trucks to achieve the regional GHG targets set by CARB for the SCAG region.

(2) City

(a) City of Alhambra General Plan

The City's General Plan addresses community development goals and policies relative to the distribution of land use, both public and private, including housing. The General Plan integrates citywide elements, Community Plans, and Specific Plans and gives policy direction for planning regulations and implementation programs. The Land Use Element of the General Plan and the Zoning Code in the City contain the basic standards that allow for the development of a variety of housing types. Housing Element law specifies that jurisdictions must identify adequate sites through appropriate zoning and development standards to encourage the development of various types of housing.[1] This includes single-family housing, multi-family housing, mobile and manufactured homes, emergency shelters, and transitional housing. The City's Zoning Code permits single-family residential uses and conditionally permits urban residential uses in commercial zones or office zones, in which the Project Site is located. The Professional Office zone covering the Project Site allows residential uses on sites larger than 30 acres in size with a Conditional Use Permit. The Project Site covers 38.38 acres; thus, residential uses are permitted on the Project Site.

The City has recently updated its General Plan in August 2019. A draft of the updated General Plan had been released in July 2018 for public review and a revised draft

[1] *2013-2021 City of Alhambra Housing Element, Page 47. The Housing Element was updated by the City in 2013; the other portions of the General Plan were adopted in August 2019.*

released in early 2019. The updated General Plan retains the land use designation of Office Professional for the Project Site. The General Plan does not contain any specific policies and goals directly related to population and housing that are applicable to the Project Site.

The Project Site is identified as "Activity Node C" in the General Plan.[2] Activity Nodes A through D are identified by the General Plan as locations within the City envisioned as capturing retail, office, and hotel "leakage", containing distinctive streetscapes, retaining a core industrial area, encouraging development of regional commercial, and developing residences to serve the local workforce.

(b) City of Alhambra 2013-2021 Housing Element

The City's Housing Element satisfies the legal requirements that housing policy be a part of the City's General Plan. The Housing Element is one of the seven mandatory elements of the General Plan, and it specifies ways in which the housing needs of existing and future residents can be met. The Housing Element covers a period extending from October 15, 2013 to October 15, 2021 and was recently updated in July of 2013. Overall, the Housing Element identifies strategies and programs to: 1) maintain and preserve the existing affordable housing stock; 2) assist in the development of affordable housing; 3) identify adequate sites to achieve a variety of housing; 4) remove governmental and other constraints on housing development; and 5) promote equal housing opportunity.[3]

Within the Housing Element, the City created the Housing Plan to identify long-term housing goals and shorter-term policies to address identified housing needs. The goals, policies, and programs within the Housing Plan build upon the identified housing needs in the community, constraints confronting the City, and resources available to address the housing needs. The Housing Plan will guide City housing policy through the 2013-2021 planning period. Quantified objectives for the planning period are presented in Table 42 of the 2013-2021 Housing Element and consist of a total of 1,492 housing units across all income affordability categories. This number represents the established RHNA goal for the City.

[2] *City of Alhambra, Draft General Plan, January 2019, Figure 1: Vision Plan, p. 3.*

[3] *2013-2021 City of Alhambra Housing Element, p. 1.*

b) Existing Conditions

(1) Project Site

No housing units are currently present on the Project Site. As discussed in **Section III, Environmental Setting**, the Project Site is fully developed with office, warehouse, storage, utility substation, and surface parking lot/parking structure uses.

(2) Existing and Forecasted Population and Housing for City of Alhambra

According to analysis by the State's Housing and Community Development Department, prior to the economic downturn and foreclosure crisis of the late 2000s, California had experienced decades of undersupply of housing, contributing to significant price escalation and the affordability crisis.[4] This undersupply still exists in 2019. The factors contributing to California's continuing housing supply and affordability problems include a chronic mismatch between the existing housing stock and the demand for housing by type and location; lack of sufficient housing construction to meet demand; and persistently high housing costs relative to household incomes, and a dramatic increase in prices since the 2008-2009 national recession.

Almost all future California population and household growth will occur in metropolitan areas, and most of that will occur in southern California. According to SCAG's 2008 growth forecast, the six-county region is projected to add about 4.6 million people and about 1.6 million households between 2010 and 2035. In Los Angeles County alone, the forecast envisions about 1.7 million people and about 646,000 households between 2010 and 2035.

On January 1, 2017, the City's population was estimated at 86,922 people with 31,653 housing units within the City, an average of 2.74 persons per household.[5] This is a more current number than that shown in the 2013 Housing Element, which lists the City's 2010 population as 83,089 persons. Of the housing units in the City, 55.6 percent are detached or attached single-family units, 44.2 percent are multi-family units, and less than 0.1 percent are mobile homes. SCAG estimates that Alhambra's population will slowly, but steadily, increase into 2040. During the next 25 years, the City's population

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[4] *State of California – Business, Transportation and Housing Agency, The State of Housing in California 2012: Affordability Worsens, Supply Problems Remain, 2012.*

[5] *California Department of Finance. 2017. Report E-1: Population Estimates for Cities, Counties, and the State January 1, 2016 and 2017. Sacramento, CA. May 2017. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-1/.*

is expected to increase by 3,258 people, for an average annual growth of about 0.25 percent.[6]

With regard to households, the California Department of Finance has reported a slow but steady increase in the number of Alhambra households from 1990 to 2015. The City added 1,297 households in the last 25 years at an average annual rate of about 0.18 percent. Between 1990 and 2010, the percent change in the number of households grew roughly three percent.[7] Based on current trends, SCAG estimates that Alhambra will add another 2,346 households by 2040 to reach a total of 31,876 households, or an average annual growth of 0.53 percent. This number exceeds the RHNA goal of 1,492 housing units by 2021, but is forecast to occur over a much longer period of time. With the number of households increasing at twice the rate of population, the City's average household size is expected to decrease over time. According to the projected demand for new housing, Alhambra will need to accommodate the development of over 3,000 housing units from 2015 to 2035. It should be noted that the projected demand for residential units is based on growth forecasts from SCAG, which has more up to date numbers than that used in the City's 2013 Housing Element. With that said, from 2000 to 2010, the City accommodated the addition of nearly 300 new households almost exclusively through the construction of multi-family townhouses, condos, and apartments with five or more units per building.[8]

3. Project Impacts

a) Methodology

Substantial population growth is defined as growth exceeding the current SCAG population forecasts for the City. The Project's direct housing/household impacts were determined based on the proposed number and characteristics (square footage and number of bedrooms) of the residential units included in the Project. An overall housing population density of 2.38 people per household is estimated for the Proposed Project (2,525 people/1,061 units), and is based on the somewhat higher density of the Proposed Project compared to the City's average density and the smaller average housing unit size. This density-per-household is lower than that which is assumed in the 2018 Draft General Plan Update (2.87 people per household) for all residential units across the City. However, this higher density reflects the City's housing stock, which consists of nearly 56 percent single-family homes, which are larger and typically accommodate more people than multi-family units of the type proposed in the Project.

[6] *City of Alhambra, General Plan Update Community Profile Report, November 2016.*

[7] *2013-2021 City of Alhambra Housing Element, Page 12.*

[8] *City of Alhambra, General Plan Update Community Profile Report, November 2016.*

The Project's total household impacts were then compared to SCAG's growth projection for the City from 2015 to 2040. The Project's household and housing impacts were also evaluated against other applicable City and regional housing/household goals (i.e., SCAG RPG and RCPG documents), objectives, and policies. The direct population growth associated with the Project's residential units was also estimated. The Project's total residential population was then compared to SCAG's 2040 population growth forecast for the City. The SCAG forecast is used as the benchmark for impact assessment in the Draft EIR because it projects out farther than the City's current Housing Element. The Project is proposed to be fully built out by 2028 (under either of the two Building Scenarios discussed in **Section II, Project Description**), which is beyond the planning horizon addressed in the Housing Element.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with Appendix G of the CEQA Guidelines, the project could have a significant impact with respect to population and housing if the project would:

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); or

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

In assessing impacts related to population and housing in this section, the City will use Appendix G as the thresholds of significance.

c) Project Design Features

No specific Project Design Features are proposed with regard to population and housing.

d) Analysis of Project Impacts

The Project would retain 902,001 square feet of existing office space and would repurpose 10,145 square feet of existing office space as residential amenity space for the newly proposed South Plan Area. Also, the Project would retain a 50,000 square-foot LA Fitness health club, but would replace existing surface parking areas, warehouse/storage/maintenance buildings, and a vacant office building with 516 new, for-sale dwelling units in stacked flat and townhome configurations and 545 new rental apartments in five-story stacked flat configurations.

Threshold a) ***Would the project 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)?***

(1) Impact Analysis

(a) Direct and Indirect Population Growth

(i) Construction

The construction activities associated with the Project would create temporary construction-related jobs. Nevertheless, the work requirements of most construction activities are highly specialized, so that construction workers remain at a job site only for the time in which their specific skills are needed to complete a particular phase of the construction process. The construction industry differs from most other industry sectors in several ways:

- There is no regular place of work. Construction workers regularly commute to job sites that change many times over the course of a year. Their often lengthy daily commutes are facilitated by the off-peak starting and ending times of the typical construction workday;
- Many construction workers are highly specialized (e.g., crane operators, steelworkers, masons, etc.) and move from job site to job site as dictated by the demand for their skills; and
- The work requirements of most construction projects are highly specialized. Workers remain at a job site only for the time frame in which their specific skills are needed to complete a particular phase of the construction process.

Therefore, Project-related construction workers would not be likely to relocate their place of residence as a consequence of working on the Project. Although construction of the Proposed Project would generate direct (in the form of short-term construction jobs at the Project Site), indirect (in the form of employment supported by Project construction-related expenditures), and induced (in the form of wages paid to construction workers) employment impacts. Project-related construction would not represent a permanent or substantial new employment generator that would significantly contribute to local or regional growth. There would be no significant housing or population impacts from construction of the Project. Therefore, no impact related to construction-related indirect population growth would occur.

(ii) Operation

As shown in Table IV.L-1, upon the completion and full occupation of the Proposed Project, and based on an average density of 2.38 persons per multi-family Project residential household, the Project would add a residential population of approximately 2,525 people to the Project Site.

Table IV.L-1
Project Estimated Population Generation

Land Use	Quantity	Generation Rates	Total
Proposed Uses			
Multi-family Residential Units	1,061 units	2.38 person / unit	2,525
Source: Psomas, The Villages at the Alhambra Water Supply Assessment, March 2018.			

Other than a small number of on-site residential property management staff, no new full-time employees would be introduced to the Project Site by the Project when compared to existing conditions. This is a direct result of retaining a majority of the existing office space and repurposing a small portion towards solely residential amenity space.

As shown on Table IV.L-2, below, the Project's residential population would represent approximately 78 percent of the total forecasted population growth within the City between 2015 and 2040. The Project's housing unit total of 1,061 new dwelling units would represent approximately 45 percent of forecasted housing unit growth in the City between 2015 and 2040 (2,346 units). Thus, the Project's population and housing unit growth would fall within the forecasted levels of growth for the City, although the Project would represent a considerable portion of the projected population growth for the City as a whole. The SCAG forecasts assume a much lower persons-per-household rate of 1.39 for the projected growth in Alhambra over the next 22 years (to 2040) either than is currently the case within the City (2.74) or is used in the Draft General Plan Update (2.87). This is because it is assumed that most of the future residential growth within Alhambra will consist of multi-family units constructed through the redevelopment of currently underutilized sites. As stated previously, fewer persons can generally be accommodated in multi-family residential units as compared to single-family households.

Table IV.L-2
Project Estimated Comparison to City of Alhambra Population and Housing Growth Forecasts

Project	Projected 2015-2040 Citywide Growth	Project % of Forecast Growth
As compared to SCAG Growth Forecast for Alhambra from 2015 to 2040		
2,525 residents	+3,258 persons	78%
1,061 housing units	+2,346 households	45%

(b) Infrastructure

The Project Site is located in an urbanized area of the City and development of the Project would connect to the existing infrastructure currently being used by the existing uses on the site. Operation of the Project would not induce substantial growth through the introduction of new and/or extensions of existing roadways and/or utility infrastructure (see **Sections IV.P.1 and IV.P.2** of the Draft EIR for a discussion of wastewater and water infrastructure). In addition, the Project would not accelerate development in an undeveloped area. Thus, no impacts would occur.

(c) Consistency with Housing Element

Alhambra's Housing Element goals, policies, and programs address several major housing-related topics. Those that are relevant to the Project are discussed below and analyzed against the Proposed Project for consistency.

C. Identify adequate sites to achieve a variety and diversity of housing

Goal: Identify adequate housing sites through appropriate land use, zoning, and specific plan designations to accommodate the City's share of regional housing needs.

The Proposed Project promotes mixed-use development where housing is located and adjacent to jobs, shopping, services, schools, transportation corridors, and leisure opportunities. When considered along with the existing office, health club, and retail uses which are to remain on the Project Site, the Proposed Project would create a mixed-use development that will provide job opportunities and needed services to the new residential housing units on the Project Site. Also, the Project Site is a reuse opportunity site on an underdeveloped set of parcels appropriate for office, commercial, and residential land uses. Consistent with the zoning for the Project Site, the Proposed Project is suitable for the area, as it provides housing opportunities in a business hub of the

City where businesses will be able to benefit from the inclusion of additional housing. Overall, the Project would be consistent with this goal.

D. Remove Constraints to Housing Development

Goal: Mitigate potential governmental constraints to housing production and affordability.

Consistent with policies identified in the Housing Element, the Project Applicant has submitted a Conditional Use Permit application for Urban Residential development in a PO (Professional Office) zone. The City's Zoning Ordinance currently allows residential uses on PO-zoned properties larger than 30 acres in size. The Project Site, at over 38 acres, meets this criterion. Allowing residential development in a professional office zone would not constrain housing and would conversely promote and encourage efficient mixed use of the existing land in this particular area of the City. Further, by proposing a residential planned development and associated Development Agreement with the City, the Proposed Project would not constrain the production of housing. Overall, the Project would be consistent with this goal.

E. Promote equal housing opportunity

Goal: Provide equal housing opportunity for all residents.

The Proposed Project, once built, would be available to everyone and would not discriminate in the building, financing, selling, or renting of housing on the Project Site. This would be consistent with Policy 5.1 of the Housing Plan in the City's Housing Element. Furthermore, all residents of the development would be aware of their rights and responsibilities regarding fair housing. The Project would be constructed in compliance with applicable Americans with Disabilities Act (ADA) requirements to allow access for those with special needs. Overall, the Project would be consistent with this goal.

(d) Consistency with Regional Housing Needs Assessment

As proposed, the Project would contribute market-rate housing stock toward the City's RHNA allocation, which is a main Project Objective. SCAG's current RHNA planning period is 2013-2021, a period that is set by state legislation. Given that the Project would not be built out until 2024-2028 and that none of the proposed residential units would be placed on the market within the current RHNA planning period, it would not affect the City's current RHNA allocation. For informational purposes, however, the Project's planned housing growth is compared to the City's current RHNA allocation below.

Consistent with Chapter 4, Subsection A.1., of the City's Housing Element, the Project represents roughly 71 percent of the City's total allocated units from the 2013 Housing Element update. State housing law requires that a local jurisdiction accommodate a share of its region's projected housing needs for the planning period. By providing 1,061 market-rate residential units on an underutilized site in the City near existing business and transit, the Project would further the City's aim of reaching its total allocated goal of 1,492 residential units.[9]

As noted above, however, the Project's residential units would be counted toward the next RHNA allocation as they would not be placed on the market until at least 2024 (under Buildout Scenario 2 as described in **Section II, Project Description**) and potentially 2028 (under Buildout Scenario 1). Therefore, the Project would have no impact with respect to SCAG's 2013-2021 RHNA allocation for Alhambra.

(e) Impact Conclusion

The Project responds to the unmet housing demand within the City of Alhambra. Specifically, the Project would help achieve a portion of the household growth forecast for the City, while also being consistent with regional policies to reduce urban sprawl, efficiently utilize existing infrastructure, reduce regional congestion, and improve air quality through the anticipated reduction of vehicle miles traveled (VMT) associated with the co-location of complementary land uses within the same development and within walking distance of a variety of commercial and retail establishments. The Project would make an important contribution to expanding the regional housing supply at an infill location near existing jobs, community resources, and transit infrastructure.

Thus, while the Project would generate a residential population at the Project Site through the development of new housing, the Project would not induce housing growth beyond forecasted levels. Due to its anticipated buildout dates (2024-2028), the Project would not be counted toward the City's current RHNA allocation. Overall, Project impacts related to population and housing growth would be **less than significant**.

(2) Mitigation Measures

Impacts related to population and housing would be less than significant. No mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to population and housing would be **less than significant** without mitigation.

[9] *2013-2021 City of Alhambra Housing Element, Page 63.*

Threshold b) ***Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

As discussed in the Initial Study (**Appendix A-3** of the Draft EIR), the Proposed Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. The Project Site does not currently contain any housing units or residents. Furthermore, the Project is seeking to place 1,061 new residential units on the Project Site. Therefore, the Project would have **no impact** with respect to Threshold (b) and no further analysis is required.

e) Cumulative Impacts

(1) Impact Analysis

A total of nine cumulative projects were identified as being proposed for development within the study area. Of these nine projects, only six are located within the City of Alhambra. Because population and housing impacts are evaluated with respect to jurisdictionally specific growth forecasts, only the growth represented by the cumulative projects in Alhambra is considered in the analysis below. These projects (listed in Table III-2 in **Section III, Environmental Setting**, of the Draft EIR) include the development of approximately 448 general dwelling units in the City of Alhambra. It is possible that some of these cumulative project sites already include residential land uses that would be removed with implementation of the cumulative projects, and as such, the total net number of dwelling units to be developed would be smaller. However, for a conservative analysis, it is assumed that all 448 general dwelling units would be net new units. With the Proposed Project added to this total, the number of cumulative housing units would be 1,509 units.

Using SCAG's 2040 growth forecasts for Alhambra yields an expected average of 1.39 persons per household for the anticipated growth that is to occur within the City over the next two decades. Applying this household population density factor to the 448 general dwelling units proposed in the cumulative projects (the majority of which are multi-family units) results in a total of approximately 623 new residents within the cumulative projects. The addition of Project residents to this would produce a combined total of 3,148 new residents within the City as a result of currently known proposed developments. Again, it is possible that some of these cumulative residents could already live in the City. However, for a conservative analysis, it is assumed that these cumulative residents would be new to the City. This new population would represent 96.6 percent of SCAG's forecasted population growth within the City between the years 2015 and 2040.

This cumulative housing increase of 1,509 units would represent approximately 64 percent of SCAG's projected increase in housing within the City of Alhambra between the years 2015 and 2040. Additionally, a portion of this cumulative housing growth would further the City's RHNA allocation objective of providing 1,492 new housing units within the City by 2021, assuming that some of the residential cumulative projects would be completed and available for occupation by that year. As noted above, the Project would not contribute to the City's current RHNA allocation. Thus, cumulative population and housing growth would fall within projected 2040 levels for the City and the cumulative impact would be **less than significant**.

(2) Mitigation Measures

Cumulative impacts related to population and housing would be less than significant. No mitigation measures would be required.

(3) Level of Significance After Mitigation

Cumulative impacts related to population and housing would be **less than significant** without mitigation.

IV. Environmental Impact Analysis

M.1. Public Services – Fire Protection

1. Introduction

This section addresses the potential environmental impacts of the Project with respect to fire protection services, and the ability of existing Alhambra Fire Department (AFD) facilities in the Project area to accommodate the Project's needs for such fire protection facilities. The Project's fire protection needs are assessed through consideration of the types of proposed land uses, the demand created by the proposed land uses, and the distance of the Project Site from the nearest fire stations. This section is based on written correspondence from AFD, included in **Appendix L** of the Draft EIR:

L Correspondence from Alhambra Fire Department, April 19, 2018.

2. Environmental Setting

a) Regulatory Framework

(1) Regional

(a) California Building Code

California Code of Regulations, Title 24, California Building Code (CBC) is a compilation of building standards, including fire safety standards for residential and commercial buildings. CBC standards are based on: (1) building standards that have been adopted by State agencies without change from a national model code; (2) building standards based on a national model code that have been modified to address particular California conditions; and (3) building standards authorized by the California legislature, not covered by the national model code. The California Fire Code (CFC) is part of the CBC. Typical fire safety requirements of the CFC include: (1) the installation of sprinklers in all high-rise buildings; (2) the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and (3) the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas. The CFC applies to all occupancies in California, except where more stringent standards have been adopted by local agencies. The Alhambra Fire Code (AFC) is contained in Section 19.02 of the Alhambra Municipal Code (AMC) and largely consists of the CFC, with some locally adopted modifications as set forth in Section 19.02.030 of the AFC.

(b) Mutual Aid Operations Plan

The AFD participates in the California Fire Service and Rescue Emergency Mutual Aid System, as managed by the Governor's Office of Emergency Services (OES). The OES Mutual Aid Plan outlines procedures for establishing mutual aid agreements at the local, operational, regional, and state levels, and divides the State into six mutual aid regions to facilitate the coordination of mutual aid. The Mutual Aid Plan is based on the concept of "self-help" and "mutual aid." The State of California, all 58 counties and nearly all city governments are signatory to a Master Mutual Aid Agreement. The AFD is located in Region I (including San Luis Obispo, Santa Barbara, Ventura, Los Angeles, and Orange counties). Through the Emergency Mutual Aid system, the OES is informed of conditions in each geographic and organizational area of the state, and the occurrence or imminent threat of disaster. All OES Mutual Aid participants monitor a dedicated radio frequency for fire events that are beyond the capabilities of the responding fire department and provide aid in accordance with the management direction of the OES.[1]

(2) Local

(a) City of Alhambra General Plan

The General Plan consists of various citywide elements such as a Land Use Element, Noise Element, and others. The General Plan serves as a guide for the City's overall long-range growth and development policies and serves as a guide to update community plans, specific plans, and the citywide elements. These citywide elements address functional topics that cross community boundaries, such as transportation, and address these topics in detail.

The City has recently updated its General Plan in August 2019. A draft of the updated General Plan had been released in July 2018 for public review and a revised draft released in early 2019. The updated General Plan consists of seven elements, including a Land Use Element, Circulation Element, and Open Space Element. Each element addresses its respective subject and the City's 20-year vision for the future. With regard to fire protection, the General Plan's Services and Infrastructure Chapter establishes the following goals and policies:

- **Goal SI-8:** Fire and emergency medical response that meets the needs of residents, visitors, and businesses.

[1] *California Emergency Management Agency, Mutual Aid Plan.*

- **Policy R-1F:** Maintain appropriate levels of water pressure throughout the City's fire hydrant system and implement appropriate system upgrades as needed and feasible.
- **Policy SI-8A:** Maintain Fire Department staffing and equipment levels adequate to meet community fire and emergency medical response demands.
- **Policy SI-8B:** Ensure that existing and new development minimizes fire risk through application of appropriate fire code requirements.

b) Existing Conditions

The AFD responds to all types of emergency situations involving fires, explosions, rescues, medical emergencies, hazardous conditions, natural disasters, and false alarms. The AFD also responds to nonemergency service calls and good intent calls. The AFD's firefighters and paramedics are therefore trained and prepared to respond to a wide variety of situations. In 2017, the AFD responded to 6,660 calls, only 1,559 of which (23 percent) actually involved fire. Calls for Emergency Medical Services (EMS) (also referred to as ambulance or paramedic services) and rescue, good intent, false alarm, and service call incident type categories accounted for 77 percent of all reported calls. Of those, 64 percent of all AFD incidents are categorized as EMS and rescue.[2]

(1) Existing Facilities

The Project Site is located at 1000 South Fremont Avenue; 2215 West Mission Road; and 629, 635, 701, 825 and 1003 South Date Avenue, in the City, approximately one mile southwest of the Alhambra Civic Center. The Site is approximately 0.7 mile east of the City of Los Angeles boundary at Lowell Avenue.

Due to its location, the Project Site is served by Fire Stations 73 and 74. Fire Station is 74 is the closest station to the Project Site, which is situated roughly 0.5 miles away. For Fire Station 74, there are five on-duty personnel 24-hours a day, at all times.[3] This includes one captain, one engineer, one firefighter, and two firefighter paramedics. Fire Station 73 includes one captain, one engineer, and one firefighter paramedic.[4] During calendar year 2017, the AFD responded to 5,101 calls for Emergency Medical Support (EMS) and 1,559 calls for fire support.

[2] *City of Alhambra General Plan Update Draft Environmental Impact Report, 2017.*

[3] *AFD: Correspondence from Alhambra Fire Department, April 2018.*

[4] *Ibid*

(2) Response Times

The City of Alhambra uses the National Fire Protection Association's (NFPA) suggested response guidelines for its internal response standards, as it relates to fire services.[5] The NFPA sets a six-minute standard for all career fire departments, meaning that fire fighters are full-time paid employees. The NFPA also recommends that the six-minute response time goal be achieved 90-percent of the time. Currently, the AFD is meeting this standard in most areas.

As communicated by the AFD, Fire Station 74 has an average response time of seven-minutes and fifteen seconds for fire related calls and five-minutes twenty-five seconds for EMS calls. Fire Station 73 has an average fire response time of six-minutes eleven seconds for fire and five-minutes thirty-six seconds for EMS related calls. With this, Fire Station 74, as it relates to EMS calls, is below the national average and for fire related calls slightly above the national average. Fire Station 73 is slightly below the national average for EMS calls and for fire calls slightly above the national average.

3. Project Impacts

a) Methodology

AFD evaluates the demand for fire prevention and protection services for the Project, including review of a project's emergency features, to determine if the Project would require additional equipment, personnel, new facilities, or alterations to existing facilities. Beyond the standards included in the AFC, consideration is given to the size of the Project, uses proposed, fire-flow necessary to accommodate the Project, response time (an acceptable response time is five minutes for 90 percent of EMS responses and five minutes, twenty seconds for 90 percent of fire incidence responses), distance for engine and truck companies, fire hydrant sizing and placement standards, access, and the Project's potential to use or store hazardous materials. Based on these factors, a determination is made as to whether AFD would require a new or physically altered facility to maintain acceptable service levels, the construction of which could result in a potentially significant environmental impact. For this analysis, AFD was consulted and its responses were incorporated regarding the Project. The Fire Department website was also reviewed, as well as applicable provisions of the AFC.

[5] *Ibid*

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with Appendix G of the State CEQA Guidelines, the Project would have a significant impact related to fire protection if it would:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 fire protection.

c) Project Design Features

No specific Project Design Features are proposed with regard to fire protection services.

d) Analysis of Project Impacts

The analysis contained in this section evaluates impacts related to fire protection services.

Threshold a) ***Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 fire protection?***

(1) Impact Analysis

(a) Construction

Construction activities associated with the Project may temporarily increase demand for fire protection and EMS. Construction activities may also cause the occasional exposure of combustible materials, such as wood, plastics, sawdust, coverings and coatings, to heat sources from machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions in combustible materials and coatings.

To comply with California Department of Industrial Relations (Cal-OSHA)[6] and Fire and Building Code requirements, construction managers and personnel would be trained in

[6] *https://www.dir.ca.gov/title8/1920.html*

fire prevention and emergency response, and fire suppression equipment specific to construction would be maintained on-site. Project construction would comply with all applicable codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. Therefore, in light of City and State regulations and code requirements that would, in part, require personnel to be trained in fire prevention and emergency response, maintenance of fire suppression equipment, and implementation of proper procedures for storage and handling of flammable materials, construction impacts on fire protection and EMS would be less than significant.

Construction activities also have the potential to affect fire protection services, such as emergency vehicle response times, by adding construction traffic to the street network and by necessitating partial lane closures during street improvements and utility installations. These impacts, while potentially adverse, are considered to be less than significant for the following reasons:

- Construction activities are temporary in nature and do not create continuing risks;
- General “good housekeeping” procedures employed by the construction contractors and the work crews (e.g., maintaining mechanical equipment, proper storage of flammable materials, cleanup of spills of flammable liquid) would minimize these hazards; and
- Partial lane closures would not significantly affect emergency vehicles, the drivers of which normally have a variety of options for dealing with traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Additionally, if there are partial closures to streets surrounding the Project Site, flagmen would be used to facilitate the traffic flow until such temporary street closures are complete.

In addition to traffic, there are a number of factors that influence emergency response times, including alarm transfer time, alarm answering and processing time, mobilization time, risk appraisal, geography, distance, traffic signals, and roadway characteristics. However, the Project's potential impacts are minimal given other factors, such as location and overall construction program.

Overall, construction is not considered to be a high-risk activity, and the AFD is equipped and prepared to deal with construction-related traffic and fires should they occur. Due to the limited duration of construction activities and compliance with applicable codes, Project construction would not be expected to adversely impact firefighting and emergency services to the extent that there would be a need for new or expanded fire facilities in order to maintain acceptable service ratios, response times, or other

performance objectives of the AFD. Therefore, impacts associated with construction of the Project would be less than significant.

(b) Operation

The Project would generate new residents and visitors, and would also increase the amount of developed square footage on the Project Site. Development of the Project could result in an increased need for fire protection and EMS at the Project Site. The following discussion analyzes the criteria for determining the Project's impacts to fire protection services, including fire flow and response distance.

(i) Fire Flow

As further discussed in **Section IV.P.2, Utilities and Service Systems – Water**, of the Draft EIR, based on an initial evaluation of local Fire Water delivery infrastructure near the Project Site, given the transformation of a large portion of the Project Site from virtually all open parking lot or non-sprinklered buildings to a dense multi-family residential campus, enhancements to meet fire flow requirements are expected to be necessary. A fire flow test was performed in 2005/2006 near the site on Palm Avenue, which is higher in elevation than the Project Site, showing a static pressure of 83 psi (pounds per square inch), a residual pressure at 955 gallons per minute (gpm) of 75 psi, and a flow at 20 psi of 2,910 gpm. Per the AFC, any Type IIIA building greater than 166,501 square feet will require a fire hydrant fire flow of 6,000 gpm at 20 psi minimum pressure from the most remote 3-4 hydrants. A reduction in fire flow of up to 75 percent may be granted by the Fire Marshal when the building is provided with an approved automatic sprinkler system. However, since that is not a guarantee, this analysis will ignore the potential reduction in required fire flow and will assume the installation of system improvements required to supply 6,000 gpm to the Project.

The improved Project Fire Water line would be a looped system with three points of connection. The fire system would connect to the existing water lines in Mission Road, Date Avenue, and Orange Street. In order to achieve the anticipated fire flow requirements for the Project, all proposed Fire Water piping (other than fire hydrant laterals) will need to be sized at 12 inches. Fire hydrants (and associated underground fire water supply piping) would be required at a spacing of approximately 300 feet along the private internal access roads. The magnitude of the system required would lend itself to potentially dedicating the underground supply line as a public main. Should that become the case, this dedicated public main should likely serve all water service needs for the Project. Meters and backflows would likely be located along the internal private roadway system as they would traditionally along the public street frontage.

All Fire Water infrastructure required to serve the Project would be installed per applicable AFC requirements for the Project. In addition, the Project Applicant would be required to

submit the proposed plot plans for the Project to the AFD for review for compliance with applicable AFC, California Fire Code, and Alhambra Building Code requirements, thereby ensuring that the Project would not create any undue fire hazard. AFD review is a legal prerequisite, with which the Project would be required to comply. As such, with respect to fire flows, fire protection services would be considered adequate by AFD standards. Therefore, Project impacts regarding fire flow would be less than significant.

(ii) Response Distance and Time

As mentioned above, the nearest fire stations have a combined four Type 1 Engine trucks, one Aerial Ladder Truck, and one Rescue Ambulance. As previously conferred, the AFD's ability to provide adequate fire protection and emergency response services to a site is determined by the response distance and the degree to which emergency response vehicles can successfully navigate the given access-ways and adjunct circulation system, which is largely dependent on roadway congestion and intersection LOS along the response route. This factor, when combined with response distance, creates a response time.

Project-related traffic would have the potential to increase emergency vehicle response times to the Project Site and surrounding properties due to travel time delays caused by traffic. However, the area surrounding the Project Site includes an established street system, consisting of freeways, primary and secondary arterials, and collector and local streets, all of which provide regional, sub-regional, and local access and circulation within the Project's traffic study area. In addition, the drivers of emergency vehicles normally have a variety of options for avoiding traffic, such as using sirens to clear a path of travel or driving in the lanes of opposing traffic, pursuant to California Vehicle Code (CVC) Section 21806. As such, the increase in traffic generated by the Project would not significantly impact emergency vehicle response times to the Project Site and surrounding area.

Development of the Project would place a residential population of approximately 2,525 persons at the Project Site. Therefore, the Project would result in an increased need for fire protection and EMS at the Project Site. Fire sprinkler systems are proposed to be included in the Project buildings. Given the proximity of the closest fire station with an engine and the fire sprinkler system incorporated into the proposed buildings, Project impacts related to response distance and time would be less than significant.

(iii) Emergency Access

The Project Applicant is required to submit the Project's plot plans and building plans to the AFD. The AFD will review the project plans for compliance with the AFC, California Fire Code, Alhambra Building Code, and NFPA standards, thereby ensuring that the Project would not create any undue fire hazard and would provide adequate emergency

access. Also, the Project Applicant would consult with neighboring land uses and prepare an emergency response plan that would include, but not be limited to, the following: mapping of emergency exits, evacuation routes for vehicles and pedestrians, location of nearest hospitals, and fire departments. Additionally, the Project Site is located within approximately three miles of the following hospitals, which house 24-hour emergency departments:

- Keck Hospital of University of Southern California, located at 1500 San Pablo Street, Los Angeles
- Los Angeles County/USC General Hospital & Medical Center, located at 2051 Marengo Street, Los Angeles
- Alhambra Hospital Medical Center, located at 100 S. Raymond Avenue

Therefore, compliance with applicable provisions of the AFC, the California Fire Code, and the Alhambra Building Code, and submission of an emergency response plan to the LAFD would ensure that potential Project impacts pertaining to emergency access would be less than significant.

(2) Impact Conclusion

Overall, as described above, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection, and Project impacts would be **less than significant**.

(3) Mitigation Measures

No significant impacts related to fire protection services have been identified, and no mitigation measures are required.

(4) Level of Significance After Mitigation

Impacts related to fire protection services would be **less than significant** prior to mitigation.

e) Cumulative Impacts

(1) Impact Analysis

Implementation of the Project in conjunction with the cumulative projects identified in **Section III, Environmental Setting**, would likely increase demand for fire protection services based on a potential net increase in residential population. It is estimated that

the residential cumulative projects located within the City of Alhambra and the Project would together generate approximately 3,148 additional residents in the City.[7] However, as is also discussed in **Section IV.L, Population and Housing**, it is possible that some of these cumulative residents may already reside in the City.

While Project impacts related to fire services would be less than significant, implementation of some of the cumulative projects in combination with the Project would result in a net increase in the number of residents, households, and employees in the Project area, which could further increase the demand for fire protection services. Cumulative development requires the AFD to continually evaluate the need for new or physically altered facilities in order to maintain adequate service ratios. Similar to the Project, the cumulative projects (in the City of Alhambra) are subject to the requirements of the AFC. Each of the cumulative projects in the City would also be required to consult with the AFD during the design phase to establish fire flow requirements for the land uses proposed and to determine the adequacy of existing fire flow infrastructure serving their respective project sites. Any AFD upgrades to the water distribution systems serving the cumulative projects would be addressed for each individual project in conjunction with their project approvals. Each of the cumulative projects in the City is also individually subject to AFD review and would be required to comply with all applicable AFD and City of Alhambra fire safety requirements, including hydrant and access improvements, if necessary, in order to adequately mitigate fire protection impacts.

Any cumulative projects further than the response distance requirements permit would be required to incorporate fire sprinklers as well as meet other requirements that may be stipulated by the AFD on a project-by-project basis. If any of the cumulative projects creates demands on fire protection staffing, equipment, or facilities such that a new station would be required, potential environmental impacts would be addressed in conjunction with the environmental review for that specific project. Because the Project does not create such demands, however, its contribution to these impacts is not cumulatively considerable.

The cumulative projects would also contribute to funding fire protection services in the area by generating annual revenue from property taxes that would be deposited into the City's General Fund. This revenue could potentially be used to fund the construction of future fire protection facilities and support hiring more firefighters, which would further

[7] *Table III-2 in Section III, Environmental Setting, identifies 448 dwelling units that are proposed, pending construction, or are under construction within the City of Alhambra, which when combined with the Project would result in approximately 1,509 cumulative dwelling units. Based on the average persons per household rate of 1.39 persons per household for future City growth (refer to Section IV.L, Population and Housing), the cumulative projects would generate approximately 623 residents. When added to the Project's estimated population of 2,525 persons, the total would be 3,148 additional residents associated with cumulative growth.*

ensure that the Project's incremental effect on fire protection services would not represent a cumulatively considerable contribution to a significant cumulative impact. Therefore, cumulative impacts related to fire protection services would be **less than significant**.

(2) Mitigation Measures

No significant cumulative impacts related to fire protection services have been identified, and no mitigation measures are required.

(3) Level of Significance after Mitigation

Cumulative impacts related to fire protection services would be **less than significant** prior to mitigation.

IV. Environmental Impact Analysis

M.2. Public Services – Police Protection

1. Introduction

This section addresses the potential impacts of the Project on the demand for police protection services. The Alhambra Police Department (APD) provides police protection services and law enforcement to the City of Alhambra and would serve the Project Site. The section is based on written correspondence from APD, included in **Appendix L** of the Draft EIR:

L Correspondence from Alhambra Police Department, April 24, 2018.

2. Environmental Setting

a) Regulatory Framework

(1) Regional

(a) Office of Emergency Management

The Office of Emergency Management was established by Chapter 2.68 of the County of Los Angeles Code with responsibility for organizing and directing the preparedness efforts, as well as the day-to-day coordination efforts, for the County's Emergency Management Organization, including the planning and coordinating of emergency response plans, overseeing operational readiness for emergency response, training for emergency responses, and public education related to emergency response.[1]

(b) Mutual Aid Operations Plan

The County is required by state law to organize a formal mutual aid agreement between all police departments within its jurisdiction. This agreement is set forth in the Mutual Aid Operations Plan for the County. The Mutual Aid Operations Plan is a reciprocal agreement between signatory agencies (such as the County and City or other local police departments) to provide police personnel and resources to assist other member agencies during emergency and/or conditions of extreme peril. Any formal mutual aid

[1] *County of Los Angeles, Chief Executive Office, Office of Emergency Management, About OEM, http://www.lacoa.org/aboutoem.html, April 10, 2017.*

requests by any police department within the County are made with the County Sheriff's Department; however, additional informal agreements may be made directly between the police agencies involved. The Mutual Aid Operations Plan is a formal agreement and has been signed by the Chief of Police of every police department within the County, including the Chief of the APD. The Mutual Aid Operations Plan provides a structure of response should an emergency arise which requires immediate response by more law enforcement personnel than would be available to the APD using all other available resources.

(2) Local

(a) City of Alhambra General Plan

The City's General Plan provides direction regarding the City's vision for future development in the City and includes several chapters to help guide the design of future development. It also contains several broad goals, objectives, and policies for neighborhood design to create a more livable city for existing and future residents. These goals and policies are stated not in terms of specific design guidelines, but in terms of general neighborhood-wide design policies.

The General Plan serves as a guide for the City's overall long-range growth and development policies and serves as a guide to update community plans, specific plans, and the citywide elements. These citywide elements address functional topics that cross community boundaries, such as transportation, and address these topics in detail.

The City has recently updated its General Plan in August 2019. A draft of the updated General Plan had been released in July 2018 for public review and a revised draft released in early 2019. The updated General Plan consists of seven elements, including a Land Use Element, Circulation Element, and Open Space Element. Each element addresses its respective subject and the City's 20-year vision for the future. With regard to police protection, the General Plan's Services and Infrastructure Chapter establishes the following goals and policies:

- **Goal SI-6:** An environment safe from crime against persons and property.
- **Goal SI-7:** A positive relationship with and effective partnerships between the community and the Alhambra Police Department.
    - **Policy SI-6A:** Ensure that police service is provided in a manner that reflects and is sensitive to the characteristics and needs of Alhambra residents, businesses, and visitors.

- **Policy SI-6C:** Provide neighborhood patrol to maintain rapid response times and to deter crime.
- **Policy SI-6E:** Upgrade police facilities as necessary to meet Department needs and accommodate technological advances.

b) Existing Conditions

(1) Existing Facilities

The APD service area covers the entire City of Alhambra. Service is provided by 85 sworn officers and 44 civilian staff in four district areas.[2] These four district areas are divided into District 1, District 2, District 3, and District 4, respectively. The Project Site is located within District 3, for reporting purposes.[3] The Alhambra Police Station is located at 211 South First Street, which is approximately 1.8 miles to the northeast of the Project Site.

(2) Deployment

Deployment of police officers to existing districts in the City is based on a number of factors and cannot be calculated solely based on police-need-per-population standards. Overall, the APD estimates that the police response time to the Project Site is approximately 4.41 minutes with the nearest police station approximately 1.8 miles away. The response time and distance meet the City's internal desired performance standards. Response time variables include patrol speed, number of units fielded, forecast call rate, percent of calls dispatched, average service time, dispatching policy, percent of calls dispatched by priority, and average travel time. Calls for police assistance are prioritized based on the nature of the call.

(3) Crime Statistics

The crime statistics, which represent the number of crimes reported, affect the "needs" projection for staff and equipment for the APD to some extent. Table IV.M.2-1 provides Citywide crime statistics for the year-to-date for the months of January to March in 2018.

Table IV.M.2-1
Alhambra Crime Statistics (2018)

Crime	Citywide
Burglary	15
Theft/Burglary from Vehicle	52

[2] *APD: Correspondence from Alhambra Police Department, April 24, 2018.*

[3] *Ibid.*

Robbery	7
Grand Theft Auto	22
Data are for the months of January-March 2018. *Source: Correspondence received from APD, dated April 2018.*	

3. Project Impacts

a) Methodology

The APD evaluates impacts to police protection services on a project-by-project basis, taking into account the ability of police personnel to adequately serve the existing and future population, including residents, workers, and daytime and nighttime visitors. Potential impacts to police protection services are evaluated based on existing police services for the police station(s) serving the Project Site, including the availability of police personnel to serve the estimated Project population. The analysis presents statistical averages associated with the police station serving the Project Site and citywide services. Based on these criteria, a determination was made as to whether police facilities could accommodate the additional demand for police protection services resulting from the Project without the need for a new facility or the alteration of existing facilities.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with Appendix G of the State CEQA Guidelines, the Project would have a significant impact related to police protection if it would:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 police protection.

c) Project Design Features

No specific Project Design Features are proposed with regard to police protection services.

d) Analysis of Project Impacts

The analysis contained in this section evaluates impacts related to police protection services.

Threshold a) ***Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 police protection?***

(1) Impact Analysis

(a) Construction

Construction sites can be sources of attractive nuisances, providing hazards, and inviting theft and vandalism. When not properly secured, construction sites can become a distraction for local law enforcement from more pressing matters that require their attention. This could result in an increase in demand for police protection services. Consequently, developers typically take precautions to prevent trespassing through construction sites. Most commonly, temporary fencing is installed around the construction site to keep trespassers out. Deployment of roving security guards is also sometimes used to prevent problems during a project's construction. When such precautions are taken, there is less need for local law enforcement at the construction site.

Although there is the potential for Project construction to create an increase in demand for police protection services, the Project would provide security on the Project Site as needed and appropriate during the phases and course of the construction process. This security would include perimeter fencing, lighting, and security guards, thereby reducing the demand for APD services. The specific type and combination of construction site security features would depend on the phase of construction. The Project Applicant would install temporary construction fencing to secure the Project Site during the construction phase to ensure that valuable materials (e.g., building supplies and metals such as copper wiring), as well as construction equipment are not easily stolen or abused.

During construction, emergency response vehicles can use a variety of options for dealing with traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Lights and other identifying noises compel traffic to pull to the side where available to provide access through traffic. In addition, due to police deployment, police service does not necessarily require travel through impacted intersections. Although minor traffic delays due to potential lane closures could occur

during construction, particularly during the construction of utilities and street improvements, impacts to police response times would be less than significant for the following reasons:

(1) Emergency access would be maintained to the Project Site during construction through marked emergency access points approved by the APD; and

(2) Partial lane closures, if determined to be necessary, would not significantly affect emergency vehicles, the drivers of which normally have a variety of options for avoiding traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Additionally, if there are partial closures to streets surrounding the Project site, flagmen would be used to facilitate the traffic flow until such temporary street closures are complete.

Construction of the Project would not affect the APD's ability to respond to emergencies to the extent that requires additional new or expanded police facilities, in order to maintain acceptable service ratios, response times, or other performance objectives of the APD. For these reasons, Project construction impacts on police services would be less than significant.

(b) Operation

The Project would generate new residents, visitors, and employees, and would also increase the amount of developed square footage on the Project Site, resulting in an increased need for police protection services at the Project Site. Although the APD does not maintain minimum officer-to-population ratio objectives, the data are a useful metric for gauging the effect a project might have on service levels and response times. The current officer-to-resident ratio in the City is 1 officer per 950 residents. The Project would result in an on-site population of approximately 2,525 people, requiring approximately three additional officers to maintain the same officer-to-population ratio. The City has 85 sworn police officers. The addition of three officers to maintain the existing ratio represents an approximately 3.5 percent increase over existing staffing levels. This change would not require the construction of additional police facilities.

To help offset the need for additional police officers, the Project would include security features within the parking facilities and exterior building areas, such as appropriate lighting and gated access. In addition, the lighting and landscaping design would ensure high visibility and the Project would provide for on-site security measures and controlled access systems for residents and tenants to minimize the demand for police protection services. The Project would incorporate crime prevention features into the design of the

buildings and public spaces, such as lighting of entryways and public areas. The Project would include the following:

- On-site security personnel;
- Security cameras;
- Perimeter lighting to supplement the street lighting and to provide increased visibility and security;
- Parking structure access control; and
- Residential units access control.

These measures would provide defensible spaces designed to reduce opportunity crime and ensure safety and security. The Project would provide the APD with a diagram of each portion of the Project Site, showing access routes and additional access information as requested by the APD, to facilitate police response. In addition, APD will be included in the plan check process and may add conditions of approval, if necessary.

Emergency access to the Project Site would be provided by the existing street system in and around the Project Site. Project-related traffic would have the potential to increase emergency vehicle response times to the Project Site and surrounding properties due to travel time delays caused by traffic. However, the area surrounding the Project Site includes an established street system, consisting of freeways, primary and secondary arterials, and collector and local streets, all of which provide regional, sub-regional, and local access and circulation within the Project's traffic study area. In addition, the drivers of emergency vehicles normally have a variety of options for avoiding traffic, such as using sirens to clear a path of travel or driving in the lanes of opposing traffic, pursuant to California Vehicle Code (CVC) Section 21806. As such, the increase in traffic generated by the Project would not significantly impact emergency vehicle response times to the Project Site and surrounding area.

The Project's demand for police services, along with the provision of on-site security features, coordination with APD, and incorporation of crime prevention features, would not require the provision of new or physically altered police stations in order to maintain acceptable service ratios or other performance objectives for police protection. Therefore, Project impacts related to police protection services during operation would be less than significant.

(2) Impact Conclusion

Based on the above analysis, the Project is not anticipated to generate a demand for additional police protection services that could exceed the APD's capacity to serve the

Project Site. Furthermore, the Project would not result in a substantial impact to APD access and emergency response as a result of increased traffic congestion attributable to the Project. Therefore, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain APD's capability to serve the Project Site. Project impacts would be **less than significant**.

(3) Mitigation Measures

No significant impacts related to police protection services have been identified, and no mitigation measures are required.

(4) Level of Significance After Mitigation

Impacts related to police protection services would be **less than significant** prior to mitigation.

e) Cumulative Impacts

(1) Impact Analysis

Implementation of the Project in conjunction with the cumulative projects identified in **Section III, Environmental Setting** would likely increase demand for police protection services based on a potential net increase in residential population. It is estimated that the residential cumulative projects located within the City of Alhambra and the Project together would generate approximately 3,148 additional residents in the City.[4] However, as is also discussed in **Section IV.L, Population and Housing**, it is possible that some or all of these cumulative residents may already reside in the City.

Conservatively assuming that all of these residents would be new to the area, this could require the need for approximately three additional officers to maintain the existing ratio in the City. As with the Project, the applicants of the cumulative projects would be required to incorporate appropriate safety features into the design and construction of their respective projects to minimize the potential for crime and to maximize safety, ultimately minimizing the need for police protection services. Each of the cumulative

[4] *Table III-2 in Section III, Environmental Setting, identifies 448 dwelling units that are proposed, pending construction, or are under construction within the City of Alhambra, which when combined with the Project would result in approximately 1,509 cumulative dwelling units. Based on the average persons per household rate of 1.39 persons per household for future City growth (refer to Section IV.L, Population and Housing), the cumulative projects would generate approximately 623 residents. When added to the Project's estimated population of 2,525 persons, the total would be 3,148 additional residents associated with cumulative growth.*

projects would be individually subject to APD review and would be required to comply with all applicable safety requirements of the APD and the City in order to adequately address police protection service demands. In addition, the cumulative projects would contribute to funding police protection services or new facilities in the area by generating annual revenue from property taxes that would be deposited into the City's General Fund and could potentially be used to fund the construction of future police protection facilities and support hiring more offices. Should a new facility be needed, its development would be subject to separate environmental review. Since this area is highly developed, the site of a police station would likely be an infill vacant lot and construction would likely only disturb between 0.5 and 1 acre of land. The development at the scale is unlikely to result in significant unavoidable environmental impacts. This would further ensure that any cumulative increase in demand for police protection services could be accommodated. Therefore, cumulative impacts related to police protection services would be **less than significant**.

(2) Mitigation Measures

No significant cumulative impacts related to police protection services have been identified, and no mitigation measures are required.

(3) Level of Significance after Mitigation

Cumulative impacts related to police protection services would be **less than significant** prior to mitigation.

IV. Environmental Impact Analysis

M.3. Public Services – Schools

1. Introduction

This section addresses the potential impacts of the Project on the demand for school services. Within the City of Alhambra, the Alhambra Unified School District (AUSD) provides public education for over 17,000 students in grades K-12 at several elementary, middle and high schools, and additional schools including magnet centers, year round schools, span schools, continuation schools, opportunity schools, special education schools, and community day schools.[1] Projects that affect these factors (e.g., by increasing residential population in an area) may increase the demand for public school facilities. This section is based on written correspondence from AUSD, included as **Appendix L** of the Draft EIR:

L Correspondence from George Murray, Assistant Superintendent, Alhambra Unified School District, April 18, 2018.

2. Environmental Setting

a) Regulatory Framework

(1) State

(a) Board of Education

AUSD is mandated by the State of California to provide the administration and provision of public elementary and secondary education to the residents of the City of Alhambra (City) and some surrounding areas, including the area where the Project Site is located. Funds for the construction and maintenance of public schools within the school district come primarily from the State government and the issuance of local bonding measures.

(b) Open Enrollment Policy

The open enrollment policy is a State-mandated policy that enables students anywhere in the AUSD to apply to any regular, grade-appropriate AUSD school with designated "open enrollment" seats. The number of open enrollment seats is determined annually.

[1] *2019 General Plan, City of Alhambra, Page 56.*

Each individual school is assessed based on the principal's knowledge of new housing and other demographic trends in the attendance area. Open enrollment seats are granted through an application process that is completed before the school year begins. Students living in a particular school's attendance area are not displaced by a student requesting an open enrollment transfer to that school.

(c) School Facilities Fee Plan

California Education Code Section 17620(a)(1) states that the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities.

The Leroy F. Greene School Facilities Act of 1998 (SB 50) sets a maximum level of fees a developer may be required to pay to mitigate a project's impacts on school facilities. The maximum fees authorized under SB 50 apply to zone changes, general plan amendments, zoning permits, and subdivisions. The provisions of SB 50 are deemed to provide full and complete mitigation of potential school facilities impacts, notwithstanding any contrary provisions in CEQA or other state or local laws (Government Code Section 65996). The fees are based on building permits. Payment of these fees would be mandatory for the Project Applicant and would fully mitigate any impact upon school services generated by the Project.

(d) Proposition 51 (Public School Facility Bonds)

In November 2016, California voters approved Proposition 51 authorizing the State of California to issue $9 billion in bonds to fund the improvement and construction of school facilities for K-12 schools and community colleges. Of this total $3 billion is to be spent on the construction of new school facilities, $3 billion is to be spent on the improvement or modernization of existing school facilities, $500 million is to be spent on providing facilities for charter schools, and the remainder is to be dedicated to technical education programs and community colleges.

(2) Local

(a) City of Alhambra General Plan

The City's General Plan provides direction regarding the City's vision for future development in the City and includes several chapters to help guide the design of future development. It also contains several broad goals, objectives, and policies for neighborhood design to create a more livable city for existing and future residents. These goals and policies are stated not in terms of specific design guidelines, but in terms of general neighborhood-wide design policies.

The General Plan serves as a guide for the City's overall long-range growth and development policies and serves as a guide to update community plans, specific plans, and the citywide elements. These citywide elements address functional topics that cross community boundaries, such as transportation, and address these topics in detail.

The City has recently updated its General Plan in August 2019. A draft of the updated General Plan had been released in July 2018 for public review and a revised draft released in early 2019. The updated General Plan consists of seven elements, including a Land Use Element, Circulation Element, and Open Space Element. Each element addresses its respective subject and the City's 20-year vision for the future. With regard to schools, the General Plan's Services and Infrastructure Chapter establishes the following goal:

- **Goal QL-9:** Quality educational opportunities that maximize the use of school facilities.

b) Existing Conditions

(1) Existing Facilities

As mentioned, the City of Alhambra is served by the AUSD, whose educational facilities in Alhambra include nine grade K-8 elementary schools (Martha Baldwin, Emery Park, Fremont, Garfield, Granada, Marguerita, Northrup, Park, and Ramona), three traditional grade 9-12 high schools (Alhambra, San Gabriel, and Mark Keppel), two non-traditional high schools (Independence and Century), and one adult school. Four district elementary schools are located in the adjacent City of Monterey Park.[2]

Alhambra is also home to several private schools, including five religious schools (Ramona Convent Secondary School, St. Therese School, St. Thomas Moore Elementary School, All Souls Parish School, and Emmaus Lutheran School). The City also includes four non-denominational private schools (Oneanta Montessori School, Sherman School, Leeway School, and Bell Tower School).

According to the City's General Plan, in the last decade, enrollment in the AUSD has been steadily decreasing. This decline in enrollment is due to the declining number of child-bearing residents in the City. Because this trend is expected to continue, schools will have to coordinate enrollment and the community may face some elementary and high school closures.

As identified in the Draft EIR for the 2019 Draft General Plan Update, AUSD is currently operating with 16,389 school seats filled and an overall student housing capacity of

[2] *2019 General Plan, City of Alhambra, Page 56.*

21,456 seats. This leaves an excess of 6,067 seats (1,854 high school and 3,217 elementary) in the District.

3. Project Impacts

a) Methodology

As shown in Table IV.M.3-1, the projected number of students generated by the Project is based on residential uses. Each student generation factor was multiplied by the appropriate dwelling unit count or square footage total to obtain an approximation of how many students would be generated based on the residential components of the Project. The total number of students generated was then added to the existing student enrollment for the schools serving the Proposed Project. This number was compared to the total capacity to determine whether the schools could accommodate the Project's student generation.

Table IV.M.3-1
AUSD Student Generation Rates

Use	School Level		
	Elementary	Middle	High
Students Per Single-Family Dwelling Unit	0.33	0.09	0.13
Students Per Single-Family Apartment Unit	0.20	0.07	0.08
Students Per Multi-Family Unit	0.15	0.06	0.06

Source: AUSD, Correspondence from George Murray, Assistant Superintendent, Facilities and Planning, AUSD, April 18, 2018.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with Appendix G of the State CEQA Guidelines, the Project would have a significant impact related to schools if it would:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 public schools.

c) Project Design Features

No specific Project Design Features are proposed with regard to schools.

d) Analysis of Project Impacts

The analysis contained in this section evaluates impacts related to public schools.

Threshold a) ***Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 public schools?***

(1) Impact Analysis

(a) Construction

The Project would generate part-time and full-time jobs associated with its construction between the start of construction and full buildout. However, due to the employment patterns of construction workers in southern California and the operation of the market for construction labor, construction workers are not likely to relocate their households as a consequence of construction job opportunities. Therefore, construction employment generated by the Project would not result in a notable increase in the resident population or a corresponding demand for schools from construction workers in the vicinity of the Project Site. Impacts on school facilities during construction of the Project would be less than significant.

(b) Operation

The projected increase in the number of residents (1,061 housing units, 2,525 residents) from the Project and the resulting potential need to enroll any school-aged children into AUSD schools would increase the demand for school services. As shown in Table IV.M.3-2, based on AUSD demographic analysis, the Project would result in approximately 223 additional AUSD students (159 elementary students and 64 high school students). These calculations do not take into account the possibility that some of the future residents of the Project already reside within the service boundaries of the AUSD and have school-aged children currently enrolled in the AUSD schools near the Project Site. However, to provide for a conservative analysis, it is assumed that all of the students generated as a result of the Project are not currently enrolled in the AUSD

schools near the Project Site and would enroll in existing AUSD (as opposed to private or newly built AUSD) schools.

Based on correspondence received from AUSD, the elementary school serving the Project Site is Emery Park Elementary, which has a current enrollment of 440 students and a capacity of 843 students. Alhambra High School would serve the high school residents at the Project Site and has a current enrollment of 2,450 students with a capacity of 3,400 students. Thus, both schools are currently operating under capacity and would continue to do so following the addition of Project-generated students.

Table IV.M.3-2
Estimated Project Student Generation

Land Use	Project Amount	Student Generation		
		Elementary	High	Total
Multi-Family Dwelling Units	1,061	159	64	**223**
	Total	**159**	**64**	**223**

Source: Student calculations based on AUSD student generation factors shown in Table IV.M.3-1.

All strategies regarding how to accommodate additional students generated by the Project are under the control of the AUSD. Among these strategies are changes in attendance boundaries, grade reconfigurations, use of portable classroom buildings, and/or additions to existing schools. The number of Project-generated students that would actually attend the AUSD schools serving the Project Site may be less than the number of students shown in Table IV.M.3-2, since the analysis does not take into account options to allow Project-generated students to receive education elsewhere. These options to reduce student population at AUSD schools include the following:

- Private schools;
- Home-schooling;
- Open enrollment that enables students anywhere within the district to apply to any regular, grade-appropriate AUSD school with designated “open enrollment” seats;
- Intra-district parent employment-related transfer permits that allow students to enroll in a school that serves the attendance area in which the student’s parent is regularly employed;
- Sibling permits that enable students to enroll in a school where a sibling is already enrolled; and

- Child care permits that allow students to enroll in a school that serves the attendance area in which a younger sibling is cared for daily during after school hours by a known child care agency, private organization, or verifiable child care provider.

(2) Impact Conclusion

A conservative analysis of Project impacts on student generation (e.g., that all Project students would represent new enrollment at the local AUSD schools) indicates that the elementary and high school serving the Project Site would have excess capacity to serve Project students. The AUSD has a current unused capacity of 6,067 student seats, while the Project would generate a total of 223 students.

Nevertheless, the Project would be required to pay school facilities fees pursuant to SB 50, which would be used to construct facilities. As discussed previously, mandatory compliance with the provisions of SB 50 regarding payment of school fees is deemed to provide full and complete mitigation of school facilities impacts and no further mitigation is required. Thus, with payment of the SB 50 fees, the Project's impact to public schools would be less than significant.

Although the Project would increase the demand for school services through its resident population, it would not result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts. Additionally, the AUSD has confirmed that there are no planned improvements to add capacity through expansion of any identified school in the area.[3] Thus, impacts to public schools would be **less than significant**.

(3) Mitigation Measures

No significant impacts related to schools have been identified, and no mitigation measures are required.

(4) Level of Significance After Mitigation

Impacts related to schools would be **less than significant** prior to mitigation.

[3] *Correspondence with George Murray, Assistant Superintendent, Alhambra Unified School District, April 18, 2018.*

e) Cumulative Impacts

(1) Impact Analysis

Implementation of the Project in conjunction with the cumulative projects identified in **Section III, Environmental Setting**, would increase student capacities at AUSD schools based on a potential net increase in residential population and the associated generation of potential AUSD students. It is estimated that the residential cumulative projects located within the City of Alhambra and the Project would together generate approximately 3,148 additional residents in the City.[4] However, as is also discussed in **Section IV.L, Population and Housing**, it is possible that some of these cumulative residents may already reside in the City. As shown in Table IV.M.3-3, this increase in residential population would be estimated to generate a total of 122 students (87 elementary school and 35 high school). When added to the Project's student generation, total cumulative development within the AUSD service area would generate 345 students (246 elementary school and 99 high school). Therefore, AUSD schools would have excess capacity to serve this estimated level of cumulative student growth. As noted previously, the AUSD has a current unused capacity of 6,067 student seats, while the Project and the cumulative projects would generate a total of 345 students.

Table IV.M.3-3
Estimated Cumulative Projects Student Generation

Land Use	Cumulative Projects Amount	Student Generation		
		Elementary	High	Total
Single-Family Dwelling Units	37	12	5	**17**
Apartment Dwelling Units	260	52	21	**73**
Multi-Family Dwelling Units	151	23	9	**32**
Total		**87**	**35**	**122**

Source: Student calculations based on AUSD student generation factors shown in Table IV.M.3-1.

AUSD's facility planning assumptions are based on overall demographic trends and, although not specifically based upon new development projects, are intended to

[4] *Table III-2 in Section III, Environmental Setting, identifies 448 dwelling units that are proposed, pending construction, or are under construction within the City of Alhambra, which when combined with the Project would result in approximately 1,509 cumulative dwelling units. Based on the average persons per household rate of 1.39 persons per household for future City growth (refer to Section IV.L, Population and Housing), the cumulative projects would generate approximately 623 residents. When added to the Project's estimated population of 2,525 persons, the total would be 3,148 additional residents associated with cumulative growth.*

address changes in student enrollment arising from area population trends from various sources. Implementation of the Project in conjunction with the cumulative projects would generate students based on an increase in dwelling units.

The cumulative students could be enrolled in private schools or one of the AUSD charter or magnet schools located in the area. Like the Project, all other future projects would be required to pay school fees to the AUSD to help reduce cumulative impacts that they may have on school services. Compliance with the provisions of SB 50 is deemed to provide full and complete mitigation of school facilities impacts. Therefore, with the full payment of all applicable school fees by the Project and cumulative projects, cumulative impacts on schools would be reduced to a less-than-significant level. As the Project would not result in a substantial incremental contribution to the cumulative demand for school services, the Project would not have a cumulatively considerable impact to schools. Therefore, cumulative impacts related to schools would be **less than significant**.

(2) Mitigation Measures

No significant cumulative impacts related to schools have been identified, and no mitigation measures are required.

(3) Level of Significance after Mitigation

Cumulative impacts related to schools would be **less than significant** prior to mitigation.

IV. Environmental Impact Analysis

M.4. Public Services – Parks and Recreation

1. Introduction

This section addresses the potential impacts of the Project on parks and recreational facilities and focuses on whether existing facilities are sufficient to accommodate the growth that could be potentially generated by the Project. Within the City of Alhambra (City) the Alhambra Parks and Recreation Department (APRD) provides park and recreational facilities. This section is based, in part, on the following written correspondence from the APRD, included as **Appendix L** of the Draft EIR:

L Correspondence from Alhambra Parks and Recreation Department, April 18, 2018.

2. Environmental Setting

a) Regulatory Framework

(1) State

(a) State Quimby Act

In response to California's rapid urbanization and decrease in the number of parks and recreational facilities, Section 66477 of the California Government Code, also known as the Quimby Act, was enacted in an effort to promote the availability of park and open space areas. Under the Quimby Act, requirements for dedications of land are not to exceed five acres of parkland per 1,000 persons residing within a subdivision, and in-lieu fee payments shall not exceed the proportionate amount necessary to provide three acres of parkland, unless the amount of existing neighborhood and community parkland exceeds that limit. If the parkland standard is not exceeded in a project area, cities may request a minimum exaction for a project of three acres of parkland per 1,000 persons, and up to five acres per 1,000 if that city currently has five acres of parkland per thousand residences. As a condition to the approval of a tentative map or parcel map, or a zone change, the Quimby Act also authorizes cities and counties to enact ordinances requiring

the dedication of land, or the payment of fees for park and/or recreational facilities in-lieu thereof, or both, by developers of residential subdivisions.

(2) Local

(a) City of Alhambra General Plan

The City's General Plan provides direction regarding the City's vision for future development in the City and includes several chapters to help guide the design of future development. It also contains several broad goals, objectives, and policies for neighborhood design to create a more livable city for existing and future residents. These goals and policies are stated not in terms of specific design guidelines, but in terms of general neighborhood-wide design policies.

The General Plan serves as a guide for the City's overall long-range growth and development policies and serves as a guide to update community plans, specific plans, and the citywide elements. These citywide elements address functional topics that cross community boundaries, such as transportation, and address these topics in detail.

The City has recently updated its General Plan in August 2019. A draft of the updated General Plan had been released in July 2018 for public review and a revised draft released in early 2019. The updated General Plan consists of seven elements, including a Land Use Element, Circulation Element, and Open Space Element. Each element addresses its respective subject and the City's 20-year vision for the future. With regard to parks, the General Plan's Services and Infrastructure Chapter establishes the following goals and policies:

- **Goal QL-6:** Provision of adequate and accessible recreation and open space amenities.
    - **Policy QL-6A:** Where feasible and desirable, add new recreation facilities such as dog parks and fitness courses.
    - **Policy QL-6G:** Where feasible and desirable, utilize vacant properties to provide new open space and passive recreation opportunities in the form of pocket parks and/or community gardens.

b) Existing Conditions

(1) Existing Facilities

Alhambra's open space is limited since the City is built out and positioned in the center of an urban region. The City currently has 270.2 acres (five percent of the City's total land area) of open space, which equals approximately 3.11 acres of open space per 1,000

persons.[1] Most of these lands are used for recreation purposes such as parks, trails, and a golf course. According to the updated General Plan, there are few opportunities for expansion of these facilities based on the limited amount of vacant land in the City.

Overall, the City operates six parks and a public golf course. The six parks total more than 200 acres. Alhambra Park, Almansor Park, Granada Park, and Story Park have sports fields for activities like baseball, basketball, soccer, or tennis utilized by youth teams and adult sports leagues throughout the year. These parks include playground equipment, exercise courses, activity rooms, and gymnasiums. The APRD also offers youth sports teams, adult basketball and volleyball leagues, and sports and dance classes throughout the year. Some of Alhambra's parks and plazas are designed especially for passive recreation. Burke Heritage Park features a historical museum and drought-tolerant garden. Gateway Plaza Park includes benches, a garden, and a 26-foot arch.

In addition to recreational activities at Alhambra's municipal parks, the After School Playground Program allows students and community members to utilize nine public school facilities. Drop-in activities include team and individual sports and other kinds of programs, such as arts and crafts, table game tournaments, four square, and kickball.

There are currently three parks in proximity to the Project Site:

- Closest Park: Emery Park (0.4 mile from Project Site) – 1.38 acres. Emery Park is a pocket park, with the following amenities: activity room (with kitchen facility), playground, BBQs, picnic tables, restrooms.

- 2nd Closest Park: Alhambra Park (1.2 miles from Project Site) – 14.22 acres. Alhambra Park offers an open grass area, picnic tables with covered shelters, playground equipment, barbecues, tennis courts, volleyball courts, meeting room, activity room, swimming pool and pool house, outdoor basketball court and restrooms, Bandshell for performances, as well as the Alhambra Veterans Memorial.

- 3rd Closest Park: Granada Park (1.5 miles from Project Site) – 15 acres. Granada Park is the second largest park in Alhambra and has the following amenities: gymnasium (with activity room attached), pool and pool house, baseball field, snack bar for Little League, tennis courts, playground equipment, picnic tables and picnic shelters, restrooms.

[1] *Based upon the City's 2017 estimated population of 86,922 persons (see Section IV.K, Population and Housing).*

The City's desired parkland ratio is 3.2+ acres per 1,000 residents, which is slightly greater than its current parkland ratio. As a result, the City does not have any plans to develop a new park or to expand existing parks, since resident needs are currently being met.

3. Project Impacts

a) Methodology

The environmental impacts of the Project on parks and recreational facilities are determined based on the ability of existing parks and recreational facilities in the Project area to accommodate the Project's demands for such facilities. This need is calculated based on the City's recommended ratio for parkland to population, as well as project-specific recommendations of the APRD. Per the APRD, the City's desired ratio of parkland to population is 3.2+ acres per 1,000 persons. The Project is compared to this standard to determine whether the Project would create substantial demands on existing parks and recreational facilities such that new or expanded parks and recreational facilities would be needed on-site or off-site.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with Appendix G of the State CEQA Guidelines, the Project would have a significant impact related to parks if it would:

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 parks;***

b) ***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; and***

c) ***Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.***

c) Project Design Features

No specific Project Design Features are proposed with regard to parks.

d) Analysis of Project Impacts

The analysis contained in this section evaluates impacts related to parks.

Threshold a) ***Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 parks?***

(1) Impact Analysis

(a) Project Open Space and Recreational Amenities

As discussed in **Section 4.L, Population and Housing**, of the Draft EIR, the Project would generate approximately 2,525 residents. Per the citywide standard (3.2+ acres of parkland per 1,000 persons), the Project would generate a demand for approximately 8.08 acres of new parkland.[2]

The increased residential population in a currently adequately served area would potentially increase the demand on existing parks and recreational facilities beyond the City's desired parkland ratio unless the Project includes features that would otherwise reduce or offset the additional demand for recreation and park services. Also, the dedication of land, or the payment of fees, or both, must not exceed the proportionate amount necessary to provide 3.2 acres of parkland per 1,000 persons.

The Project would include a substantial amount of open space, exceeding applicable City requirements. Recreational amenities including swimming pools, fitness centers, public gathering spaces, and landscaped courtyards and gardens would be included within the proposed residential community. Table IV.M.4-1 details the amount of required and proposed open space to be included in the Project. As shown, the proposed residential units would require a total of 450,925 square feet of open space. The Project would provide a total of 716,434 square feet of open space, 450,509 square feet of which would be located in the primary amenity area for each Plan Area.

[2] *3.2 acres / 1,000 persons x 2,525 persons = 8.08 acres.*

Table IV.M.4-1
Project Open Space

Use	Open Space in Plan Area (square feet)					Total
	Office	North	East	South	Corner	
Residential: Required	0	219,300	0	166,600	65,025	450,925
Residential: Provided		*236,485*		*132,069*	*40,777*	*409,331*
Office: Required	0	0	0	0	0	0
Office: Provided	*276,040*	*0*	*31,063*	*0*	*0*	*307,103*
TOTAL Provided						***716,434***
Source: TCA Architects, Inc., April 2018						

The Project proposes 864 new trees on the site. Preliminary landscape plans and examples are illustrated on Figures II-39 through II-41. The intent of the landscape design is to provide lush, tree-shaded pedestrian corridors, paseos, and courtyards throughout the proposed residential community. Because the Project would provide open space in excess of the required amount in the overall Plan Area, impacts would be less than significant.

(b) Consistency with City Policies

Although the Project would not dedicate any new parkland to the City, it would include a variety of recreational amenities for the use of its residents and guests. These amenities would serve to reduce the Project's demand for and use of existing recreation and park facilities in the local area.

Furthermore, compliance with regulatory requirements would ensure that the intent of the ADPR's parkland policies would be addressed through compliance with State law as enforced through applicable Alhambra Municipal Code (AMC) requirements related to the provision and/or funding of parks and recreational spaces. Such requirements include the provision of on-site recreational amenities and open space, and payment of Quimby fees.

The Project would not conflict with, or impede implementation of, any of the policies or goals related to parks described in the General Plan. The Project, through the payment of in lieu fees, would help the ADRP achieve progress toward its goal of ensuring adequate park facilities for existing and future population. With the addition of the Project's estimated residential population, the City would continue to fall short of its desired parkland ratio of 3.2+ acres per 1,000 persons, having an estimated ratio of approximately 3.02 acres per 1,000 persons.[3] However, this is a Citywide goal and is not intended to constitute a requirement for individual development projects. The Project's provision of on-site recreational amenities and open space in excess of City requirements

[3] *Based upon 2017 City of Alhambra population estimate of 86,922 persons and adding the Project's estimated 2,525 residents (see Section IV.L, Population and Housing). The resulting Citywide population-to-parkland ratio would be 3.02 acres/1,000 persons.*

coupled with its payment of required Quimby Fees would reduce the Project's impact to a less-than-significant level.

(2) Impact Conclusion

The Project's compliance with the above-referenced requirements collectively address the Project's future demand upon recreation and park facilities by requiring the dedication of parkland or contribution of funds to be placed in a City-controlled account to be used to acquire and develop new parkland areas within the Project's service area. The formulas for calculating fees and/or land dedication are established to ensure that the provision of new park and recreation facilities is commensurate with the level of development that is built. Compliance with applicable regulatory requirements would ensure that the intent of the ADPR's parkland policies would be addressed through compliance with applicable AMC requirements related to the provision and/or funding of parks and recreational spaces. Thus, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks. Therefore, Project impacts would be **less than significant**.

(3) Mitigation Measures

No significant impacts related to parks have been identified, and no mitigation measures are required.

(4) Level of Significance After Mitigation

Impacts related to parks would be **less than significant** prior to mitigation.

Threshold b) ***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?***

(1) Construction

Construction of the Project would result in a temporary increase in the number of construction workers at the Project Site. Due to the employment patterns of construction workers in southern California, and the operation of the market for construction labor, the likelihood that construction workers would relocate their households as a consequence of working on the Project is negligible. Therefore, the construction workers associated with the Project would not result in a notable increase in the residential population of the

Project vicinity, or a corresponding permanent demand for parks and recreational facilities in the vicinity of the Project Site.

During Project construction, the use of public parks and recreational facilities by construction workers would be expected to be limited, as construction workers are highly transient in their work locations and are more likely to utilize parks and recreational facilities near their places of residence. Although there is a potential for construction workers to spend their lunch breaks at the parks and recreational facilities near the Project Site, it is unlikely to occur at parks and recreational facilities beyond the immediate vicinity of the Project Site as lunch breaks typically are not long enough for workers to take advantage of such facilities and return to work within the allotted time (e.g., 30 to 60 minutes). The closest park facility to the Project Site is Emery Park, which is located approximately 0.4 mile distant. Therefore, the resulting increase, if any, in the use of local parks and recreational facilities would be temporary and negligible. Project construction would not be expected to result in access restrictions to City parks and recreation facilities in the vicinity of the Project Site or interfere with existing park usage.

Based on the above analysis, Project construction would not generate a demand for park or recreational facilities that could not be adequately accommodated by existing or planned facilities and services. Project construction would not 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. Therefore, impacts on parks and recreational facilities during Project construction would be **less than significant**.

(2) Operation

As discussed in **Section II, Project Description**, of the Draft EIR, the Project would redevelop portions of the Project Site with 1,061 multiple-family residential dwelling units. The Project's new residential units would increase the residential population at the Project Site by 2,525 persons, as shown in **Section IV.L, Population and Housing**, of the Draft EIR. The population increase associated with the Project would generate additional demand for parks and recreational facilities in the Project vicinity.

As shown in Table IV.M.4-1, the Project would provide a total of approximately 716,434 square feet of open space and recreational amenities to serve the recreational needs of Project residents and guests. Specifically, the Project would include swimming pools, fitness centers, public gathering spaces, and landscaped courtyards and gardens within the proposed residential community. As such, the open space and recreational amenities for the Project would overall greatly exceed the City's open space requirement of 409,331 square feet. In addition, a total of approximately 864 new trees would be provided by the Project.

Due to the amount, variety, and availability of the proposed open space and recreational amenities, it is anticipated that Project residents would generally utilize on-site open space to meet their recreational needs. Thus, while the Project's residents would be expected to utilize off-site public parks and recreational facilities to some degree, the Project would not be expected to cause or accelerate substantial physical deterioration of off-site public parks or recreational facilities given the provision of on-site open space and recreational amenities.

Furthermore, the Project would comply with the requirements of the AMC regarding payment of Quimby fees. As such, the Project would not significantly increase the demand for off-site public parks and recreational facilities. Project operation would not 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. Therefore, impacts on parks and recreational facilities during Project operation would be **less than significant**.

(3) Mitigation Measures

Impacts related to parks would be less than significant. Therefore, no mitigation measures would be necessary.

(4) Level of Significance After Mitigation

Impacts related to parks would be **less than significant** without mitigation.

Threshold c) Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

(1) Impact Analysis

As detailed above in the discussions under Thresholds (a) and (b**)**, the Project would comply with regulations regarding open space and recreational facilities. In addition, although the Project would increase the residential population on-site that would generate a demand for parks and recreational facilities, Project residents and guests would be anticipated to utilize the Project's on-site open space and recreational facilities to a greater extent than off-site facilities. Therefore, the Project would not include or require the construction or expansion of recreational facilities that would result in adverse physical effects on the environment. Impacts would be **less than significant**.

(2) Mitigation Measures

Impacts related to parks would be less than significant. Therefore, no mitigation measures would be necessary.

(3) Level of Significance After Mitigation

Impacts related to parks would be **less than significant** without mitigation.

e) Cumulative Impacts

(1) Impact Analysis

Implementation of the Project in conjunction with the cumulative projects identified in **Section III, Environmental Setting**, would increase demand for City parks and recreational facilities based on a potential net increase in Citywide residential population. It is estimated that the residential cumulative projects located within the City of Alhambra and the Project would together generate approximately 3,148 additional residents in the City.[4] However, as is also discussed in **Section IV.L, Population and Housing**, it is possible that some or all of these cumulative residents may already reside in the City. The increase in residential population by the cumulative development projects would increase the demand for parks and recreation facilities. This increase in the residential population of the area is estimated to generate a need for approximately 10 acres of additional park area (per the ADPR desired parkland ratio). Employees generated by the retail/commercial uses of the cumulative projects would not typically enjoy long periods of time during the workday to visit parks and/or recreational facilities, and would, therefore, not be expected to contribute to the future demand on park services. All of the residential cumulative projects within the City of Alhambra are served by the ADPR and some may be impacting the same park facilities as the Project.

The extent to which the residential cumulative projects are proposing to include parks/recreational amenities is unknown. However, similar to the Project, residential cumulative projects would be required to comply with the requirements of the AMC pertaining to the provision of on-site open space and recreational amenities.

[4] *Table III-2 in Section III, Environmental Setting, identifies 448 dwelling units that are proposed, pending construction, or are under construction within the City of Alhambra, which when combined with the Project would result in approximately 1,509 cumulative dwelling units. Based on the average persons per household rate of 1.39 persons per household for future City growth (refer to Section IV.L, Population and Housing), the cumulative projects would generate approximately 623 residents. When added to the Project's estimated population of 2,525 persons, the total would be 3,148 additional residents associated with cumulative growth.*

In accordance with CEQA Guidelines section 15130(a)(3), a project's contribution to cumulative impacts is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure designed to alleviate the cumulative impact. As discussed previously, the City imposes Quimby fees pursuant to the AMC, based on the number of units proposed within a project. Accordingly, the fees are established to be proportionate to a project's demand for recreation and park facilities, as the demands for such facilities are primarily based on residential population of a given area.

The Project would be required to mitigate its impacts upon public recreation and park facilities by paying applicable Quimby fees in addition to providing the mandatory code-required open space areas and on-site recreational amenities. Therefore, pursuant to CEQA Guidelines Section 15130(a)(3), the Project's impacts would not be considered cumulatively considerable, as these fees are mandatory and proportionate based upon the Project's residential density. Therefore, the Project's contribution to cumulative impacts would not be cumulatively considerable and impacts would be **less than significant**.

(2) Mitigation Measures

No significant cumulative impacts related to parks have been identified, and no mitigation measures are required.

(3) Level of Significance after Mitigation

Cumulative impacts related to parks would be **less than significant** prior to mitigation.

IV. Environmental Impact Analysis

M.5. Public Services – Libraries

1. Introduction

This section addresses the potential impacts of the Project on the demand for library facilities, as well as the ability of existing library facilities to accommodate any increase in demand resulting from the Project. Within the City, the City itself provides library services through one central library location. This section is based on written correspondence from the City's only library (Alhambra Civic Center Library), included in **Appendix L** of the Draft EIR.

L Correspondence from Alhambra Civic Center Library, April 2018.

2. Environmental Setting

a) Regulatory Framework

(1) Local

(a) City of Alhambra General Plan

The City's General Plan provides direction regarding the City's vision for future development in the City and includes several chapters to help guide the design of future development. It also contains several broad goals, objectives, and policies for neighborhood design to create a more livable city for existing and future residents. These goals and policies are stated not in terms of specific design guidelines, but in terms of general neighborhood-wide design policies.

The General Plan serves as a guide for the City's overall long-range growth and development policies and serves as a guide to update community plans, specific plans, and the citywide elements. These citywide elements address functional topics that cross community boundaries, such as transportation, and address these topics in detail.

The City has recently updated its General Plan in August 2019. A draft of the updated General Plan had been released in July 2018 for public review and a revised draft released in early 2019. The updated General Plan consists of seven elements, including a Land Use Element, Circulation Element, and Open Space Element. Each element

addresses its respective subject and the City's 20-year vision for the future. With regard to libraries, the General Plan's Services and Infrastructure Chapter establishes the following goals and policies:

- **Goal SI-4:** An Alhambra Public Library that provides high-quality service in a high-quality setting to Alhambra residents.
    - **Policy SI-4B** Provide adequate space in the Alhambra Public Library for current and planned collections, users, staff, and services.
- **Goal SI-5:** An Alhambra Public Library that is accessible to all users.
    - **Policy SI-5A** Ensure that the Alhambra Public Library is reasonably accessible, physically and electronically, to all users.
    - **Policy SI-5B** Ensure that the hours and days of operation of the Alhambra Public Library continue to meet the needs of the City's residents.

b) Existing Conditions

(1) Existing Facilities

The City of Alhambra is served through one library, as discussed above, named the Alhambra Civic Center Library, which is approximately 45,000 square-feet in size, located at 101 South 1st Street, Alhambra, California. The Civic Center Library has a collection of approximately 128,000 items, including books, magazines, newspapers, audio books, and DVDs.[1] Total circulation of the library is estimated at approximately 294,024 during fiscal year 2016/2017.[2] To help with circulation needs, the Civic Center Library currently has 32 full time employees and has no plan for future expansion. In particular, the City's General Plan mentions that, while the number of visitors to the library continues to increase, the overall size of the library collection has generally declined over the years as the nature and function of the library has changed from reading books to more of a social interaction and study area for students. The Civic Center Library also serves as an electronic access point, providing computer access to citizens. There are no planned improvements to add capacity through expansion or plans for the development of any new libraries to serve the community.[3]

[1] *Correspondence with Alhambra Civic Library, April 18, 2018; Alhambra 2019 General Plan, Page 83.*

[2] *Ibid.*

[3] *Ibid.*

3. Project Impacts

a) Methodology

The impact of the Project with respect to library facilities is determined based on the ability of existing library facilities in the Project area to accommodate the Project's needs for such facilities. The analysis is based on a comparison of the Project's projected resident population to the City's anticipated population growth. Given that the Alhambra Civic Center Library has no stated plans to expand its facility in light of the City's projected population growth, the Project would only have an impact with respect to municipal library services if it would exceed the City's projected population growth.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with Appendix G of the State CEQA Guidelines, the Project would have a significant impact related to libraries if it would:

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 libraries.

c) Project Design Features

No specific Project Design Features are proposed with regard to libraries.

d) Analysis of Project Impacts

The analysis contained in this section evaluates impacts related to libraries.

Threshold a) ***Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 libraries?***

(1) Impact Analysis

(a) Construction

Construction of the Project would result in a temporary increase of construction workers on the Project Site. Due to the employment patterns of construction workers in southern California, and the operation of the market for construction labor, construction workers are not likely to relocate their households as a consequence of Project construction. Therefore, Project-related construction workers would not result in a notable increase in the resident population within the service area of the Alhambra Civic Center Library. Furthermore, Project-related construction workers would not result in a notable increase in an overall corresponding demand for library services in the vicinity of the Project Site; it is unlikely that construction workers would visit Project area libraries on their way to/from work or during their lunch hours. Construction workers would likely use library facilities near their places of residence because lunch break times are typically not long enough (30 to 60 minutes) for construction workers to take advantage of library facilities, eat lunch, and return to work within the allotted time. It is also unlikely that construction workers would utilize library facilities on their way to work as the start of their workday generally occurs before the libraries open for service. Similarly, it is unlikely that construction workers would utilize library facilities at the end of the workday and would likely use library facilities near their places of residence. Therefore, any increase in usage of the libraries by construction workers is anticipated to be negligible.

As such, Project construction would not cause the local library to exceed its capacity to adequately serve the City's existing residential population. Project construction would not substantially increase the demand for library services for which current demand exceeds the ability of the facility to adequately serve the population. As such, Project construction would not result in the need for new or physically altered libraries, the construction of which would cause significant environmental impacts. Impacts on library facilities during Project construction would be **less than significant**.

(b) Operation

As discussed in **Section II, Project Description**, of the Draft EIR, the Project would redevelop portions of the Project Site with 1,061 multiple-family residential dwelling units. The Project's new residential units would increase the residential population at the Project Site by 2,525 persons, as shown in **Section IV.L, Population and Housing**, of the Draft EIR. The population increase associated with the Project would generate additional demand for libraries in the Project vicinity.

The Civic Center Library is the only library within the City, and it has confirmed that it has adequate capacity to serve the City's current and forecasted future population and that there are no planned improvements to add capacity through expansion or

construction of any new libraries.[4] As discussed in **Section IV.L, Population and Housing**, the estimated 2017 population of the City is 86,922 persons. The Southern California Association of Governments (SCAG) forecasts an increase in Alhambra's population of 3,258 persons by 2040. The Project's estimated population of 2,525 persons represents 78 percent of this forecasted growth. Because the Project's population would not exceed the City's forecasted growth, the Project's demand for municipal library services would similarly not exceed the Civic Center Library's ability to provide library services to future Project residents.

Furthermore, the Project would generate revenues to the City's General Fund (in the form of property taxes, sales tax, and business tax, etc.) that could be applied toward the provision of new or improved library facilities and related staffing, as deemed appropriate. The Project's revenue to the General Fund would help offset the Project-related increase in demand for library services. Additionally, it is likely that some of the residents of the Project would have individual access to internet service, which provides information and research capabilities that studies have shown to reduce demand at physical library locations.[5,6,7] Also, there are interlibrary programs available to the public through which one can request materials from other libraries located outside of Alhambra. Therefore, it is not anticipated that the Project would result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities, or need for new or physically altered library facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for library services. The Project's impact on library services would be **less than significant**.

(2) Mitigation Measures

Impacts related to libraries would be less than significant. Therefore, no mitigation measures would be necessary.

(3) Level of Significance After Mitigation

Impacts related to libraries would be **less than significant** without mitigation.

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4 *Correspondence with Alhambra Civic Center Library, April 18, 2018.*

5 *"To Read or Not To Read", see pg. 10: "Literary reading declined significantly in a period of rising Internet use": http://www.nea.gov/research/toread.pdf.*

6 *"How and Why Are Libraries Changing?" Denise A. Troll, Distinguished Fellow, Digital Library Federation: http://old.diglib.org/use/whitepaper.htm.*

7 *"Use and Users of Electronic Library Resources: An Overview and Analysis of Recent Research Studies", Carol Tenopir: http://www.clir.org/pubs/reports/pub120/contents.html.*

e) Cumulative Impacts

(1) Impact Analysis

Implementation of the Project in conjunction with the cumulative projects identified in **Section III, Environmental Setting**, would increase demand for City libraries based on a potential net increase in Citywide residential population. It is estimated that the residential cumulative projects located within the City of Alhambra and the Project would together generate approximately 3,148 additional residents in the City.[8] However, as is also discussed in **Section IV.L, Population and Housing**, it is possible that some or all of these cumulative residents may already reside in the City. The increase in residential population by the cumulative development projects would increase the demand for library services. Employees generated by the retail/commercial uses of the cumulative projects would not typically enjoy long periods of time during the workday to visit libraries, and would, therefore, not be expected to contribute to the future demand on library services. All of the residential cumulative projects within the City of Alhambra are served by the Alhambra Civic Center Library.

This cumulative population increase would represent 96.6 percent of SCAG's forecasted population growth within the City between the years 2015 and 2040. Because the cumulative population would not exceed the total forecasted growth for the City, the cumulative additional demand for municipal library services would similarly not exceed the Civic Center Library's ability to provide library services to future City residents.

Additionally, the Project and cumulative projects, through the generation of revenue into the City's General Fund, would help the Civic Center Library achieve progress toward the City's goals (as stated in the General Plan) to ensure adequate library facilities and service. Therefore, cumulative impacts would be **less than significant**.

(2) Mitigation Measures

No significant cumulative impacts related to libraries have been identified, and no mitigation measures are required.

[8] *Table III-2 in Section III, Environmental Setting, identifies 448 dwelling units that are proposed, pending construction, or are under construction within the City of Alhambra, which when combined with the Project would result in approximately 1,509 cumulative dwelling units. Based on the average persons per household rate of 1.39 persons per household for future City growth (refer to Section IV.L, Population and Housing), the cumulative projects would generate approximately 623 residents. When added to the Project's estimated population of 2,525 persons, the total would be 3,148 additional residents associated with cumulative growth.*

(3) Level of Significance after Mitigation

Cumulative impacts related to libraries would be **less than significant** prior to mitigation.

IV. Environmental Impact Analysis

N. Transportation

1. Introduction

The section includes information from the following, which is included as Appendix E of the Draft EIR:

E Traffic Impact Analysis: The Villages at the Alhambra Development, Kimley-Horn, June 2019.

The scope of analysis for the Traffic Impact Analysis (TIA) was developed in consultation with the City of Alhambra and the analysis was conducted in accordance with County of Los Angeles and Congestion Management Program (CMP) guidelines.

2. Environmental Setting

a) Regulatory Framework[1]

(1) County of Los Angeles Congestion Management Program

To address the increasing public concern that traffic congestion is impacting the quality of life and economic vitality of the State of California, Proposition 111 enacted the Congestion Management Program (CMP) in 1990. The intent of the CMP is to provide the analytical basis for transportation decisions through the State Transportation Improvement Program (STIP) process. A countywide approach has been established by the Los Angeles County Metropolitan Transportation Authority (Metro), the local CMP agency, designating a highway network that includes all state highways and principal arterials within the County of Los Angeles (County). The LOS at each CMP monitoring

[1] *On September 27, 2013, Governor Brown signed Senate Bill (SB) 743. Among other things, SB 743 required the Governor's Office of Planning and Research (OPR) to change the way public agencies evaluate transportation impacts of projects under CEQA. Specifically, SB 743 required OPR to amend the CEQA Guidelines to provide an alternative to automobile level of service (LOS) for evaluating transportation impacts. The amended CEQA Guidelines recommend that LOS be replaced by vehicle miles traveled (VMT) as the metric for considering significant transportation impacts under CEQA. Effective January 1, 2019, new Section 15064.3 of the CEQA Guidelines describes the new VMT methodology to be used in the analysis of transportation impacts in CEQA documents. Per Section 15064.3(c), while any agency may immediately apply the new CEQA Guidelines section to its CEQA analyses, a statewide application of the new section is not required until July 1, 2020.*

station is managed by local jurisdictions. If LOS standards deteriorate, then local jurisdictions must prepare a deficiency plan to meet conformance standards outlined by the countywide plan. The local CMP requires that all CMP arterial monitoring intersections be analyzed where a project would likely add 50 or more trips during the peak hours and that all CMP freeway monitoring locations be analyzed where a project would likely add 150 or more trips in either direction during the peak hours.

(2) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy

On April 7, 2016, the Southern California Association of Governments (SCAG) adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016-2040 RTP/SCS). The 2016-2040 RTP/SCS includes a commitment to reduce emissions from transportation sources to comply with SB 375, improve public health, and meet the National Ambient Air Quality Standards (NAAQS) as set forth by the Federal Clean Air Act. The 2016-2040 RTP/SCS contains a regional commitment for the broad deployment of zero- and near-zero-emission transportation technologies in the 2023-2040 timeframe and clear steps to move toward this objective. This is especially critical for the goods movement system. The development of a zero- or near-zero-emission freight transportation system is necessary to maintain economic growth in the region, to sustain quality of life, and to meet federal air quality requirements. The 2016-2040 RTP/SCS puts forth an aggressive strategy for technology development and deployment to achieve this objective. This strategy will have many co-benefits, including energy security, cost certainty, increased public support for infrastructure, greenhouse gas (GHG) emissions reduction, and economic development.

The 2016-2040 RTP/SCS includes a consideration of the economic impacts and opportunities provided by the transportation infrastructure plan set forth in the document, considering the economic and job creation impacts of the direct investment in transportation infrastructure, and the efficiency gains in terms of worker and business economic productivity and goods movement.

The 2016-2040 RTP/SCS provides a blueprint for improving quality of life for residents by providing more choices for where they will live, work, and play, and how they will move around. It is designed to promote safe, secure, and efficient transportation systems to provide improved access to opportunities, such as jobs, education, and healthcare. Its emphasis on transit and active transportation is designed to allow residents to lead a healthier, more active lifestyle. Its goal is to create jobs, ensure the region's economic competitiveness through strategic investments in the goods movement system, and improve environmental and health outcomes for its 22 million residents by 2040.

Within the 2016-2040 RTP/SCS, the overarching strategy includes plans for High Quality Transit Areas (HQTA), Livable Corridors, and Neighborhood Mobility Areas as key features of a thoughtfully planned, maturing region in which people benefit from increased mobility, more active lifestyles, increased economic opportunity, and an overall higher quality of life. HQTAs are described as generally walkable transit villages or corridors that are within 0.5 miles of a well-served transit stop or a transit corridor with a 15-minute or less service frequency during peak commute hours.[2] Local jurisdictions are encouraged to focus housing and employment growth within HQTAs.[3] The Project Site is located within an HQTA as designated by the 2016-2040 RTP/SCS.[4]

(3) City of Alhambra

(a) General Plan

The City's General Plan provides direction regarding the City's vision for future development in the City and includes several chapters to help guide the design of future development. It also contains several broad goals, objectives, and policies for neighborhood design to create a more livable city for existing and future residents. These goals and policies are stated not in terms of specific design guidelines, but in terms of general neighborhood-wide design policies.

The General Plan serves as a guide for the City's overall long-range growth and development policies and serves as a guide to update community plans, specific plans, and the citywide elements. These citywide elements address functional topics that cross community boundaries, such as transportation, and address these topics in detail.

As shown on Figure III-2 in **Section III, Environmental Setting**, of the Draft EIR, the Project Site is designated for Office Professional uses in the General Plan, although Urban Residential uses are also permitted per the City's Zoning Code.

The City has recently updated its General Plan in August 2019. A draft of the updated General Plan had been released in July 2018 for public review and a revised draft released in early 2019. The updated General Plan consists of seven elements, including a Land Use Element, Circulation Element, and Open Space Element. Each element addresses its respective subject and the City's 20-year vision for the future. With regard to Citywide mobility, the General Plan establishes the following goals and policies:

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[2] *SCAG, 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, April 2016, p. 189.*

[3] *SCAG, 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, April 2016, p. 76.*

[4] *SCAG, 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, April 2016, Exhibit 5.1: High Quality Transit Areas in the SCAG Region for 2040, p. 77.*

- **Goal M-1A** A circulation system that is efficient, safe, pleasant, and attractive for all users.
    - **Policy M-1A** Maintain peak hour LOS D for intersections on secondary arterial and collector roadways, and, as feasible, on major arterials.
    - **Policy M-1B** At major intersections where two major arterials intersect (such as along Fremont, Valley, Mission, and Garfield), peak hour LOS E or F may be acceptable. In these locations, balance the efficiency and convenience of vehicular operations with other General Plan goals and policies.
    - **Policy M-1C** Plan and maintain the City's transportation facilities in a way that provides adequate and safe access for all users, including pedestrians, bicyclists, and motorists of all ages and abilities.
- **Goal M-2** A circulation system that accommodates and encourages the use of alternative modes of transportation, including walking, bicycling, and transit.
    - **Policy M-2A** Ensure that new development accommodates, and does not have a negative impact on, alternative transportation modes.

b) Existing Conditions

(1) Study Area

The study area selected for analysis is shown on Figure IV.N-1. Twenty-seven intersections and four roadway segments were selected for analysis in consultation with the City. Of the 27 study intersections, 20 are currently signalized and seven are unsignalized. The unsignalized intersections were analyzed to determine whether they meet traffic signal warrants.

The intersections and roadway segments analyzed in the TIA are listed in Table IV.N-1.

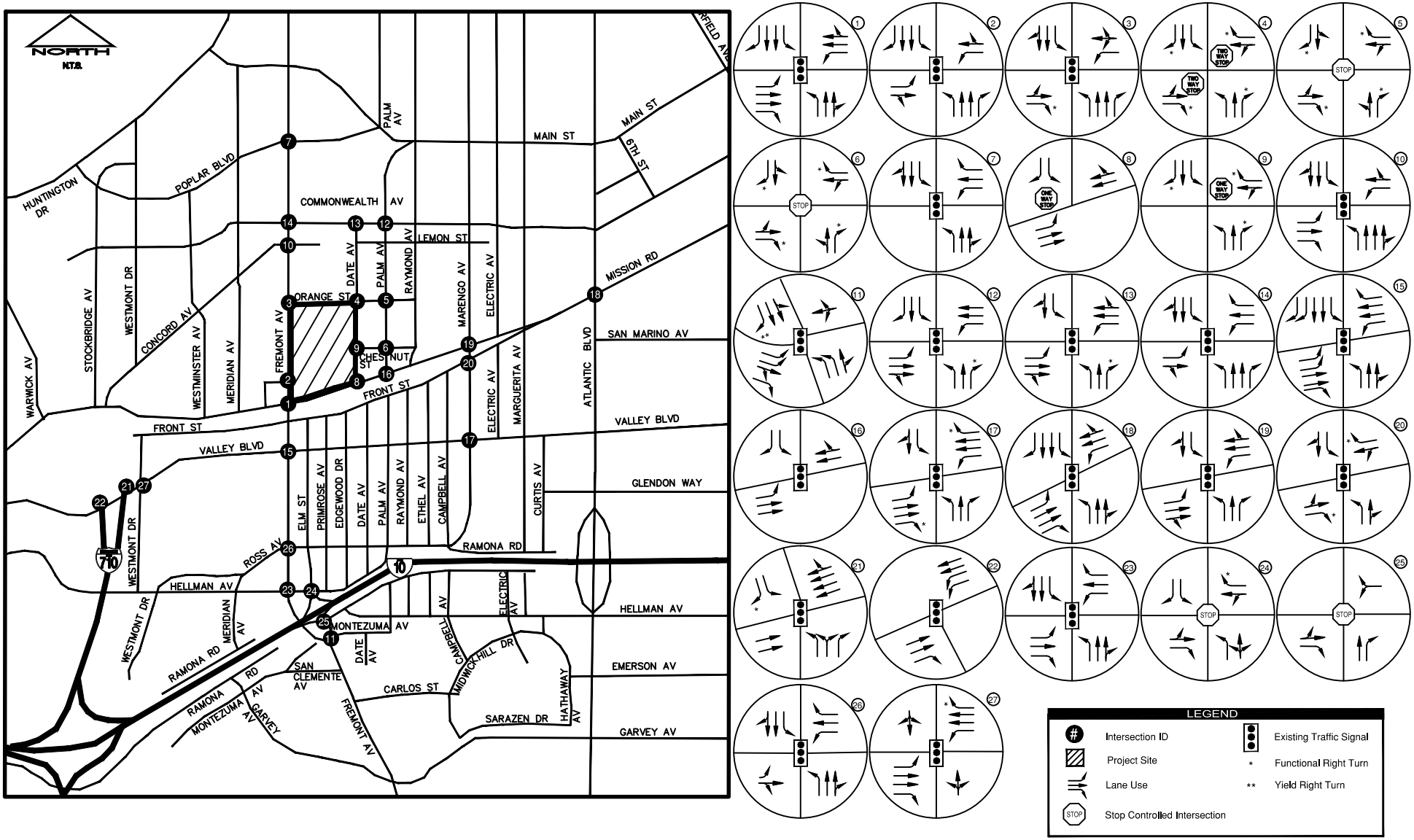


Figure IV.N-1
Existing (2018) Study Intersection Lane Configuration and Traffic Control

Source: Kimley Horn, June 2019.

Table IV.N-1
Study Area Intersections and Roadways

INTERSECTIONS			
Intersection #	**Northbound/ Southbound**	**Eastbound/ Westbound**	**Signalized**
1	S Fremont Ave	W Mission Rd	Yes
2	S Fremont Ave	Project Driveway	Yes
3	S Fremont Ave	Orange St	Yes
4	Date Ave	Orange St	No
5	Orange St	S Palm Ave	No
6	Chestnut Ave	S Palm Ave	No
7	S Fremont Ave	Poplar Blvd	Yes
8	W Mission Rd	Date Ave	No
9	Chestnut St	Date Ave	No
10	S Fremont Ave	Concord Ave	Yes
11	S Fremont Ave	Montezuma Ave	Yes
12	W Commonwealth Ave	S Palm Ave	Yes
13	Date Ave	W Commonwealth Ave	Yes
14	S Fremont Ave	W Commonwealth Ave	Yes
15	S Fremont Ave	W Valley Blvd	Yes
16	W Mission Rd	S Palm Ave	Yes
17	W Valley Blvd	S Marengo Ave	Yes
18	S Atlantic Blvd	W Mission Rd	Yes
19	S Marengo Ave	W Mission Rd	Yes
20	S Marengo Ave	Front St	Yes
21	W Valley Blvd	I-710 NB Off ramp	Yes
22	W Valley Blvd	I-710 SB On ramp	Yes
23	S Fremont Ave	W Hellman Ave	Yes
24	W Hellman Ave	I-10 WB Ramps/Elm St	No
25	S Fremont Ave	I-10 EB Ramps/ Ramona Rd	No
26	S Fremont Ave	Ross Ave	Yes
27	W Valley Blvd	Westmont Dr	Yes
ROADWAYS			
Roadway #	**Name**	**From/To**	**# of Lanes**
1	S Fremont Ave	Orange St/Mission Rd	4
2	Mission Road	Fremont Ave/Date Ave	4
3	Orange Street	Fremont Ave/Date Ave	2
4	Date Avenue	Mission Rd/Orange St	2
Source: Kimley-Horn			

(2) Existing Roadway System

The existing roadway system in the vicinity of the Project Site and within the TIA study area consists of the following major public streets:

Fremont Avenue is a north-south major arterial located at the west of the Project Site. It has two lanes in each direction between Orange Street at the north and Mission Road at the south. Fremont Avenue provides three lanes in the northbound direction between Orange Street and Commonwealth Avenue. Fremont Avenue connects to Interstate 210 to the north and Interstate 10 to the south. It also provides access to Pasadena to the north and Monterey Park to the south. Fremont Avenue provides direct access to the Project Site via a signalized intersection due north of Mission Road. On-street parking is prohibited on both sides of Fremont Avenue and the posted speed limit is 40 miles per hour (mph).

Mission Road is a major arterial that runs east-west located at the south edge of the Project Site. Mission Road provides two travel lanes in each direction and there is one full access driveway along Mission Road providing access to the Project Site. On-street parking is prohibited on both sides of the road and the posted speed limit along Mission Road is 40 mph.

Date Avenue is a local street that runs north-south from Commonwealth Avenue to Mission Street and is located at the east edge of the Project Site. Date Avenue provides one travel lane in each direction and there is one full access enter-only driveway along Date Avenue at Chestnut Street providing access to the Project Site. On-street parking is available on both sides of the street and the posted speed limit along Date Avenue is 30 mph.

Orange Street is a local street that runs east-west from Fremont Avenue to Raymond Avenue and is located at the north edge of the Project Site. Orange Street provides one travel lane in each direction and there are three full access driveways providing access to the Project Site. On-street parking is available on both sides of the street and the speed limit is 25 mph.

Palm Avenue is a local street that runs north-south from Mission Road to Main Street and is located to the east of the Project Site. Palm Avenue provides one travel lane in each direction and diagonal on-street parking is available on both sides of the street. The posted speed limit along Palm Avenue is 25 mph.

Chestnut Street is a local street that runs east-west from Date Avenue to Raymond Avenue and is located to the east of the Project Site. Chestnut Street has one travel lane in each direction and on-street parking is available on both sides of the street. The west end of Chestnut Street leads to the full access enter-only driveway along Date Avenue providing access to the Project Site. The speed limit along Chestnut Street is 25 mph.

Commonwealth Avenue is a major collector that runs east-west located north of the Project Site. Commonwealth Avenue provides two travel lanes in each direction between Fremont Avenue and Palm Avenue. On-street parking is prohibited along both sides of

the street between Fremont Avenue and Raymond Avenue and the posted speed limit is 35 mph.

Valley Boulevard is a major arterial that runs east-west located south of the Project Site. Valley Boulevard is an alternative route to Interstate 10 and has two lanes in each direction. On-street parking is available on both sides of the street and the posted speed limit is 35 mph.

Atlantic Boulevard is a major arterial that runs north-sound located north of the Project Site and provides two travel lanes in each direction. On-street parking is prohibited along both sides of the street between Huntington Drive and Valley Boulevard and the posted speed limit is 35 mph.

(3) Regional Transportation System

Regional access to the Project Site is provided by Interstate 10 (I-10 or San Bernardino Freeway) approximately 0.8 mile to the south and Interstate 710 (I-710 or Long Beach Freeway) approximately 0.6 mile southwest of the Project Site. Freeways are high-volume, high-speed roadways with limited access provided by interchanges that carry regional traffic through and do not provide local access to adjacent land uses. Freeways are under the jurisdiction of Caltrans.

(a) Freeways

Interstate 10 runs in an east-west direction and extends from the Pacific Ocean eastward through Los Angeles County and beyond. In the vicinity of the study area, I-10 lies to the south of the Project Site and provides six lanes in each direction. Interchanges are provided at Fremont Avenue and Atlantic Boulevard in the study area.

Interstate 710 runs in a north-south direction and extends from the southwestern corner of Alhambra to the Port of Long Beach. In the vicinity of the study area, the freeway lies southwest of the Project Site and provides three lanes in each direction. Freeway ramps closest to the Project Site are located at Valley Boulevard and I-10. The northern terminus of I-710 is at Valley Boulevard.

(b) CMP Facilities

The CMP arterial monitoring stations closest to the Project Site are the intersections of Fremont Avenue/Valley Boulevard and Valley Boulevard/I-710 northbound off-ramp. Both of these intersections are located to the south of the Project Site. The CMP freeway monitoring stations closest to the Project Site are along I-10 at the Los Angeles city limit, I-10 at Atlantic Boulevard, and along I-710 south of State Route 60 (Pomona Freeway). All three of these locations are located to the south of the Project Site.

(4) Transit System

The existing public transit lines that operate within the study area are shown in Table IV.N-2. Transit services include Alhambra Community Transit, Los Angeles County Metropolitan Transportation Authority (Metro), and University of Southern California (USC) Transit.

Table IV.N-2
Existing Public Transit Service Summary

Agency	Line	From	To	Via	Weekday Peak Frequency	Saturday Peak Frequency
Alhambra Community Transit	Blue Line	Circular Loop Within City Limit		Fremont Ave / Commonwealth Ave	20 minutes	20 minutes
Alhambra Community Transit	Green Line	Circular Loop Within City Limit		Fremont Ave / Valley Blvd	20 minutes	20 minutes
Metro	258	Paramount	Alhambra	Fremont Ave	35 to 45 minutes	n/a
Metro	76	Los Angeles	El Monte	Valley Blvd	12 to 15 minutes	15 to 20 minutes
Metro Rapid	762	Compton	Altadena	Atlantic Blvd	17 to 30 minutes	n/a
Metro Express	485	Downtown Los Angeles	Altadena	Fremont Ave	40 minutes	40 minutes
USC Transit	Alhambra Route	USC	Alhambra Campus	Fremont Ave	2-3 hours	n/a

Source: Kimley-Horn, 2019.

(5) Bicycle System

In the General Plan, the City identifies the following bicycle routes in the vicinity of the Project Site:

- A potential Class III Bike Route along Orange Street adjacent to the Project Site's northern edge;
- A potential Class III Bike Route along Front Street approximately 200 feet to the south of the Project Site;
- Short-term bicycle parking on Orange Street adjacent to the Project Site's northern edge; and
- Long-term bicycle parking on Front Street just east of Fremont Avenue, approximately 200 feet to the south of the Project Site.

Class III Bike Routes are defined as routes where signs indicate that the right-of-way is shared between vehicles and bicyclists. These facilities are recommended for streets with relatively low traffic speeds and lower traffic volumes.

(6) Pedestrian Facilities

Sidewalks are provided along the entire perimeter of the Project Site, including a crosswalk across the primary vehicular entryway to the existing Alhambra campus, located off of Fremont Avenue in the southwestern portion of the Project Site.

(7) Existing Traffic Conditions in Study Area

(a) Analysis Methodology

(i) Traffic Counts

The purpose of the existing conditions evaluation is to provide an evaluation of the existing transportation network surrounding the study area. The Project TIA evaluated existing traffic conditions on the street system in the vicinity of the Project Site. Intersection conditions were evaluated for typical weekday morning (7:00 AM to 9:00 AM) and afternoon (4:00 PM to 6:00 PM) peak periods. The analysis of existing traffic conditions provides a basis for the assessment of future traffic conditions.

Existing morning and evening peak period traffic turning movement counts were conducted at the first 25 intersections shown in Table IV.N-1 on April 27, 2017 and at the intersections of S. Fremont Avenue/Ross Avenue and Valley Boulevard/Westmont Drive on November 14, 2017. Intersection counts were collected during the morning (7:00 AM to 9:00 AM) and evening (4:00 PM to 6:00 PM) peak periods.

24-hour average daily trip (ADT) tube counts were collected on Fremont Avenue and Mission Road on April 27, 2017 and on Orange Street and Date Avenue on November 14, 2017. Copies of the traffic data collection worksheets are provided in Appendix A of the TIA (see **Appendix E** of the Draft EIR).

(ii) Signalized Intersection Methodology

Existing conditions at the 20 signalized study area intersections were evaluated by conducting Level of Service (LOS) analyses using the Intersection Capacity Utilization (ICU) methodology. The ICU technique is used for signalized intersections and compares the volumes of traffic on each movement to the capacity for each movement, and calculates the sum of individual volume-to-capacity (V/C) ratios for key conflicting movements. The ICU numerical value represents the percent of signal green time, or capacity, required by existing or future traffic. The Los Angeles County ICU methodology is used for signalized intersections, including an hourly capacity of 1,600 vehicles per lane

for each through or turning lane (1,440 vehicles per lane for dual left-turn lanes), and a clearance interval of 10% per cycle.

Technical analysis of the intersection operating conditions will provide a qualitative assessment of the operating conditions of that intersection. Operating conditions are expressed in terms of LOS. LOS designations range from "A" to "F," with LOS "A" representing comfortable, free-flowing traffic conditions with minimal delays and LOS "F" representing congested conditions with long delays. A qualitative description of each Level of Service is presented in Table IV.N-3 below. Traffix software, version 8 was used to analyze the 20 signalized study intersections.

Table IV.N-3
ICU and Level of Service Definitions

V/C Value	Level of Service (LOS)	Description
0 to 0.604	A	Free flow conditions; low traffic volumes and density; high speeds; no restriction to maneuver pass; drivers can maintain desired speeds with little or no delay
0.605 to 0.704	B	Stable flow; operating speeds beginning to be restricted; drivers still have some freedom to select speed and lane of operation
0.705 to 0.804	C	Still in the stable flow zone; Speeds and maneuverability closely controlled by higher volumes; most drivers' freedom restricted to select their own speed and lane; relative satisfactory operating speed is still obtained
0.805 to 0.904	D	Approaches unstable flow; tolerable operating speeds still maintained; fluctuations in volume and temporary restrictions to flow may substantially drop operating speeds; drivers have little freedom to maneuver
0.905 to 1.004	E	Unstable flow at or near capacity; lower operating speeds typically, but not always, 30 mph; stoppages for momentary duration
1.005+	F	Forced flow operation at low speeds; volumes are below capacity; in extreme cases both speed and volume can drop to zero; stoppages may occur for short or long periods of time due to downstream congestion

Source: Intersection Capacity Utilization (ICU) 2000 Guidelines

(iii) Unsignalized Intersection Methodology

Existing conditions at the seven unsignalized study intersections were evaluated by conducting LOS analysis using the Highway Capacity Method (HCM 2010). The HCM 2010 method utilizes the average number of seconds of delay a driver would experience to define the LOS. Unsignalized LOS is reported for the worst approach for two-way stop-controlled intersections and for the average approach for all-way stop-controlled intersections. Signal warrants were conducted for all unsignalized intersections.

Synchro 9 software was used for analysis of the unsignalized study intersections. Table IV.N-4 presents the average intersection delay (per vehicle) ratio and the corresponding LOS under the HCM 2010 analysis.

Table IV.N-4
HCM 2010 Level of Service for Unsignalized Intersections

Seconds of Delay (average per vehicle)	Related LOS Rating
10 or less	A – Free Flow
Between 10 and 15	B – Unconstrained Flow
Between 15 and 25	C – Somewhat constrained flow, maneuverability is reduced
Between 25 and 35	D – Constrained flow, little maneuverability
Between 35 and 50	E – Significant vehicle queuing; not all vehicles clear intersection in one cycle
Greater than 50	F – Excessive delay; vehicles require more than one signal cycle to clear the intersection
Source: 2010 Highway Capacity Manual	

(b) Existing (2018) Traffic Conditions

The analysis of existing traffic conditions is intended to provide an evaluation of the existing transportation network surrounding the Project Site. Existing morning and evening peak period traffic counts were used for analysis of the 27 study intersections. Figure IV.N-2 illustrates the AM and PM peak period traffic volumes at the study intersections under existing (2018) conditions. The intersection analysis worksheets are provided in Appendix B of the Project TIA (see **Appendix E** of the Draft EIR). Table IV.N-5 below presents a summary of the Existing (2018) Conditions V/C ratio or delay (in seconds) and the corresponding LOS for each study intersection.

The Existing (2018) Conditions traffic analysis results presented in Table IV.N-5 indicate that during the AM peak period, two intersections currently operate at LOS E and four intersections operate at LOS F while the remaining 21 intersections operate at LOS D or better. During the PM peak period, two intersections operate at LOS E and two intersections operate at LOS F while the remaining 23 intersections operate at LOS D or better.

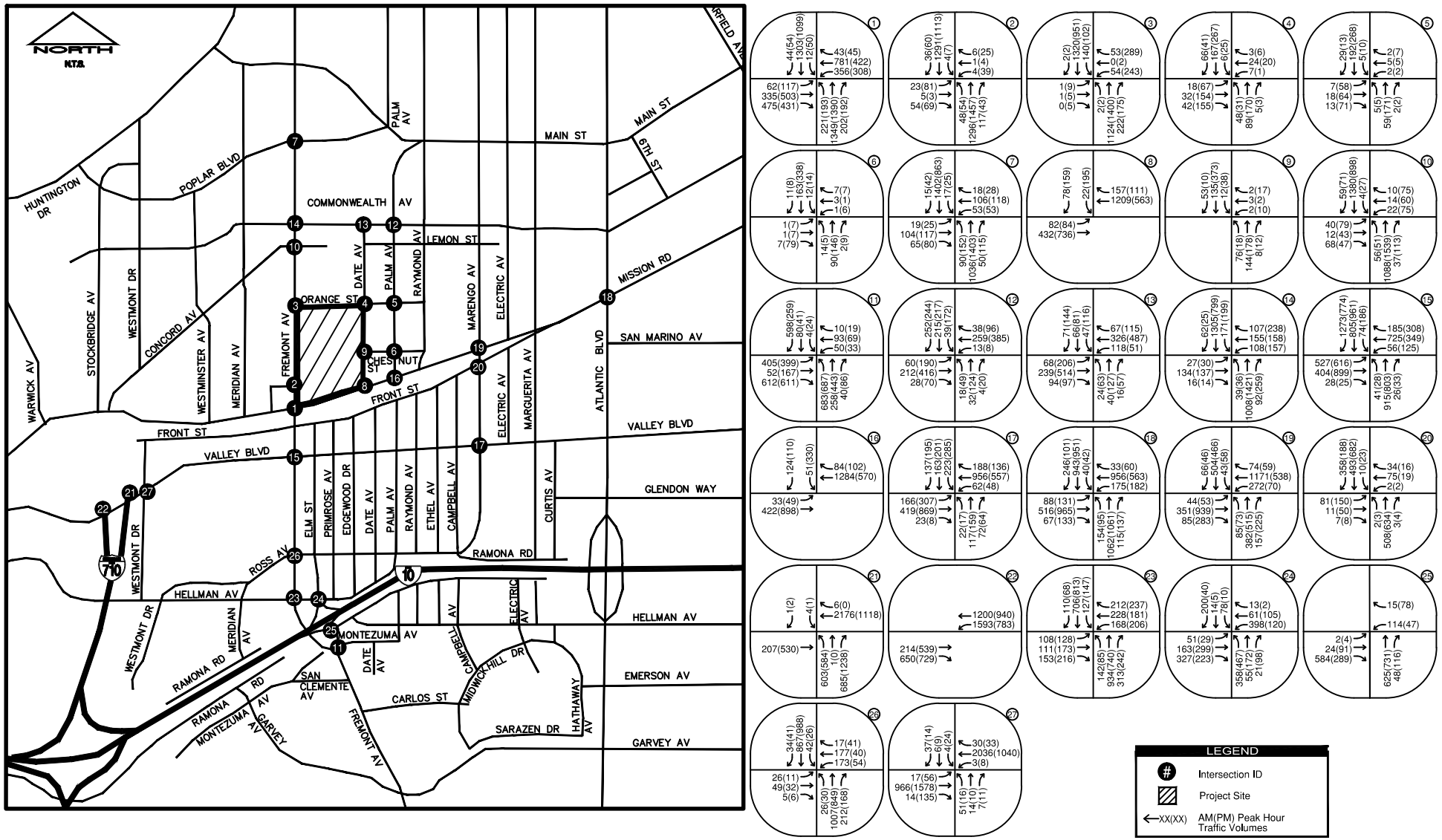


Figure IV.N-2
Existing (2018) Study Intersection Weekday Peak-Hour Turning Movement Volumes

Source: Kimley Horn, June 2019.

Table IV.N-5
Summary of Intersection Operations – Existing (2018) Conditions

Signalized Study Intersections		LOS Analysis Results			
		AM Peak Hour		PM Peak Hour	
		V/C	LOS	V/C	LOS
1	S Fremont Ave/W Mission Rd	1.165	F	1.087	F
2	S Fremont Ave/Project Driveway	0.573	A	0.628	B
3	S Fremont Ave/Orange St	0.573	A	0.792	C
7	S Fremont Ave/Poplar Blvd	0.697	B	0.696	B
10	S Fremont Ave/Concord Ave	0.641	B	0.595	A
11	S Fremont Ave/Montezuma Ave	0.600	A	0.674	B
12	W Commonwealth Ave/S Palm Ave	0.387	A	0.524	A
13	Date Ave/W Commonwealth Ave	0.378	A	0.597	A
14	S Fremont Ave/W Commonwealth Ave	0.713	C	0.861	D
15	S Fremont Ave/W Valley Blvd	0.933	E	0.884	D
16	W Mission Rd/S Palm Ave	0.626	B	0.587	A
17	W Valley Blvd/S Marengo Ave	0.715	C	0.743	C
18	S Atlantic Blvd/W Mission Rd	0.855	D	0.916	E
19	S Marengo Ave/W Mission Rd	0.926	E	0.891	D
20	S Marengo Ave/Front St	0.732	C	0.772	C
21	W Valley Blvd/I-710 NB Off-ramp	0.696	B	0.647	B
22	W Valley Blvd/I-710 SB On-ramp	1.059	F	0.828	D
23	S Fremont Ave/W Hellman Ave	0.779	C	0.762	C
26	S Fremont Ave/Ross Ave	0.649	B	0.498	A
27	W Valley Blvd/Westmont Dr	0.808	D	0.636	B
Unsignalized Study Intersections		**LOS Analysis Results**			
		AM Peak Hour		**PM Peak Hour**	
		Delay (s)	**LOS**	**Delay (s)**	**LOS**
4	Date Ave/Orange St	12.3	B	21.0	C
5	Orange St/S Palm Ave	8.7	A	11.1	B
6	Chestnut Ave/S Palm Ave	8.6	A	11.6	B
8	W Mission Rd/Date Ave	21.8	C	37.6	E
9	Chestnut St/Date Ave	12.0	B	12.2	B
24	W Hellman Ave/I-10 WB Ramps (Elm St)	66.5	F	31.3	D
25	S Fremont Ave/I-10 EB Ramps (Ramona Rd)	109.4	F	112.2	F

Source: Kimley-Horn, 2019.

3. Project Impacts

a) Methodology

This analysis addresses a wide range of issues, including, but not limited to, the following:

- Construction: an analysis of the potential temporary impacts on traffic, access, transit, and parking resulting from the Project's construction activities;
- Intersections: an analysis of the potential changes in operating conditions at the 20 signalized and 7 unsignalized intersections identified within the study area;
- Regional Transportation System: an analysis of potential impacts along the nearest CMP arterial monitoring stations and mainline freeway monitoring locations and on the transit lines serving the Project area; and
- Project Access: an analysis of potential impacts associated with access to and from the Project Site by automobiles, bicyclists, and pedestrians.

(1) Construction Impacts

The assessment of the Project's potential construction impacts was conducted considering the following factors:

- Temporary Traffic Impacts
- Temporary Loss of Access
- Temporary Loss of Bus Stops or Rerouting of Bus Lines
- Temporary Loss of On-Street Parking

(2) Operational Impacts

As is discussed in **Section II, Project Description** of the Draft EIR, the Project could be developed under one of two different buildout scenarios. Under Buildout Scenario 1, Project construction would be completed by 2028 and no residential units would be occupied prior to that time. Under Buildout Scenario 2, Project buildout would occur in two distinct phases. Phase I would be completed and available for occupation in 2024, while Phase II would be completed and available for occupation in 2028. This analysis addresses each of these buildout scenarios and is directed at analyzing the potential Project-generated traffic impact on the local street system under both existing "baseline" (2018) and future year traffic conditions (2024 and 2028). The following traffic scenarios have been developed and are analyzed in the TIA and this section:

- Existing (Year 2018) Conditions – Existing traffic conditions at study area intersections based upon the traffic counts undertaken for the TIA and discussed under "Existing Traffic Conditions in Study Area" above.

- Existing (Year 2018) With Project Conditions – This traffic scenario provides projected traffic volumes and an assessment of intersection operating conditions under existing conditions with the addition of Project-generated traffic. The impacts of the Project on current baseline traffic operating conditions are then identified.

- Future Cumulative (Year 2028) Conditions – Projections of future traffic conditions at study area intersections without the Project were developed for 2028, the year of expected Project completion under Buildout Scenario 1. The objective of this analysis is to project future traffic growth and operating conditions that could be expected to result from regional growth and other development projects in the vicinity of the Project Site by the year of anticipated Project completion.

- Future Cumulative (Year 2028) With Buildout Scenario 1 Project Conditions – This traffic scenario provides projected traffic volumes and an assessment of intersection operating conditions under projected 2028 conditions with the addition of Project-generated traffic under Buildout Scenario 1. The impacts of the Project on future traffic operating conditions are then identified.

- Future Cumulative (Year 2024/2028) Conditions – Projections of future traffic conditions at study area intersections without the Project were developed for 2024, the year of expected Project Phase I completion under Buildout Scenario 2, and for 2028, the year of expected Project Phase II completion under Buildout Scenario 2. The objective of this analysis is to project future traffic growth and operating conditions that could be expected to result from regional growth and other development projects in the vicinity of the Project Site by the years of anticipated Project phase completion.

- Future Cumulative (Year 2028) With Buildout Scenario 2 Project Conditions – This traffic scenario provides projected traffic volumes and an assessment of intersection operating conditions under projected 2028 conditions with the addition of Project-generated traffic under Buildout Scenario 2. The impacts of the Project on future traffic operating conditions are then identified.

(a) Project Trip Generation

Weekday daily, AM, and PM peak period trips were estimated for the Project using trip generation rates from the Institute of Transportation Engineers (ITE) publication entitled *Trip Generation*, 9th Edition and from the Los Angeles County Traffic Impact Analysis (TIA) Report Guidelines. The morning and evening peak hours correspond to the peak hours of the adjacent street system. The ITE Land Use Categories used for this analysis were 220 – Apartment, 230 – Residential Condominium/Townhouse, and 710 – General Office Building. Per County of Los Angeles TIA Report Guidelines, adjusted rates were used for

the Residential Condominium/Townhouse land use. Project trip generation rates are summarized in Table IV.N-6. The resulting trips that would be generated by the proposed Project are summarized in Table IV.N-7 for the Phase I 2024 completion under Buildout Scenario 2 and in Table IV.N-8 for the 2028 full buildout under Buildout Scenarios 1 and 2.

Table IV.N-6
ITE Trip Generation Rates

ITE Code	Land Use Description	Unit	Daily Rate	AM Rate	PM Rate	% AM Trips In	% AM Trips Out	% PM Trips In	% PM Trips Out
220	Apartment	Dwelling Unit(s)	6.65	0.51	0.62	20%	80%	65%	35%
230	Residential Condominium/Townhouse	Dwelling Unit(s)	8.00	0.54	0.73	11%	89%	64%	36%
710	General Office Building	1,000 Sq Ft	11.03	1.56	1.49	88%	12%	17%	83%

Source: Kimley-Horn, 2019.

Table IV.N-7
Project Trip Generation: Buildout Scenario 2 (Phase I 2024)

ITE Code	Building	Land Use Description	Units	No. of Units	Project Generated Trips				
					Daily	AM Peak Hour		PM Peak Hour	
						In	Out	In	Out
Trips Generated									
230	N1	Residential Condominium/Townhouse*	DU	149	1,192	9	72	70	39
230	N2	Residential Condominium/Townhouse*	DU	139	1,112	8	67	65	36
230	N3	Residential Condominium/Townhouse*	DU	192	1,536	12	92	90	50
230	N4	Residential Condominium/Townhouse*	DU	36	288	2	17	17	9
Subtotal of Trips Generated					**4,128**	**31**	**248**	**243**	**134**
Trip Credits									
Drive Ratio Reduction (11%)					-454	-3	-27	-27	-15
Internal Capture** (2-3% AM, 7-11% PM)					-372	-1	-7	-34	-13
Subtotal of Trip Credits					**-826**	**-4**	**-35**	**-61**	**-28**
Net Project Total					**3,302**	**27**	**213**	**182**	**106**

Source: Trip Generation Manual (ITE 9th Edition), February 2019
**Residential Condominium/Townhouse rates per LA County Traffic Impact Analysis Report guidelines were used.*
***Internal capture rates based upon calculation. Calculations shown in Appendix C of the TIA (see Draft EIR Appendix E).*

Table IV.N-8
Project Trip Generation: Buildout Scenarios 1 & 2 (2028)

ITE Code	Building	Land Use Description	Units	No. of Units	Project Generated Trips				
					Daily	Am Peak Hour		PM Peak Hour	
						In	Out	In	Out
Trips Generated									
220	S1	Apartment	DU	175	1,164	18	71	71	38
220	S2	Apartment	DU	217	1,443	22	89	87	47
220	C	Apartment	DU	153	1,017	16	62	62	33
230	N1	Residential Condominium/Townhouse*	DU	149	1,192	9	72	70	39
230	N2	Residential Condominium/Townhouse*	DU	139	1,112	8	67	65	36
230	N3	Residential Condominium/Townhouse*	DU	192	1,536	12	92	90	50
230	N4	Residential Condominium/Townhouse*	DU	36	288	2	17	17	9
Subtotal of Trips Generated					**7,752**	**87**	**470**	**463**	**252**
Trip Credits									
710	S1	General Office Building***	KSF	10.145	-112	-14	-2	-3	-13
Drive Ratio Reduction (11%)					-853	-10	-52	-51	-28
Internal Capture** (2-3% AM, 7-11% PM)					-699	-2	-14	-65	-25
Subtotal of Trip Credits					**-1,664**	**-25**	**-68**	**-119**	**-66**
Net Project Total					**6,088**	**62**	**402**	**344**	**186**

Source: Trip Generation Manual (ITE 9th Edition), February 2019
**Residential Condominium/Townhouse rates per LA County Traffic Impact Analysis Report guidelines were used.*
***Internal capture rates based upon calculation. Calculations shown in Appendix C of the TIA (see Draft EIR Appendix E).*
****Office space to be repurposed in S1 Plan area.*

The Project trip generation estimates shown in Tables IV.N-6 through IV.N-8 include the following three types of credits:

1) The first trip generation credit is for existing land uses that would be demolished or repurposed as part of the Project. Many of the buildings currently on the Project Site are warehouses and are not currently generating any trips. The Alhambra Medical University on the southeast corner of the Project Site has classes primarily in the evenings and on weekends and is estimated to generate a negligible number of trips during AM and PM peak periods. The buildings that are proposed to be removed from the North Plan Area are currently unused so no credits are taken. The one credit that is applied is for 10,145 square feet of office space within the South Plan Area that would be repurposed to serve as residential amenity space within the Project.

2) The second credit is an 11% drive ratio credit which indicates that 11% of the residential trips would be completed by public transit, biking, or walking, rather

than single occupant vehicle trips. This credit is based on 2015 American Community Survey data that shows that 11% of those who work in the City of Alhambra commute to work using a non-auto mode and 11% carpool. In addition, in 2016, the Project Applicant performed a week-long survey of employee commute modes as part of its LEED certification process. A total of 449 employees participated in the survey. On an average day, approximately 16% of employees do not drive to work. This includes those who are telecommuting or not working due to a compressed work week schedule.

3) The third credit is for internal capture of trips using multiple land uses within the Project Site. Internal capture credits are applied to projects where some of the trips generated by the project are expected to be captured by other land uses within the project. Since the Project Site would contain a mixed-use development with office, residential, and restaurant land uses following completion of the Project, internal capture can be applied. Internal capture rates are from the ITE publication entitled *Trip Generation Handbook*, 3rd Edition. In the AM peak hour, 2% of incoming trips and 3% of outgoing trips are expected to be generated internally by existing office, educational, and retail land uses at the Project Site and adjacent Shops at the Alhambra development across Fremont Avenue to the west. In the PM peak hour, 14% of incoming trips and 10% of outgoing trips are expected to be generated internally.

Table IV.N-7 indicates that, under Project Buildout Scenario 2 in which Phase I would open in 2024, Phase I of the Project would generate approximately 3,302 new daily trips, with 240 new trips during the AM peak hour and 288 new trips during the PM peak hour. Table IV.N-8 indicates that, in 2028, under both Project Buildout Scenario 1 and both phases of Project Buildout Scenario 2, the full Project would generate approximately 6,088 new daily trips, with 464 new trips during the AM peak hour and 530 new trips during the PM peak hour.

(b) Project Trip Distribution

The geographic distribution of trips generated by the Project is dependent on characteristics of the street system serving the Project Site; the level of accessibility of routes to and from the Project Site; locations of employment and commercial centers to which residents of the Project would be drawn; and residential areas from which the office employees and other commercial visitors would be drawn. Trip distribution assumptions for the Project were developed based on the roadway system and land uses in the vicinity of the Project Site. Trip distribution assumptions were submitted to and approved by City staff. Figure IV.N-3 illustrates the trip distribution utilized in this analysis for the Project's proposed land uses.

(c) Project Traffic Assignment

The Project traffic shown in Tables IV.N-7 and IV.N-8 was distributed to the street system within the study area based on the trip distribution percentages shown on Figure IV.N-3. The resulting Project-related peak hour turning movements are shown on Figure IV.N-4.

(d) Congestion Management Program

To determine whether the Project would require preparation of a CMP Traffic Impact Analysis, the number of Project net new trips that would be distributed to the nearest CMP facilities was reviewed to determine if the Project would add 50 or more trips to an arterial monitoring intersection during either the AM or PM weekday peak hours, or add 150 or more trips to a mainline freeway monitoring location in either direction during the AM or PM weekday peak hours.

(e) Access and Circulation

The analysis of the Project's potential access impacts included a review of the proposed vehicular access points and internal circulation as well as a queuing analysis to determine the degree to which vehicles accessing the Project Site entrances would back up onto adjacent roadways, creating potential safety hazards.

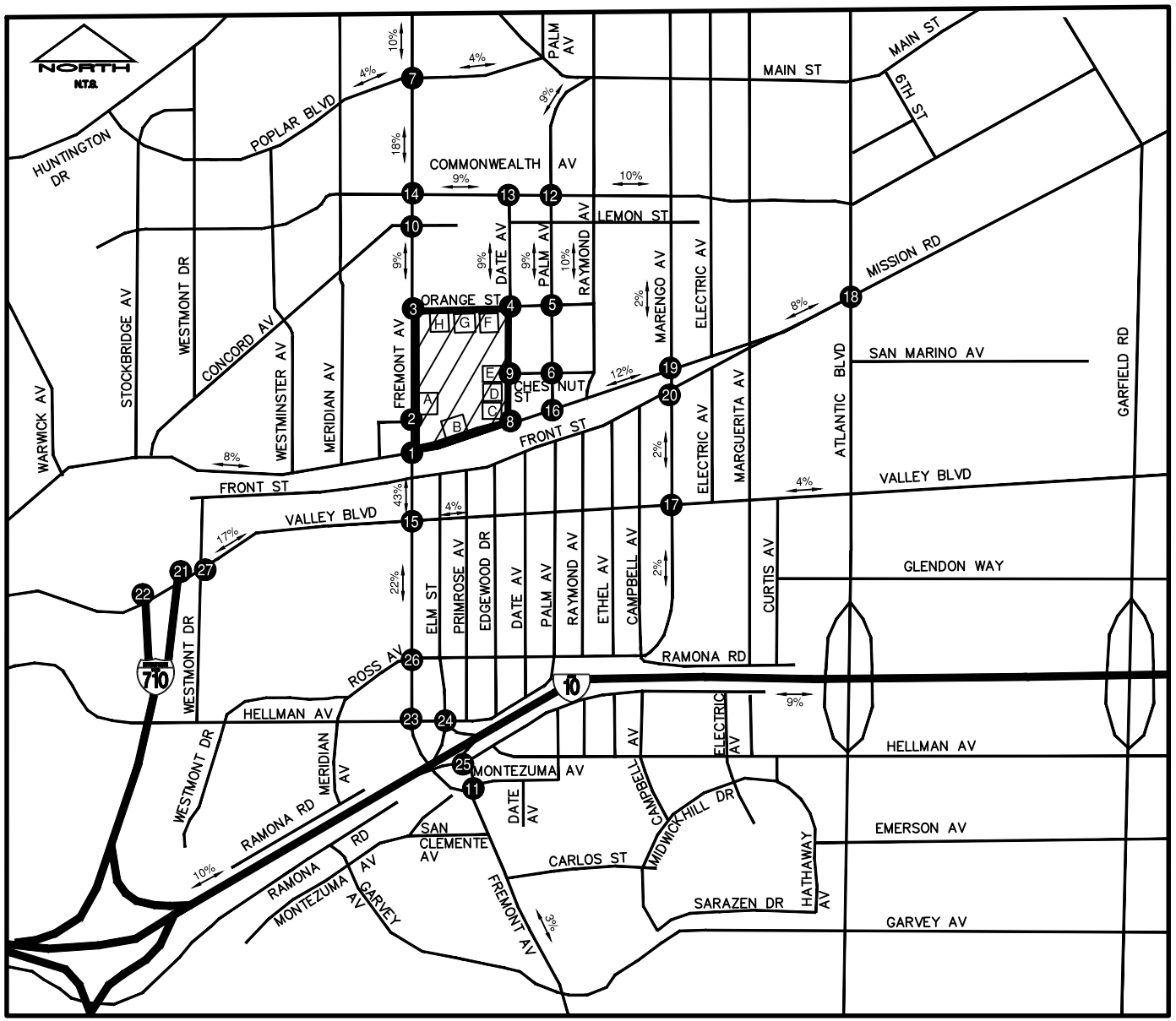
(f) Bicycle, Pedestrian, and Vehicular Safety

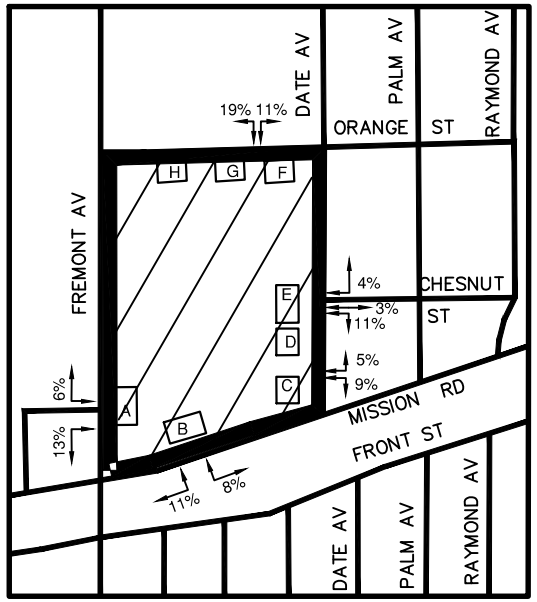
The methodology for the analysis of pedestrian/bicycle safety impacts includes a review of the Project's access and internal circulation scheme and a determination of whether the Project would substantially increase the potential for pedestrian/vehicle and/or bicycle/vehicle conflicts pursuant to the thresholds of significance identified below.

(3) Future Cumulative Conditions

(a) Traffic Volumes

To evaluate the potential impacts of the Project on future (Year 2024 and 2028) conditions, it was necessary to develop estimates of future traffic conditions in the area both without and with Project traffic. Estimates of traffic growth were developed for the study area to forecast future conditions without the Project. These forecasts included traffic increases as a result of both regional ambient traffic growth and traffic generated by specific developments (i.e., cumulative projects) in the vicinity of the Project Site.





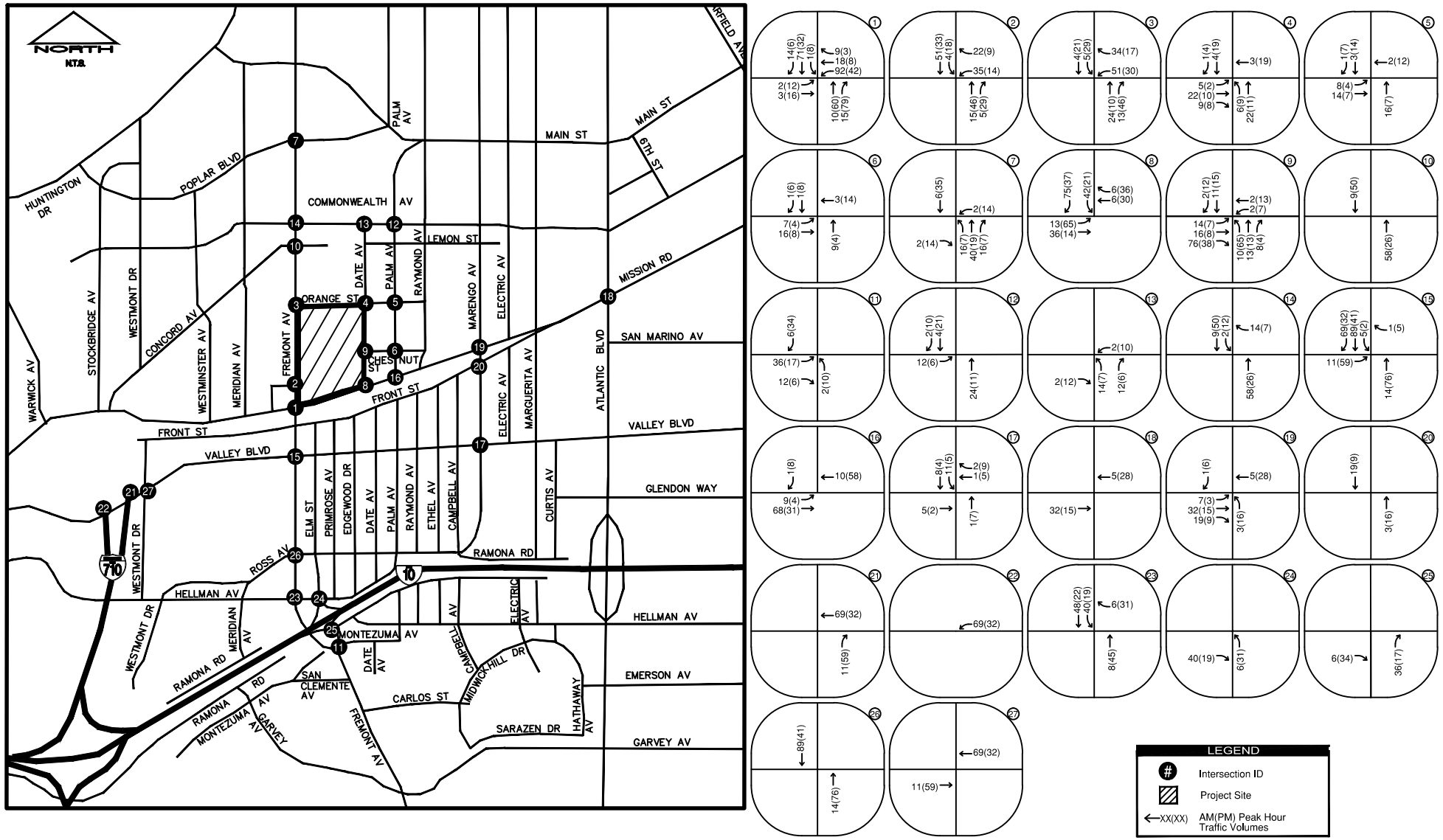
Project Driveway Trip Distribution

FIGURE 5
The Villages at The Alhambra Development
Project Trip Distribution Percentages

LEGEND
- # Intersection ID
- Project Site
- X Project Driveway
- XX% % Project Traffic

Source: Kimley Horn, June 2019.

Figure IV.N-3
Project Trip Distribution



Source: Kimley Horn, June 2019.

Figure IV.N-4
Project Weekday Peak-Hour Turning Movement Volumes

These projected traffic volumes, identified herein as the future cumulative conditions, represent the future conditions without the Project. The traffic generated by the Project was then estimated and assigned to the surrounding street system. Project traffic was added to the future cumulative conditions to form the future cumulative with Project conditions, which were analyzed to determine the incremental traffic impacts attributable to the Project itself under each of the two Project buildout scenarios.

(b) Ambient Growth

Ambient conditions are defined in the Project TIA to represent the sum of ambient traffic growth and existing traffic volumes to show the impact of background growth and development in the area. Regional ambient traffic growth was estimated as an annual percentage increase over the existing traffic volumes. Based on discussions with City staff, a growth rate of 1% per year was applied to the existing 2018 peak hour traffic volumes to represent future year 2028 traffic volumes. These volumes were assigned to the street network and study intersections.

(c) Cumulative Development Projects

In addition to the ambient traffic growth discussed above, the future cumulative conditions evaluated in the TIA include the effects of known specific development projects, referred to as "cumulative projects", expected to be implemented in the vicinity of the Project Site within a similar approximate timeframe.

As per the direction and information provided by City staff, a total of 9 such projects were identified in the vicinity of the Project Site to be included in this analysis. Cumulative development projects are approved and pending projects expected to be built by the year of proposed Project completion (2028) within 1.5 miles of the Project Site. Trip generation and distribution information for each of the cumulative development projects is found in Appendix G of the TIA (see Draft EIR **Appendix E**). The daily and peak hour trips generated by the cumulative projects are summarized in the TIA (see Table 15 of Draft EIR **Appendix E**) and are based upon the trip generation rates from the ITE publication entitled *Trip Generation*, 9th Edition. A list of the cumulative development projects and a map showing their location with respect to the Project Site are provided in Table III-2 and Figure III-16, respectively, in **Section III, Environmental Setting**, of the Draft EIR.

The trip projections for the cumulative development projects are conservative in that they do not in every case account for either the existing uses to be removed or the possible use of non-motorized travel modes (transit, walking, etc.), nor do they include the trip-reducing effects of any mitigation that may be included with these development proposals.

(d) Future Transportation Infrastructure Projects

In addition to the ambient traffic growth and traffic generated by cumulative development projects in the area, programmed improvements to local streets were considered for this analysis. Several transportation projects are programmed to be constructed in the City of Alhambra prior to completion of the Project. The six projects listed below have been approved to be funded by Metro as part of the SR-710 North Corridor Mobility Improvements. All six projects will be funded between Fiscal Year 2020 and Fiscal Year 2023. No expected completion date for any of these projects has been announced but it is feasible that many could be completed prior to the completion of the proposed Project. These infrastructure projects may result in capacity increases at the study intersections for this analysis. However, without knowledge of the specific design of each of these infrastructure projects, it is not yet possible to include them in the analyses of future cumulative conditions. In order to present a conservative evaluation of the Project's potential impact, none of the improvements that would be implemented by these projects have been assumed to be in place by 2028, the year of Project buildout.

- **I-10/SR-710 Interchange Reconfiguration Project**: Reconfigure the I-10/SR-710 Interchange to provide a two-lane connector (eastbound and westbound) from I-10 to the campus of Cal State Los Angeles pending completion of supporting traffic studies, environmental document(s) and final design.

- **I-10/Fremont Avenue On- and Off-Ramp Reconfiguration Project**: Reconfigure existing westbound on- and off-ramps at the I-10/Fremont Avenue local interchange to increase capacity and storage; improve mobility by directing vehicles to Fremont Avenue, while also protecting adjacent residential neighborhoods and Fremont Elementary School; and remove and/or relocate the soundwall at Elm/Hellman/Ramona. Also, reconfigure existing eastbound on- and off-ramps at I-10 at Fremont/Montezuma to increase capacity and storage; improve mobility; and reduce the potential for freeway traffic backing onto traffic through lanes on major arterials.

- **I-10/Atlantic Boulevard On- and Off-Ramp Reconfiguration Project**: Reconfigure existing eastbound and westbound on- and off-ramps at the I-10/Atlantic Boulevard local interchange to increase capacity and storage; improve mobility; and reduce the potential for freeway traffic backing onto traffic through lanes on major arterials.

- **I-10/Garfield Avenue On- and Off-Ramp Reconfiguration Project**: Reconfigure existing eastbound and westbound on- and off-ramps at the I-10/Garfield Avenue local interchange to increase capacity and storage; improve mobility; and reduce the potential for freeway traffic backing onto traffic through lanes on major arterials.

- **Garfield Avenue Traffic Signal Synchronization Project**: On Garfield Avenue, from Huntington Drive to I-10 Freeway (18 intersections), install new signal controllers, signal control firmware, system detection, communications, and additional signal hardware to improve corridor operations and conform with updated signal control standards and requirements to improve arterial operations.
- **Fremont Avenue Traffic Signal Synchronization Project**: On Fremont Avenue, from the northerly city limit to Montezuma/I-10 Freeway (11 intersections), install new signal controllers, signal control firmware, system detection, communications, and additional signal hardware to improve corridor operations and conform with updated signal control standards and requirements to improve arterial operations.

(e) Future Cumulative (2028) Traffic Conditions

Future Cumulative (2028) Conditions represent the sum of Existing (2018) Conditions traffic volumes, ambient growth, and the traffic estimated from the cumulative development projects. Figure IV.N-6 illustrates the AM and PM peak hour traffic volumes at the study intersections for Future Cumulative (2028) Conditions. The intersection analysis worksheets for Cumulative (2028) Conditions are provided in Appendix H of the TIA (see Draft EIR **Appendix E**). Table IV.N-9 below presents a summary of the Future Cumulative (2028) Conditions V/C ratio or delay (in seconds) and the corresponding LOS for each intersection.

The Future Cumulative (2028) Conditions traffic analysis results shown in Table IV.N-9 indicate that 1 intersection is projected to operate at LOS E and 6 intersections will operate at LOS F while the remaining 20 intersections will operate at LOS D or better during the AM peak period. During the PM peak period, 3 intersections are projected to operate at LOS E and 6 intersections are projected to operate at LOS F while the remaining 18 intersections will operate at LOS D or better.

Table IV.N-9
Summary of Intersection Operations – Cumulative (2028) Without Project & With Project (Buildout Scenario 1) Conditions

Signalized Study Intersections		Cumulative (2028) Without Project LOS Analysis Results				Cumulative (2028) With Project LOS Analysis Results				Change in V/C	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	AM	PM
1	S Fremont Ave/W Mission Rd	**1.297**	**F**	**1.211**	**F**	**1.377**	**F**	**1.285**	**F**	**0.080**	**0.074**
2	S Fremont Ave/Project Driveway	0.632	B	0.693	B	0.670	B	0.724	C	0.038	0.031
3	S Fremont Ave/Orange St	0.633	B	**0.875**	**D**	0.670	B	**0.907**	**E**	0.037	**0.032**
7	S Fremont Ave/Poplar Blvd	0.779	C	0.781	C	0.793	C	0.798	C	0.014	0.017
10	S Fremont Ave/Concord Ave	0.708	C	0.654	B	0.711	C	0.660	B	0.003	0.006
11	S Fremont Ave/Montezuma Ave	0.670	B	0.745	C	0.683	B	0.747	C	0.013	0.002
12	W Commonwealth Ave/S Palm Ave	0.482	A	0.609	B	0.490	A	0.619	B	0.008	0.010
13	Date Ave/W Commonwealth Ave	0.448	A	0.662	B	0.458	A	0.667	B	0.010	0.005
14	S Fremont Ave/W Commonwealth Ave	0.793	C	**0.964**	**E**	0.794	C	**0.980**	**E**	0.001	**0.016**
15	S Fremont Ave/W Valley Blvd	**1.033**	**F**	**0.980**	**E**	**1.059**	**F**	**1.029**	**F**	**0.026**	**0.049**
16	W Mission Rd/S Palm Ave	0.691	B	0.646	B	0.701	C	0.656	B	0.010	0.010
17	W Valley Blvd/S Marengo Ave	0.802	D	0.831	D	0.810	D	0.840	D	0.008	0.009
18	S Atlantic Blvd/W Mission Rd	0.951	E	1.019	F	0.953	E	1.023	F	0.002	0.004
19	S Marengo Ave/W Mission Rd	1.036	F	**1.002**	**F**	1.044	F	**1.024**	**F**	0.008	**0.022**
20	S Marengo Ave/Front St	0.818	D	0.862	D	0.830	D	0.868	D	0.012	0.006
21	W Valley Blvd/I-710 NB Off-ramp	0.769	C	0.716	C	0.782	C	0.739	C	0.013	0.023
22	W Valley Blvd/I-710 SB On-ramp	**1.173**	**F**	**0.914**	**E**	**1.197**	**F**	**0.925**	**E**	**0.024**	**0.011**
23	S Fremont Ave/W Hellman Ave	**0.873**	**D**	**0.853**	**D**	**0.900**	**E**	**0.878**	**D**	**0.027**	**0.025**
26	S Fremont Ave/Ross Ave	0.720	C	0.551	A	0.725	C	0.564	A	0.005	0.013
27	W Valley Blvd/Westmont Dr	**0.893**	**D**	0.701	C	**0.914**	**E**	0.720	C	**0.021**	0.019

Unsignalized Study Intersections		Cumulative (2028) Without Project LOS Analysis Results				Cumulative (2028) With Project LOS Analysis Results				Change in Delay (s)	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	AM	PM
4	Date Ave/Orange St	13.8	B	**34.0**	**D**	14.7	B	**50.7**	**F**	0.9	**16.7**
5	Orange St/S Palm Ave	8.9	A	12.2	B	9.1	A	12.8	B	0.2	0.6
6	Chestnut Ave/S Palm Ave	8.8	A	12.7	B	8.9	A	13.3	B	0.1	0.6
8	W Mission Rd/Date Ave	**33.1**	**D**	93.2	F	**68.7**	**E**	266.2	F	**35.6**	173.0
9	Chestnut St/Date Ave	13.2	B	13.4	B	15.5	C	21.9	C	2.3	8.5
24	W Hellman Ave/I-10 WB Ramps (Elm St)	102.9	F	50.5	F	106.7	F	53.9	F	3.8	3.4

25	S Fremont Ave/I-10 EB Ramps (Ramona Rd)	159.6	F	161.4	F	159.3	F	163.7	F	-0.3	2.3
Source: Kimley-Horn, 2019 *Significant impacts shown in **bold**.*											

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with the State CEQA Guidelines Appendix G (Appendix G), a project would have a significant impact related to transportation if the project would do the following:

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

(b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b); or

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

(d) Result in inadequate emergency access.

Effective January 1, 2019, new Section 15064.3 of the CEQA Guidelines describes a new VMT methodology to be used in the analysis of transportation impacts in CEQA documents. Per Section 15064.3(c), while any agency may immediately apply the new CEQA Guidelines section to its CEQA analyses, a statewide application of the new section is not required until July 1, 2020. For the purposes of this analysis and Draft EIR, a VMT study has not been performed and this evaluation of Project impacts utilizes City-adopted intersection LOS-based significance thresholds in order to make a determination with respect to the Appendix G questions.

(2) City of Alhambra Significant Impact Criteria

The City of Alhambra uses County of Los Angeles LOS standards of significance to identify significant project impacts. The City is currently developing guidelines for the analysis of project impacts with respect to the VMT metric as required by the State of California, pursuant to Senate Bill 743. The State requires these new thresholds to be adopted by July 1, 2020. As of June 2019, only a few cities in southern California have developed a model to analyze VMT. For now, the City will continue to use the County of Los Angeles standards of significance.

(a) Signalized Intersections

The County of Los Angeles impact criteria for signalized intersections states that a project's impact is considered to be significant if the project-related increase in the intersection V/C ratio equals or exceeds the thresholds shown in Table IV.N-10.

Table IV.N-10
Signalized Intersection Significant Impact Threshold

Pre-Project Conditions		Project V/C Increase
Level of Service	**V/C Ratio**	
C	0.71 to 0.80	0.040 or more
D	0.81 to 0.90	0.020 or more
E/F	0.91 or more	0.010 or more
Source: Los Angeles County Traffic Impact Analysis Report Guidelines		

Using the intersection significant impact criteria, a project will not have a significant impact at a signalized intersection if the intersection operates at LOS D after the addition of the proposed project's traffic and the incremental change in V/C ratio is less than 0.040. However, if the intersection is operating at LOS F after the addition of the proposed project's traffic and the associated increase in V/C ratio is 0.020 or greater, the project will be considered to have a significant impact.

(b) Unsignalized Intersections

Based on review of the Los Angeles County TIA guidelines and the City's Circulation Element, there are no specific significance criteria for the performance of unsignalized intersections. Therefore, for purposes of determining project-specific impacts at unsignalized intersections, the following significance criteria was provided by the City:

1. The project would create a significant impact at an unsignalized intersection if the addition of the project's traffic would cause the intersection to operate from LOS D or better in the baseline (pre-project) condition, to LOS E or F in the plus-project condition. A traffic signal warrant analysis shall be conducted to determine whether a traffic signal is warranted. If a traffic signal is warranted, the City may require the project applicant to pay its fair share of fees to an applicable program for the signalization of the intersection, when warranted.

2. If an unsignalized intersection is operating at LOS E or F in the baseline (pre-project) condition, the project would create a significant impact at that intersection if it contributes 10 percent, or more, to the total traffic volume of the impacted peak hour(s). A traffic signal warrant analysis shall be conducted to determine whether a traffic signal is warranted. If a traffic signal is warranted, the City may require the project applicant to pay its fair-share of fees to an applicable program for the signalization of the intersection, when warranted.

c) Project Design Features

The following Project Design Features (PDFs) are proposed as part of the Project.

- **TR-PDF-1**: Site Design – The Project Site perimeter will be designed to encourage walking, biking, and transit usage. Amenities would include:
    - Street trees along the perimeter sidewalks
    - Improved street and pedestrian lighting
- **TR-PDF-2**: Work Zone Traffic Control Plan – A Work Zone Traffic Control Plan will be developed by the contractor and approved by the City of Alhambra to alleviate potential construction period impacts. The Plan may include, but is not limited to, the following measures:
    - Provide on-site truck staging.
    - Install a temporary fence around the perimeter of the construction area for the protection of pedestrians.
    - Schedule deliveries and pick-ups of construction materials during non-peak travel periods to the extent possible and coordinate to reduce the potential of trucks waiting to load or unload for protracted periods.
    - Required excavation and hauling of material will be scheduled for the mid-day period in order to reduce the impacts of traffic during construction.
    - In the event that parking lane and/or travel lane closures are necessary, worksite traffic control plan(s), approved by the City, will be implemented to route vehicular traffic, bicyclists, and pedestrians around any such closures.
    - Establish requirements for loading/unloading and storage of materials on the Project Site, where parking spaces would be encumbered, length of time traffic travel lanes can be encumbered, sidewalk closings or pedestrian diversions to ensure the safety of the pedestrian and access to local businesses and residences.
    - The contractor will provide an estimate of truck volume and schedule. Areas will be designated by the City for the staging of all trucks. All earth-moving and ready-mix trucks will be equipped with two- way radios so that the drivers at the staging areas are linked to a person controlling traffic at the Project Site. Trucks will follow a City-approved route to the Project Site.

- When feasible, materials being delivered to the site will be scheduled with the least inconvenience to the public. Timing of material delivery is subject to the approval of the City Engineer. The contractor will have a designated employee controlling the logistics of all deliveries. All materials requiring assembly will be accommodated on-site.

- Ensure that access will remain unobstructed for land uses in proximity to the Project Site during Project construction.

- Coordinate with the City and emergency service providers to ensure adequate access is maintained to the Project Site and neighboring businesses and residences.

- **TR-PDF-3**: Project Driveway E – Driveway E on Date Avenue is proposed to allow access to the North Plan Area. The driveway is located opposite Chestnut Street on Date Avenue. There is an existing 30-foot northbound left turn pocket. The distance does not provide adequate storage for 95th percentile queues in either the PM peak period for Existing (2018) With Project or the PM peak period for Cumulative (2028) With Project scenarios. The northbound left turn lane shall be lengthened to 65 feet to provide adequate storage for 95th percentile queues at Project Driveway E.

d) Analysis of Project Impacts

Threshold a) ***Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?***

(1) Impact Analysis

(a) Construction Impacts

Under Buildout Scenario 1, the Project would be developed as a single entity with completion projected for 2028. Under this scenario, demolition would occur for approximately 3 months and would require the demolition and removal of 104,242 square feet of existing uses. Grading/soil export and foundation preparation would occur for approximately 7 months and 120,000 cubic yards of soil export would be required. Building construction would occur for approximately 26 months and would include the construction of the proposed structures, connection of utilities, laying irrigation for landscaping, architectural coatings, paving, and landscaping the Project Site. Due to the eight-year buildout period, the 36 months of construction activities would not occur continuously but would be episodic across the entire buildout period.

Under Buildout Scenario 2, the Project would be phased with partial buildout of 516 condominium and townhouse units in the North Plan Area (Phase I) completed in 2024 and the remaining 545 apartment units in the South and Corner Plan Areas (Phase II) completed by 2028. Phase I involves the demolition of 42,576 square feet of existing uses, and the construction of 480 condominium and 36 townhouse units and 1,625 parking spaces, built by 2024. Under this phase, demolition would occur for approximately 1 month. Grading/soil export and foundation preparation would occur for approximately 3.5 months and 60,000 cubic yards of soil export would be required. Building construction would occur for approximately 13 months. Phase II would involve the demolition of 61,666 square feet of existing uses, and the construction of 545 apartment units and 922 parking spaces, built by 2028. Under this phase, demolition would occur for approximately 2 months. Grading/soil import and foundation preparation would occur for approximately 3.5 months and 60,000 cubic yards of soil export would be required. Building construction would occur for approximately 13 months. The estimated Project construction duration under each Buildout Scenario is shown in Table II-4 in **Section II, Project Description** of the Draft EIR.

As noted, approximately 120,000 cubic yards of earthen material is expected to be exported from the Project Site during construction work. Demolition of approximately 104,242 square feet of existing structures on-site would also generate material requiring hauling from the Project Site. The proposed haul route for excavated/demolished materials within the City would consist of Date Avenue to Mission Road to Fremont Avenue, and then either Fremont Avenue south to Interstate 10 or Valley Boulevard west to Interstate 710 (for additional detail, see **Section IV.P.3, Utilities and Service Systems – Solid Waste**, of the Draft EIR).

(i) Temporary Traffic Impacts

Closures to one travel lane along the Date Avenue Project frontage could potentially occur during certain phases of Project construction. There are no emergency services located within the immediate vicinity of the affected streets. Since Date Avenue is a local street with low volumes and other alternative routes are available, the temporary construction impacts on the roadway network would be considered less than significant. Per Project Design Feature TR-PDF-2, worksite traffic control plans would be prepared for any temporary vehicle lane or sidewalk closures in accordance with applicable City guidelines.

Hauling activity is expected to occur over the first three phases of construction: Phase 1 – Demolition & Site Preparation; Phase 2 – Grading; and Phase 3 – Building Framing and Construction. Peak hauling activity is anticipated to occur during Phase 1 when the demolition of existing on-site structures would occur. Hauling hours are anticipated to be 7:00 AM to 3:00 PM, Monday through Friday, and 8:00 AM to 6:00 PM on Saturdays. Trucks would be staged on-site.

In addition to haul trucks, the Project is also expected to generate equipment and delivery trucks during each phase of construction. One example would be concrete delivery. Other materials could include plumbing supplies, electrical fixtures, and items used in furnishing the buildings. These materials would be delivered to the Project Site and stored on-site. These deliveries are expected to occur in variously sized vehicles, ranging from small delivery trucks to cement mixer trucks and 18-wheeler trucks. Additionally, construction equipment would be delivered to the Project Site. Pieces of construction equipment could include cranes, bulldozers, excavators, and other large items of machinery. Most of the heavy equipment would be transported to the Project Site on large trucks, such as 18-wheelers or other similar vehicles.

No construction activities with heavy equipment would occur beyond the normal weekday construction hours of 7:00 AM to 8:00 PM and Saturday from 9:00 AM to 4:00 PM. Per Project Design Feature TR-PDF-2, materials being delivered to the site during the construction period would be scheduled at times that are not in conflict with peak public use of the roadways so that congestion is limited.

The potential impacts of construction traffic on the traffic operations within the study area would be temporary and expected to be periodically ongoing until 2028. The impacts of construction-related trips (trucks and construction employees) on the street system should be considered negligible since these trips can be scheduled and their frequency increased during off-peak (mid-day) hours.

Per Project Design Feature TR-PDF-2, the specifics of a Work Zone Traffic Control Plan, which includes the use of flagmen and lane channelization devices, would be established in accordance with City guidelines. Contractor traffic control plans will need to be approved by the City of Alhambra. A flagman would be available at all times when construction activities are occurring to ensure vehicle and pedestrian safety, and would be used whenever trucks are leaving the Project Site to prevent the impedance of the flow of traffic. The safety of pedestrians would be ensured by installing a construction fence around the zone of construction activity on the Project Site perimeter.

Through the implementation of the Work Zone Traffic Control Plan, Project construction traffic impacts would be less than significant.

(ii) Temporary Loss of Access

The existing land uses in the vicinity of the construction site would remain open throughout construction. There are currently sidewalks on both sides of Date Avenue and Orange Street. Pedestrian and vehicular access to properties located near the Project Site would be open and unobstructed during construction. Since Project construction would not block vehicle or pedestrian access to other parcels fronting the construction

area, there would be no temporary loss of access, and, as such, impacts would be less than significant.

(iii) Temporary Loss of Bus Stops or Rerouting of Bus Lines

Construction is not anticipated to affect bus stops or bus lines in the area. As Project construction would not require relocation of bus stops or bus lines, there would be no temporary loss of bus stops or rerouting of bus lines, and, as such, no construction impacts on transit operations would occur.

(iv) Temporary Loss of On-Street Parking

Construction of the Project could require the temporary removal of on-street parking spaces along the Date Avenue and Orange Street Project frontages for periods during the overall construction work to accommodate temporary truck staging. As there is other on- and off-street parking available to serve nearby businesses, these temporary impacts would be less than significant.

(v) Construction Workers and Vehicle Parking

The number of construction workers would vary throughout the construction period with the building construction phase necessitating the highest number of workers on-site. Due to the size of the Project Site, it is expected that parking for construction workers will be available on-site and that off-site parking would not be necessary. Impacts would be less than significant.

(vi) Impact Conclusion

Per the above discussion and with implementation of Project Design Feature TR-PDF-2, the Project would have a **less-than-significant** impact during the construction period.

(b) Operational Impacts

(i) Existing (2018) Conditions With Project

Existing (2018) With Project Conditions add the estimated Project trips to the Existing (2018) Conditions and are used to evaluate the net change in the traffic conditions resulting from the Project. The Existing (2018) With Project traffic volumes represent the sum of existing traffic volumes and the Project trips. These volumes were assigned to the street network and study intersections to evaluate the net change in traffic conditions and to identify potential traffic impacts associated with the proposed Project.

The peak hour traffic volumes for the Existing (2018) With Project Conditions at each of the study intersections are illustrated on Figure IV.N-5. The intersection analysis

worksheets for Existing (2018) With Project Conditions are provided in TIA Appendix D (see Draft EIR **Appendix E**). Table IV.N-11 below presents a summary of the Existing (2018) With Project Conditions V/C ratio or delay (sec) and the corresponding LOS for each intersection.

Table IV.N-11
Summary of Intersection Operations – Existing (2018) + Project Conditions

Signalized Study Intersections		Existing (2018) Without Project LOS Analysis Results				Existing (2018) With Project LOS Analysis Results				Change in V/C	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	AM	PM
1	S Fremont Ave/W Mission Rd	**1.165**	**F**	**1.087**	**F**	**1.244**	**F**	**1.162**	**F**	**0.079**	**0.075**
2	S Fremont Ave/Project Driveway	0.573	A	0.628	B	0.611	B	0.663	B	0.038	0.035
3	S Fremont Ave/Orange St	0.573	A	0.792	C	0.611	B	0.824	D	0.038	0.032
7	S Fremont Ave/Poplar Blvd	0.697	B	0.696	B	0.710	C	0.713	C	0.013	0.017
10	S Fremont Ave/Concord Ave	0.641	B	0.595	A	0.644	B	0.600	B	0.003	0.005
11	S Fremont Ave/Montezuma Ave	0.600	A	0.674	B	0.613	B	0.676	B	0.013	0.002
12	W Commonwealth Ave/S Palm Ave	0.387	A	0.524	A	0.396	A	0.535	A	0.009	0.011
13	Date Ave/W Commonwealth Ave	0.378	A	0.597	A	0.389	A	0.601	B	0.011	0.004
14	S Fremont Ave/W Commonwealth Ave	0.713	C	0.861	D	0.716	C	0.877	D	0.003	0.016
15	S Fremont Ave/W Valley Blvd	**0.933**	**E**	**0.884**	**D**	**0.958**	**E**	**0.933**	**D**	**0.025**	**0.049**
16	W Mission Rd/S Palm Ave	0.626	B	0.587	A	0.635	B	0.597	A	0.009	0.010
17	W Valley Blvd/S Marengo Ave	0.715	C	0.743	C	0.723	C	0.752	C	0.008	0.009
18	S Atlantic Blvd/W Mission Rd	0.855	D	0.916	E	0.857	D	0.921	E	0.002	0.005
19	S Marengo Ave/W Mission Rd	0.926	E	**0.891**	**D**	0.934	E	**0.912**	**E**	0.008	**0.021**
20	S Marengo Ave/Front St	0.732	C	0.772	C	0.744	C	0.777	C	0.012	0.005
21	W Valley Blvd/I-710 NB Off-ramp	0.696	B	0.647	B	0.709	C	0.670	B	0.013	0.023
22	W Valley Blvd/I-710 SB On-ramp	**1.059**	**F**	0.828	D	**1.083**	**F**	0.839	D	**0.024**	0.011
23	S Fremont Ave/W Hellman Ave	0.779	C	0.762	C	0.807	D	0.788	C	0.028	0.026
26	S Fremont Ave/Ross Ave	0.649	B	0.498	A	0.653	B	0.515	A	0.004	0.017
27	W Valley Blvd/Westmont Dr	0.808	D	0.636	B	0.830	D	0.655	B	0.022	0.019

Unsignalized Study Intersections		Existing (2018) Without Project LOS Analysis Results				Existing (2018) With Project LOS Analysis Results				Change in Delay (s)	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	AM	PM
4	Date Ave/Orange St	12.3	B	21.0	C	12.9	B	26.7	D	0.6	5.7
5	Orange St/S Palm Ave	8.7	A	11.1	B	8.9	A	11.6	B	0.2	0.5
6	Chestnut Ave/S Palm Ave	8.6	A	11.6	B	8.8	A	11.9	B	0.2	0.3
8	W Mission Rd/Date Ave	21.8	C	37.6	E	33.5	D	110.6	F	11.7	73.0
9	Chestnut St/Date Ave	12.0	B	12.2	B	13.7	B	18.7	C	1.7	6.5
24	W Hellman Ave/I-10 WB Ramps (Elm St)	66.5	F	31.3	D	71.1	F	35.1	E	4.6	3.8

Table IV.N-11
Summary of Intersection Operations – Existing (2018) + Project Conditions

Signalized Study Intersections		Existing (2018) Without Project LOS Analysis Results				Existing (2018) With Project LOS Analysis Results				Change in V/C	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	AM	PM
25	S Fremont Ave/I-10 EB Ramps (Ramona Rd)	109.4	F	112.2	F	106.2	F	114.2	F	-3.2	2.0

Source: Kimley-Horn, 2019
*Significant impacts shown in **bold**.*

The Existing (2018) With Project Conditions traffic analysis results presented in Table IV.N-11 indicate that during the AM peak period, 2 intersections would operate at LOS E and 4 intersections would operate at LOS F while the remaining 21 intersections would operate at LOS D or better. During the PM peak period, 3 intersections would operate at LOS E and 3 intersections would operate at LOS F while the remaining 21 intersections would operate at LOS D or better.

For the Existing (2018) With Project Conditions, the following intersections would have an increase in V/C ratio resulting in a significant impact in the AM and PM peak periods:

1. Intersection #1 – S. Fremont Avenue and W. Mission Road (increase in V/C of 0.079 to LOS F in the AM peak and 0.075 to LOS F in the PM peak)
2. Intersection #15 – S. Fremont Avenue and W. Valley Boulevard (increase in V/C of 0.025 to LOS E in the AM peak and 0.049 to LOS D in the PM peak)
3. Intersection #19 – S. Marengo Avenue and W. Mission Road (increase in V/C of 0.021 to LOS F in the PM peak)
4. Intersection #22 – W. Valley Boulevard and I-710 SB On-Ramp (increase in V/C of 0.024 to LOS F in the AM peak)

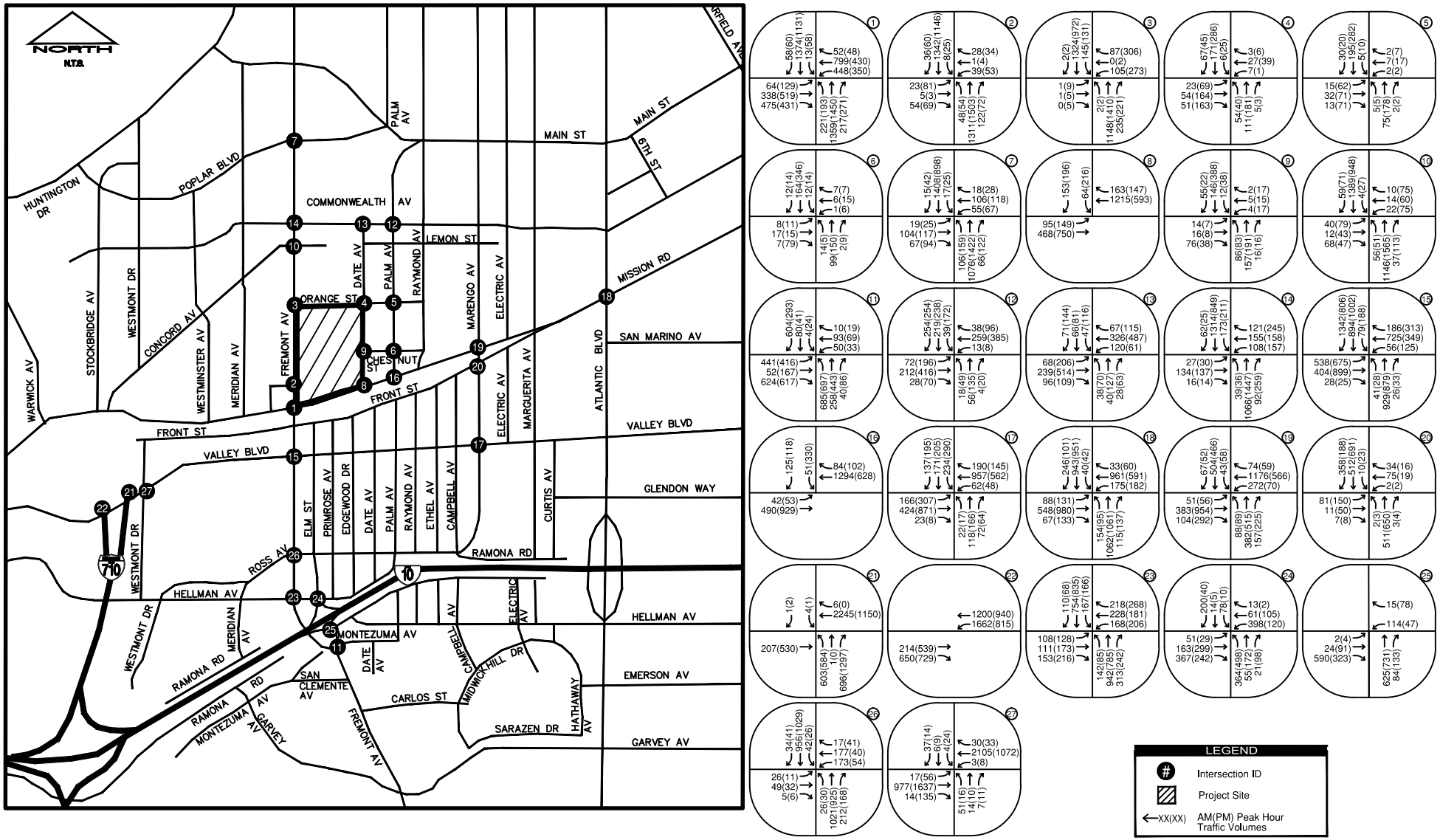


Figure IV.N-5
Existing (2018) With Project Weekday Peak-Hour Turning Movement Volumes

Source: Kimley Horn, June 2019.

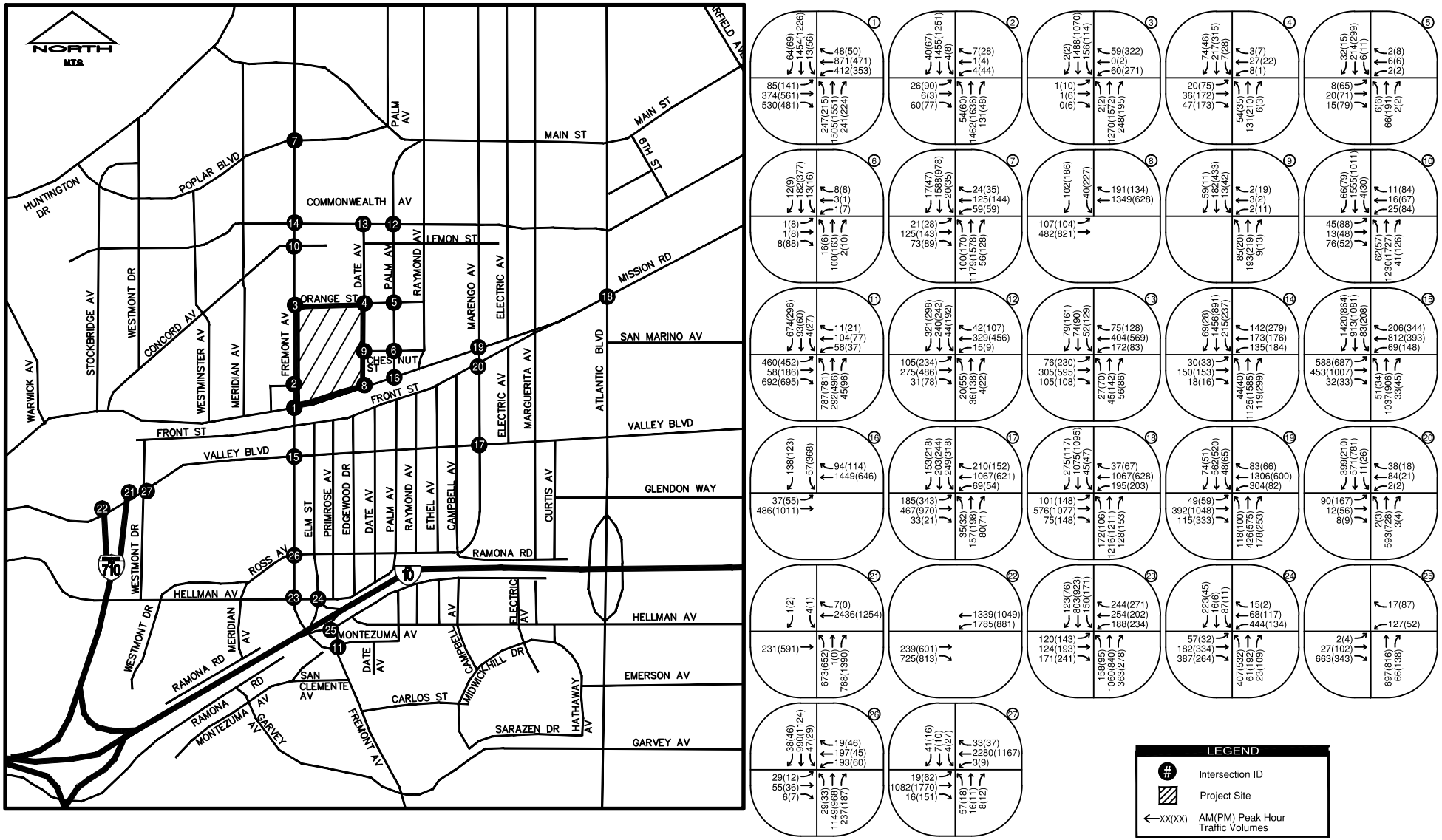


Figure IV.N-6
Future (2028) Without Project Peak-Hour Turning Movement Volumes

Source: Kimley Horn, June 2019.

Unsignalized intersections that operate at LOS E or F under Existing (2018) Without Project Conditions were also analyzed to determine if the Project's added volume exceeds 10% of the total intersection traffic volume. The Project would add the following volumes to intersections currently operating at LOS E or F under Existing (2018) Without Project Conditions:

1. Intersection #8 – W. Mission Road and Date Avenue. Less-than-significant impact because the Project contributes 9.9% of the total intersection volume in the PM peak period.

2. Intersection #24 – W. Hellman Avenue and I-10 WB Ramps (Elm Street). Less-than-significant impact because the Project contributes 2.6% of the total intersection volume in the AM peak period and 3.1% in the PM peak period.

3. Intersection #25 – S. Fremont Avenue and I-10 EB Ramps (Ramona Road). Less-than-significant impact because the Project contributes 2.9% of the total intersection volume in the AM peak period and 3.6% in the PM peak period.

Based on the City's impact criteria for intersection LOS impacts shown in Table IV.N-10, the Project's intersection LOS impacts under the Existing (2018) With Project traffic condition would be **significant**.

(ii) Cumulative Future (2028) Conditions With Project – Buildout Scenario 1

Buildout Scenario 1 considers the entire Project to be built in one phase with completion scheduled for 2028. Traffic conditions were analyzed for Cumulative Future (2028) Conditions, which, as stated previously, reflect the sum of ambient traffic growth and existing traffic volumes and also include traffic from other approved and pending projects in the immediate area (the "cumulative development projects") to analyze the impacts of cumulative traffic. Cumulative Future (2028) With Project Conditions add the estimated Project traffic to the Cumulative Future (2028) base conditions and are used to evaluate the net change in the traffic conditions and to identify potential traffic impacts associated with the proposed Project. The Cumulative Future (2028) With Project traffic volumes represent the sum of existing traffic volumes raised by ambient growth factor, the traffic estimated from other specific projects, and the Project trips. These volumes were assigned to the street network and study intersections to evaluate the net change in the traffic conditions and to identify potential traffic impacts associated with the proposed Project for the buildout conditions under Buildout Scenario 1.

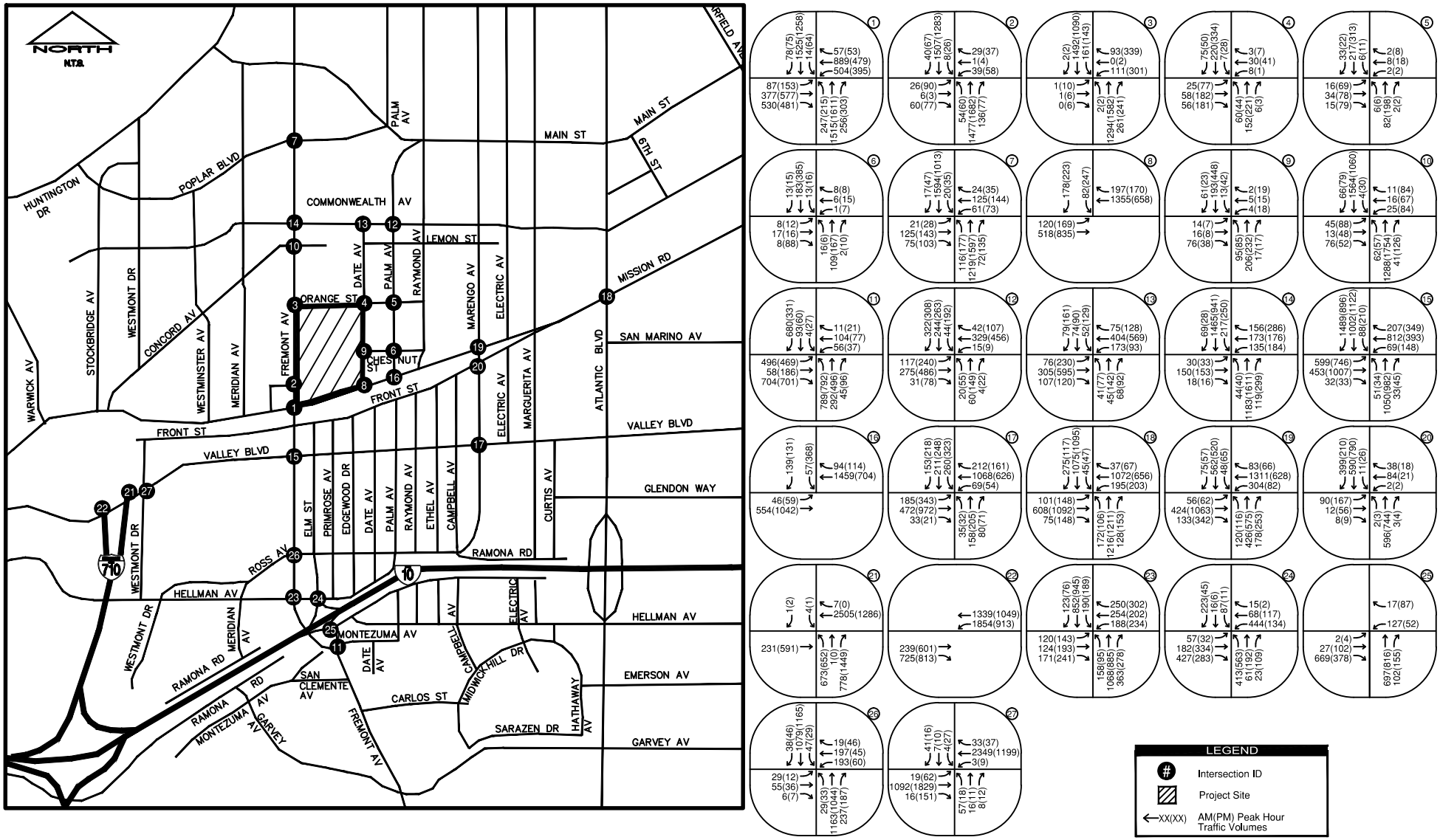
Figure IV.N-7 illustrates the AM and PM peak hour traffic volumes at the study intersections for the Cumulative Future (2028) With Project Conditions. The intersection analysis worksheets for the Cumulative Future (2028) With Project Conditions are

provided in TIA Appendix I (see Draft EIR **Appendix E**). Table IV.N-9 presented earlier in this section provides a summary of the Cumulative Future (2028) With Project Conditions V/C ratio or delay (sec) and the corresponding LOS for each intersection.

The Cumulative Future (2028) With Project Conditions traffic analysis results presented in Table IV.N-9 indicate that 4 intersections are projected to operate at LOS E and 6 intersections are projected to operate at LOS F while the remaining 17 intersections would operate at LOS D or better during the AM peak period. During the PM peak period, 3 intersections are projected to operate at LOS E and 9 intersections would operate at LOS F while the remaining 15 intersections would operate at LOS D or better.

For the Cumulative Future (2028) With Project Conditions, the following intersections would have an increase in V/C ratio resulting in a significant impact during the AM and PM peak periods:

1. Intersection #1: S. Fremont Avenue and W. Mission Road (increase in V/C of 0.080 to LOS F in the AM peak and 0.074 to LOS F in the PM peak)
2. Intersection #3: S. Fremont Avenue and Orange Street (increase in V/C of 0.032 to LOS E in the PM peak)
3. Intersection #14: S. Fremont Avenue and W. Commonwealth Avenue (increase in V/C of 0.016 to LOS E in the PM peak)
4. Intersection #15: S. Fremont Avenue and W. Valley Boulevard (increase in V/C of 0.026 to LOS F in the AM peak and 0.049 to LOS F in the PM peak)
5. Intersection #19: S. Marengo Avenue and W. Mission Road (increase in V/C of 0.022 to LOS F in the PM peak)
6. Intersection #22: W. Valley Boulevard and I-710 SB On-Ramp (increase in V/C of 0.024 to LOS F in the AM peak and 0.011 to LOS E in the PM peak)
7. Intersection #23: S. Fremont Avenue and W. Hellman Avenue (increase in V/C of 0.027 to LOS E in the AM peak and 0.025 to LOS D in the PM peak)
8. Intersection #27: W. Valley Boulevard and Westmont Drive (increase in V/C of 0.021 to LOS E in the AM peak)
9. Intersection #4: Date Avenue and Orange Street (increase in LOS from D to F in the PM peak)
10. Intersection #8: W. Mission Road and Date Avenue (increase in LOS from D to E in the AM peak)



Source: Kimley Horn, June 2019.

Figure IV.N-7
Future (2028) With Project (Buildout Scenario 1) Weekday Peak-Hour Turning Movement Volumes

Unsignalized intersections that operate at LOS E or F under Cumulative Future (2028) Without Project Conditions were also analyzed to determine if the Project-added volume exceeds 10% of the total intersection traffic volume. The Project would add the following volumes to intersections operating at LOS E or F under Cumulative Future (2028) Without Project Conditions:

1. Intersection #8 – W. Mission Road and Date Avenue. Less-than-significant impact because the Project contributes 8.8% of the total intersection volume in the PM peak period.

2. Intersection #24 – W. Hellman Avenue and I-10 WB Ramps (Elm Street). Less-than-significant impact because the Project contributes 2.3% of the total intersection volume in the AM peak period and 2.7% in the PM peak period.

3. Intersection #25 – S. Fremont Avenue and I-10 EB Ramps (Ramona Road). Less-than-significant impact because the Project contributes 2.6% of the total intersection volume in the AM peak period and 3.2% in the PM peak period.

Based on the City's impact criteria for intersection LOS impacts shown in Table IV.N-10, the Project's Buildout Scenario 1 intersection LOS impacts under the Cumulative Future (2028) With Project traffic condition would be **significant**.

(iii) Cumulative Future (2024/2028) Conditions With Project – Buildout Scenario 2

Under Buildout Scenario 2, the Project would be developed in two phases. A total of 516 condominium and townhouse units (Phase I) would be built by 2024 and the remaining 545 apartment units (Phase II) would be built by 2028. Phasing Project construction into two periods over eight years partially decreases the impacts to the surrounding transportation network.

Buildout Scenario 2 impacts were analyzed at the opening year of 2024 when Phase I would be completed and again in 2028 when all of the Project units are completed. The 2024 analysis includes the trips expected to be generated by Project areas N1, N2, N3, and N4 (North Plan Area).

The Cumulative Future (2024) Conditions represent the sum of existing volumes, ambient growth, and the traffic estimated from other specific projects. Since all nine of the cumulative development projects identified by the City of Alhambra are expected to be built by 2024, all were included in the Cumulative Future (2024) Conditions as well as the Cumulative Future (2028) Conditions. No additional projects were considered for Cumulative Future (2028) Conditions.

The Cumulative Future (2024) Without Project Conditions traffic analysis results presented in Table IV.N-12 below indicate that 3 intersections are projected to operate at LOS E and 4 intersections would operate at LOS F while the remaining 20 intersections would operate at LOS D or better during the AM peak period. During the PM peak period, 5 intersections are projected to operate LOS E and 3 intersections are projected to operate at LOS F while the remaining 19 intersections would operate at LOS D or better.

Cumulative Future (2024) With Project Conditions add the estimated Project traffic to the Cumulative Future (2024) Without Project Conditions and are used to evaluate the net change in the traffic conditions and to identify potential traffic impacts associated with the proposed Project. The Cumulative Future (2024) With Project traffic volumes represent the sum of existing traffic volumes raised by ambient growth factor, the traffic estimated from other specific projects, and the Project trips. These volumes were assigned to the street network and study intersections to evaluate the net change in the traffic conditions and to identify potential traffic impacts associated with the proposed Project.

Figure IV.N-8 illustrates the AM and PM peak hour traffic volumes at the study intersections for Cumulative Future (2024) With Project Conditions under Buildout Scenario 2. The intersection analysis worksheets for Cumulative Future (2024) With Project Conditions are provided in TIA Appendix M (see Draft EIR **Appendix E**). Table IV.N-12 below presents a summary of the Cumulative Future (2024) With Project Conditions V/C ratio or delay (sec) and the corresponding LOS for each intersection.

The Cumulative Future (2024) With Project Conditions traffic analysis results presented in Table IV.N-12 indicate that 2 intersections are projected to operate at LOS E and 6 intersections are projected to operate at LOS F while the remaining 19 intersections would operate at LOS D or better during the AM peak period. During the PM peak period, 6 intersections are projected to operate at LOS E and 3 intersections would operate at LOS F while the remaining 18 intersections would operate at LOS D or better.

Table IV.N-12
Summary of Intersection Operations – Cumulative (2024) Without Project & With Project (Buildout Scenario 2) Conditions

Signalized Study Intersections		Cumulative (2024) Without Project LOS Analysis Results				Cumulative (2024) With Project LOS Analysis Results				Change in V/C	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	AM	PM
1	S Fremont Ave/W Mission Rd	**1.251**	**F**	**1.167**	**F**	**1.290**	**F**	**1.202**	**F**	**0.039**	**0.035**
2	S Fremont Ave/Project Driveway	0.612	B	0.670	B	0.628	B	0.684	B	0.016	0.014
3	S Fremont Ave/Orange St	0.613	B	**0.845**	**D**	0.640	B	**0.869**	**D**	0.027	**0.024**
7	S Fremont Ave/Poplar Blvd	0.753	C	0.755	C	0.760	C	0.764	C	0.007	0.009
10	S Fremont Ave/Concord Ave	0.685	B	0.633	B	0.686	B	0.636	B	0.001	0.003
11	S Fremont Ave/Montezuma Ave	0.648	B	0.720	C	0.655	B	0.721	C	0.007	0.001
12	W Commonwealth Ave/S Palm Ave	0.469	A	0.591	A	0.476	A	0.583	A	0.007	-0.008
13	Date Ave/W Commonwealth Ave	0.435	A	0.641	B	0.443	A	0.644	B	0.008	0.003
14	S Fremont Ave/W Commonwealth Ave	0.766	C	0.931	E	0.768	C	0.941	E	0.002	0.010
15	S Fremont Ave/W Valley Blvd	**0.997**	**E**	**0.946**	**E**	**1.010**	**F**	**0.969**	**E**	**0.013**	**0.023**
16	W Mission Rd/S Palm Ave	0.669	B	0.625	B	0.670	B	0.630	B	0.001	0.005
17	W Valley Blvd/S Marengo Ave	0.776	C	0.803	D	0.781	C	0.808	D	0.005	0.005
18	S Atlantic Blvd/W Mission Rd	0.923	E	0.983	E	0.924	E	0.986	E	0.001	0.003
19	S Marengo Ave/W Mission Rd	1.000	E	**0.968**	**E**	1.004	F	**0.982**	**E**	0.004	**0.014**
20	S Marengo Ave/Front St	0.791	C	0.833	D	0.799	C	0.837	D	0.008	0.004
21	W Valley Blvd/I-710 NB Off-ramp	0.742	C	0.691	B	0.749	C	0.704	C	0.007	0.013
22	W Valley Blvd/I-710 SB On-ramp	**1.131**	**F**	0.882	D	**1.144**	**F**	0.889	D	**0.013**	0.007
23	S Fremont Ave/W Hellman Ave	0.843	D	0.824	D	0.857	D	0.838	D	0.014	0.014
26	S Fremont Ave/Ross Ave	0.696	B	0.533	A	0.698	B	0.541	A	0.002	0.008
27	W Valley Blvd/Westmont Dr	0.862	D	0.678	B	0.873	D	0.687	B	0.011	0.009

Unsignalized Study Intersections		Cumulative (2024) Without Project LOS Analysis Results				Cumulative (2024) With Project LOS Analysis Results				Change in Delay (s)	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	AM	PM
4	Date Ave/Orange St	13.5	B	**28.6**	**D**	13.9	B	**37.2**	**E**	0.4	**8.6**
5	Orange St/S Palm Ave	8.9	A	11.7	B	8.9	A	12.0	B	0.0	0.3
6	Chestnut Ave/S Palm Ave	8.7	A	12.2	B	8.7	A	12.3	B	0.0	0.1
8	W Mission Rd/Date Ave	**30.1**	**C**	70.8	F	**47.3**	**E**	144.0	F	**17.2**	73.2
9	Chestnut St/Date Ave	12.9	B	13.2	B	14.3	B	18.8	C	1.4	5.6
24	W Hellman Ave/I-10 WB Ramps (Elm St)	89.5	F	43.1	E	92.9	F	45.3	E	3.4	2.2
25	S Fremont Ave/I-10 EB Ramps (Ramona Rd)	140.2	F	142.9	F	139.6	F	144.2	F	-0.6	1.3

*Source: Kimley-Horn, 2019 Significant Impacts shown in **bold***

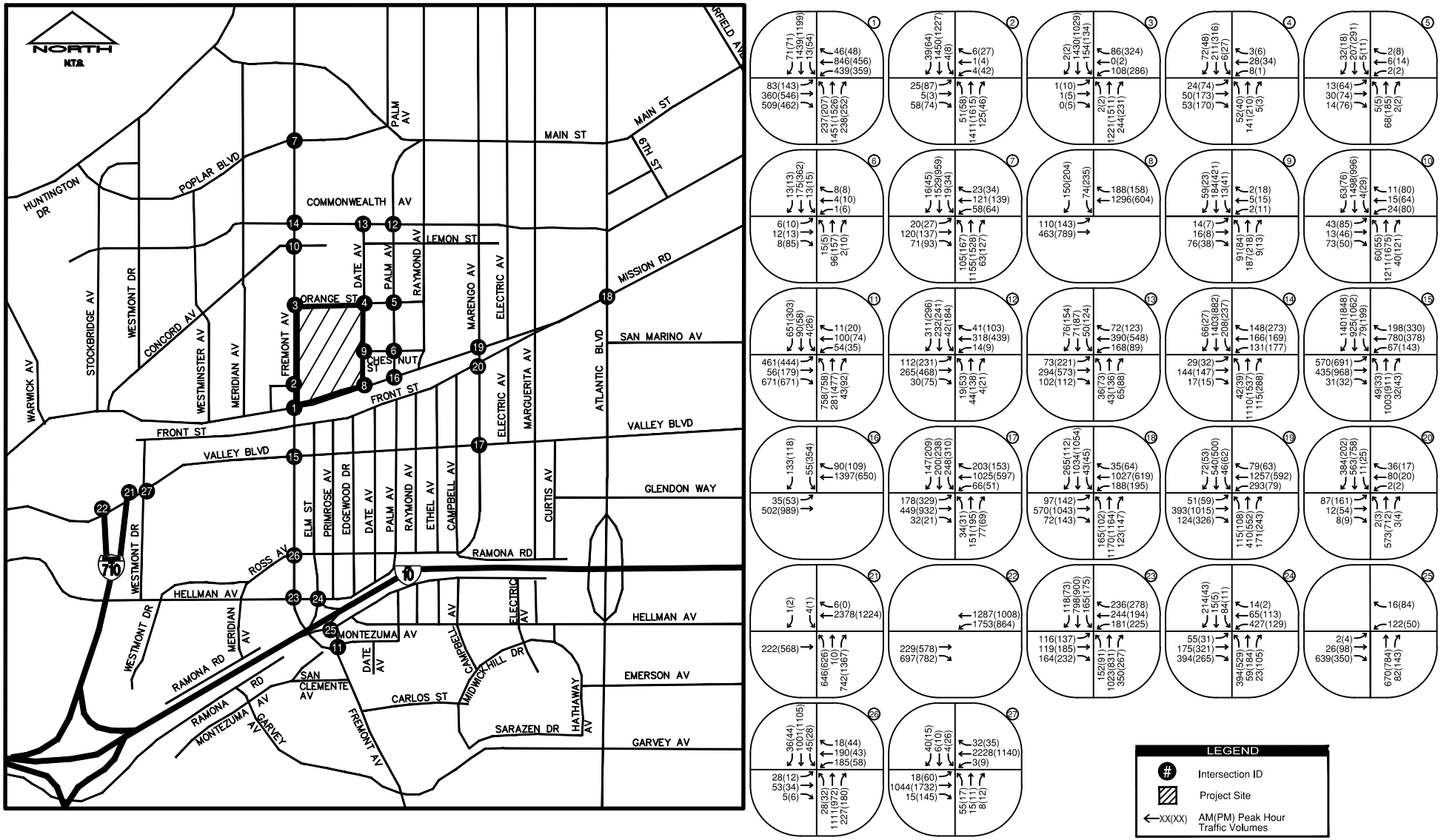


Figure IV.N-8
Future (2024) With Project (Buildout Scenario 2) Weekday Peak-Hour Turning Movement Volumes

Source: Kimley Horn, June 2019.

For the Cumulative Future (2024) With Project Conditions, the following intersections would have an increase in V/C ratio resulting in a significant impact during the AM and PM peak periods:

1. Intersection #1: S. Fremont Avenue and W. Mission Road (increase in V/C of 0.039 to LOS F in the AM peak and 0.035 to LOS F in the PM peak)
2. Intersection #3: S. Fremont Avenue and Orange Street (increase in V/C of 0.024 to LOS D in the PM peak)
3. Intersection #15: S. Fremont Avenue and W. Valley Boulevard (increase in V/C of 0.013 to LOS F in the AM peak and 0.023 to LOS E in the PM peak)
4. Intersection #19: S. Marengo and W. Mission Road (increase in V/C of 0.014 to LOS E in the PM peak)
5. Intersection #22: W. Valley Boulevard and I-710 SB On-Ramp (increase in V/C of 0.013 to LOS F in the AM peak)
6. Intersection #4: Date Avenue and Orange Street (increase in LOS from D to E in the PM peak)
7. Intersection #8: W. Mission Road and Date Avenue (increase in LOS from C to E in the AM peak)

Unsignalized intersections that operate at LOS E or F under Cumulative Future (2024) Without Project Conditions were also analyzed to determine if the Project-added volume exceeds 10% of the total intersection traffic volume. The Project would add the following volumes to intersections operating at LOS E or F in Cumulative Future (2024) Without Project Conditions:

1. Intersection #8 – W. Mission Road and Date Avenue. Less-than-significant impact because the Project contributes 9.1% of the total intersection volume in the PM peak period.
2. Intersection #24 – W. Hellman Avenue and I-10 WB Ramps (Elm Street). Less-than-significant impact because the Project contributes 2.4% of the total intersection volume in the AM peak period and 2.8% in the PM peak period.
3. Intersection #25 – S. Fremont Avenue and I-10 EB Ramps (Ramona Road). Less-than-significant impact because the Project contributes 2.7% of the total intersection volume in the AM peak period and 3.3% in the PM peak period.

Based on the City's impact criteria for intersection LOS impacts shown in Table IV.N-10, the Project's Buildout Scenario 2 intersection LOS impacts under the Cumulative Future (2024) With Project traffic condition would be **significant**.

For Buildout Scenario 2, Cumulative Future (2028) Without Project Conditions use Cumulative Future (2024) With Project Plus Mitigation Conditions as a baseline. These baseline conditions include the portion of the proposed Project that would be completed in 2024 (Phase I), all nine cumulative development projects considered in this analysis, and the ambient growth expected to occur between 2018 and 2024. The baseline conditions also include infrastructure improvements that are expected to be built as a result of the mitigation required for Phase I Project impacts. These mitigations are discussed under "Mitigation Measures" below. Due to this, the Cumulative Future (2024) With Project Plus Mitigation Conditions are equivalent to the Cumulative Future (2024) With Project Conditions. The Cumulative Future (2028) Without Project Conditions for Buildout Scenario 2 adds the ambient growth expected to occur between 2025 and 2028 to the Cumulative Future (2024) With Project Conditions.

The Cumulative Future (2028) Without Project Conditions for Buildout Scenario 2 traffic analysis results presented in Table IV.N-13 below indicate that 2 intersections are projected to operate at LOS E and 7 intersections would operate at LOS F while the remaining 18 intersections would operate at LOS D or better during the AM peak period. During the PM peak period, 3 intersections are projected to operate at LOS E and 7 intersections are projected to operate at LOS F while the remaining 17 intersections would operate at LOS D or better.

Cumulative Future (2028) With Project Conditions for Buildout Scenario 2 add the estimated Phase II Project traffic to the Cumulative Future (2024) With Project Conditions and are used to evaluate the net change in the traffic conditions and to identify potential traffic impacts associated with the proposed Project. The Cumulative Future (2028) With Project traffic volumes represent the sum of existing traffic volumes raised by ambient growth factor, the traffic estimated from other specific projects, the traffic and mitigations from Project Phase I, and the Project Phase II trips. These volumes were assigned to the street network and study intersections to evaluate the net change in the traffic conditions and to identify potential traffic impacts associated with the proposed Project.

Figure IV.N-9 illustrates the AM and PM peak hour traffic volumes at the study intersections for Cumulative Future (2028) With Project Conditions under Buildout Scenario 2. The intersection analysis worksheets for Cumulative Future (2028) With Project Conditions under Buildout Scenario 2 are provided in TIA Appendix O (see Draft EIR **Appendix E**). Table IV.N-13 below presents a summary of the Cumulative Future (2028) With Project Conditions for Buildout Scenario 2 V/C ratio or delay (sec) and the corresponding LOS for each intersection.

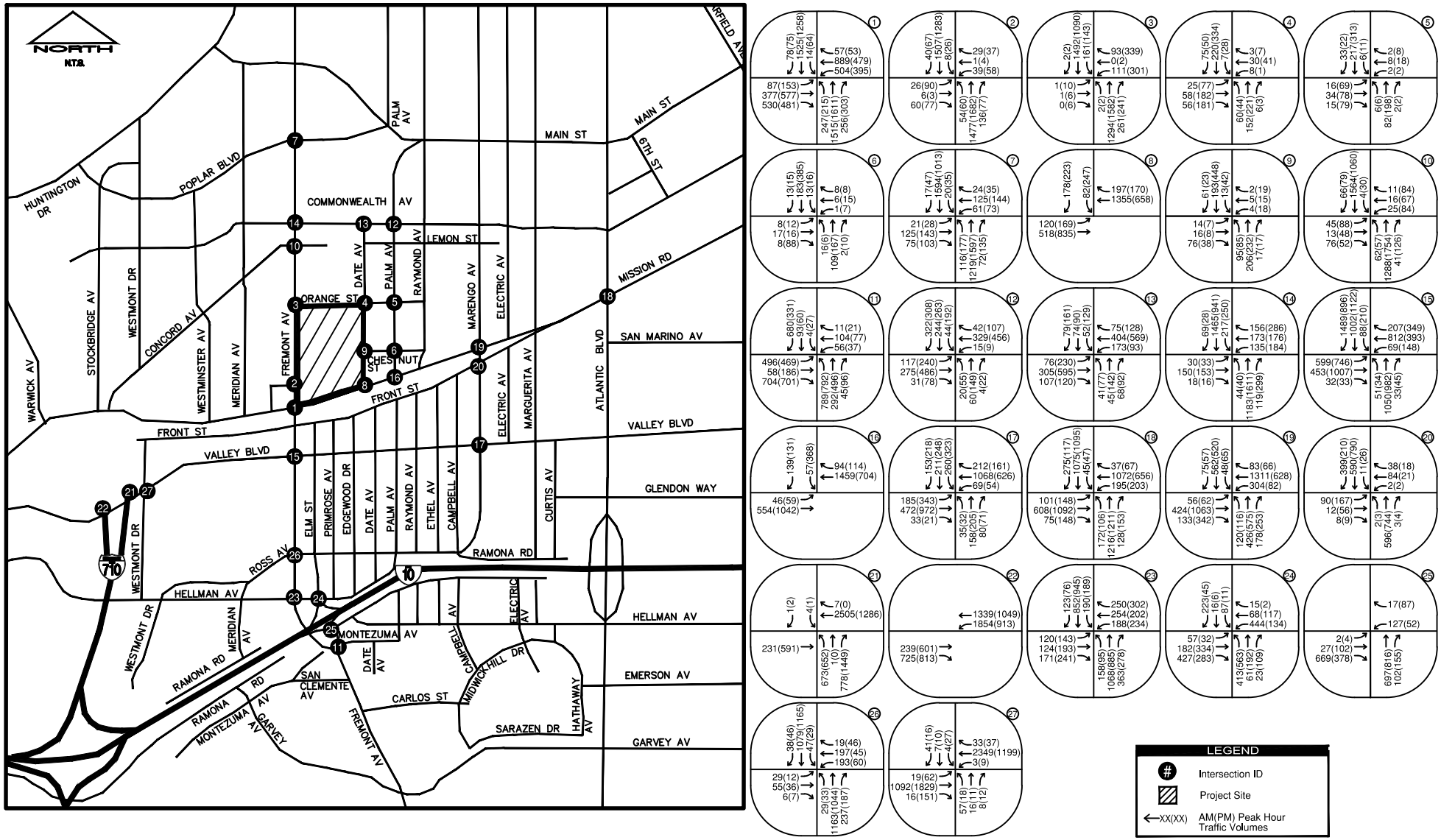


Figure IV.N-9
Future (2028) With Project (Buildout Scenario 2) Weekday Peak-Hour Turning Movement Volumes

Source: Kimley Horn, June 2019.

Table IV.N-13
Summary of Intersection Operations – Cumulative (2028) Without Project & With Project (Buildout Scenario 2) Conditions

Signalized Study Intersections		Cumulative (2028) Without Project LOS Analysis Results				Cumulative (2028) With Project LOS Analysis Results				Change in V/C	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	AM	PM
1	S Fremont Ave/W Mission Rd	**1.337**	**F**	**1.246**	**F**	**1.377**	**F**	**1.285**	**F**	**0.040**	**0.039**
2	S Fremont Ave/Project Driveway	0.648	B	0.706	C	0.670	B	0.724	C	0.022	0.018
3	S Fremont Ave/Orange St	0.660	B	0.899	D	0.670	B	0.907	E	0.010	0.008
7	S Fremont Ave/Poplar Blvd	0.786	C	0.790	C	0.793	C	0.798	C	0.007	0.008
10	S Fremont Ave/Concord Ave	0.709	C	0.657	B	0.711	C	0.660	B	0.002	0.003
11	S Fremont Ave/Montezuma Ave	0.677	B	0.746	C	0.683	B	0.747	C	0.006	0.001
12	W Commonwealth Ave/S Palm Ave	0.489	A	0.617	B	0.490	A	0.619	B	0.001	0.002
13	Date Ave/W Commonwealth Ave	0.455	A	0.666	B	0.458	A	0.667	B	0.003	0.001
14	S Fremont Ave/W Commonwealth Ave	0.794	C	0.974	E	0.794	C	0.980	E	0.000	0.006
15	S Fremont Ave/W Valley Blvd	**1.046**	**F**	**1.003**	**F**	**1.059**	**F**	**1.029**	**F**	**0.013**	**0.026**
16	W Mission Rd/S Palm Ave	0.693	B	0.651	B	0.701	C	0.656	B	0.008	0.005
17	W Valley Blvd/S Marengo Ave	0.808	D	0.836	D	0.810	D	0.840	D	0.002	0.004
18	S Atlantic Blvd/W Mission Rd	0.952	E	1.021	F	0.953	E	1.023	F	0.001	0.002
19	S Marengo Ave/W Mission Rd	1.040	F	1.016	F	1.044	F	1.024	F	0.004	0.008
20	S Marengo Ave/Front St	0.826	D	0.866	D	0.830	D	0.868	D	0.004	0.002
21	W Valley Blvd/I-710 NB Off-ramp	0.776	C	0.728	C	0.782	C	0.739	C	0.006	0.011
22	W Valley Blvd/I-710 SB On-ramp	**1.186**	**F**	0.920	E	**1.197**	**F**	0.925	E	**0.011**	0.005
23	S Fremont Ave/W Hellman Ave	0.887	D	0.867	D	0.900	E	0.878	D	0.013	0.011
26	S Fremont Ave/Ross Ave	0.722	C	0.558	A	0.725	C	0.564	A	0.003	0.006
27	W Valley Blvd/Westmont Dr	0.904	E	0.711	C	0.914	E	0.720	C	0.010	0.009

Unsignalized Study Intersections		Cumulative (2028) Without Project LOS Analysis Results				Cumulative (2028) With Project LOS Analysis Results				Change in Delay (s)	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	AM	PM
4	Date Ave/Orange St	14.3	B	46.1	E	14.7	B	50.7	F	0.4	4.6
5	Orange St/S Palm Ave	9.0	A	12.4	B	9.1	A	12.8	B	0.1	0.4
6	Chestnut Ave/S Palm Ave	8.8	A	12.9	B	8.9	A	13.3	B	0.1	0.4
8	W Mission Rd/Date Ave	55.7	F	187.3	F	68.7	F	266.2	F	13.0	78.9
9	Chestnut St/Date Ave	14.6	B	19.2	C	15.5	C	21.9	C	0.9	2.7
24	W Hellman Ave/I-10 WB Ramps (Elm St)	102.9	F	53.8	F	106.7	F	53.9	F	3.8	0.1
25	S Fremont Ave/I-10 EB Ramps (Ramona Rd)	159.1	F	162.5	F	159.3	F	163.7	F	0.2	1.2

Source: Kimley-Horn, 2019
*Significant impacts shown in **bold**.*

The Cumulative (2028) With Project Conditions for Buildout Scenario 2 traffic analysis results presented in Table IV.N-13 indicate that 3 intersections are projected to operate at LOS E and 7 intersections are projected to operate at LOS F while the remaining 17 intersections would operate at LOS D or better during the AM peak period. During the PM peak period, 3 intersections are projected to operate at LOS E and 8 intersections would operate at LOS F while the remaining 16 intersections would operate at LOS D or better.

For the Cumulative (2028) With Project Conditions under Buildout Scenario 2, the following intersections would have an increase in V/C ratio resulting in a significant impact in the AM and PM peak periods:

1. Intersection #1: S. Fremont Avenue and W. Mission Road (increase in V/C of 0.040 to LOS F in the AM peak and 0.039 to LOS F in the PM peak)
2. Intersection #15: S. Fremont Avenue and W. Valley Boulevard (increase in V/C of 0.013 to LOS F in the AM peak and 0.026 to LOS F in the PM peak)
3. Intersection #22: W. Valley Boulevard and I-710 SB On-ramp (increase in V/C of 0.011 to LOS F in the AM peak)

Unsignalized intersections that operate at LOS E or F under Cumulative Future (2028) Without Project Conditions were also analyzed to determine if the Project-added volume exceeds 10% of the total intersection traffic volume. The Project would add the following volumes to intersections operating at LOS E or F in Cumulative Future (2028) Without Project Conditions:

1. Intersection #4 – Date Avenue and Orange Street. Less-than-significant impact because the Project contributes 6.7% of the total intersection volume in the PM peak period.
2. Intersection #8 – W. Mission Road and Date Avenue. Less-than-significant impact because the Project contributes 7.9% of the total intersection volume in the AM peak period and 8.4% in the PM peak period.
3. Intersection #24 – W. Hellman Avenue and I-10 WB Ramps (Elm Street). Less-than-significant impact because the Project contributes 2.3% of the total intersection volume in the AM peak period and 2.7% in the PM peak period.
4. Intersection #25 – S. Fremont Avenue and I-10 EB Ramps (Ramona Road). Less-than-significant impact because the Project contributes 2.5% of the total intersection volume in the AM peak period and 3.1% in the PM peak period.

Based on the City's impact criteria for intersection LOS impacts shown in Table IV.N-10, the Project's Buildout Scenario 2 intersection LOS impacts under the Cumulative Future (2028) With Project traffic condition would be **significant**.

(iv) Unsignalized Intersection Signal Warrant Analysis

A traffic signal warrant analysis was conducted as per the 2014 edition of the California Manual for Uniform Traffic Control Devices (MUTCD) for evaluating the need for traffic signals at the unsignalized study intersections. Warrant 3 (Peak Hour) was evaluated using AM and PM peak hour data for 7 unsignalized intersections. The warrant analysis was conducted for Buildout Scenario 1 only because this is the more conservative scenario.

According to Peak Hour Warrant (Warrant 3) of the MUTCD, the need for a traffic control signal shall be considered if *either of the following* two parts is met:

1. If ***all three*** of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

    - The total stopped time delay experienced by the traffic on one minor street approach (one direction only) equals or exceeds: 5 vehicle-hours for a one-lane approach, and

    - The volume on the same minor street approach (one direction only) equals or exceeds 100 vehicles per hour (vph) for one moving lane of traffic or 150 vph for two moving lanes; and

    - The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.

2. The plotted point representing the vehicles per hour (total of both approaches) and the corresponding vehicles per hour on the minor street (higher approach - one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in MUTCD Figure 4C-3 for the existing combination of approach lanes.

The peak hour warrant analysis was conducted for the 7 unsignalized study intersections under Cumulative Future (2028) With Project Conditions during AM and PM peak hours. For intersections that met Signal Warrant 3 for this most conservative case, the signal warrant analysis was also conducted for the Cumulative Future (2028), Existing (2018) With Project, and Existing (2018) Conditions. Table IV.N-14 presents a summary of the traffic signal peak hour warrant analysis for the unsignalized study intersections.

Table IV.N-14
Summary of Peak Hour Signal Warrants Met

#	Intersection	Peak Period Signal Warrant Met				
		Existing Conditions	Existing With Project Conditions	Cumulative (2028) Conditions	Cumulative (2028) With Project Conditions	Project Significant Impact?
4	Date Ave / Orange St	No	No	No	Yes (PM)	**Yes**
5	Orange St / Palm Ave	No	No	No	No	
6	Chestnut Ave / Palm Ave	No	No	No	No	
8	W Mission Rd / Date Ave	Yes (PM)	Yes (AM & PM)	Yes (PM)	Yes (AM & PM)	**Yes**
9	Chestnut St / Date Ave	No	No	No	No	
24	W Hellman Ave / I-10 WB Ramps	Yes (AM & PM)	Yes (AM & PM)	Yes (AM & PM)	Yes (AM & PM)	
25	S Fremont Ave / I-10 EB Ramps	No	No	No	No	

Source: Kimley-Horn, 2019

Table IV.N-14 indicates that the intersections of Date Avenue and Orange Street, W. Mission Road and Date Avenue, and W. Hellman Avenue and I-10 WB Ramps meet the peak hour signal warrant for AM and/or PM peak conditions in the Cumulative Future (2028) With Project Conditions. The intersections of W. Mission Road/Date Avenue and W. Hellman Avenue/I-10 WB Ramps also both meet the unsignalized significant impact thresholds under Existing (2018) Conditions. Because the traffic signal is warranted, the City may require the Project Applicant to pay its fair-share of fees to an applicable program for the signalization of the intersection. Project impacts would be considered **significant**.

The intersection of W Hellman Avenue/I-10 WB Ramps does not meet the unsignalized impact threshold for either Buildout Scenario 1 or Buildout Scenario 2 so the Project does not cause a significant impact at this intersection. The traffic signal warrant analysis shows that a signal is warranted in both Existing and Cumulative conditions, with and without the Project. It should be noted that this intersection is controlled by Caltrans so the decision whether or not to install a traffic signal would be made by them.

(v) CMP Arterial Analysis

The CMP guidelines require that intersection monitoring locations must be examined if a project will add 50 or more trips during either the weekday AM or PM peak hours. The nearest CMP arterial monitoring intersections to the Project Site are S. Fremont Avenue/W. Valley Boulevard (CMP ID 1) and W. Valley Boulevard/I-710 NB off-ramp (CMP ID 69). The Project is projected to contribute more than 50 peak hour trips to the

CMP monitored intersections of S. Fremont Avenue/W. Valley Boulevard and W. Valley Boulevard/I-710 NB Off-Ramp during both AM and PM peak hours, and therefore, additional evaluation for CMP purposes was completed.

Per Metro's CMP guidelines, the CMP evaluation requires traffic data collection, physical description of intersections, and intersection LOS calculations. The two CMP monitored intersections were evaluated during both AM and PM peak hours for Existing (2018) Conditions. Table IV.N-15 below provides a summary of the Existing (2018) Conditions V/C ratio and corresponding LOS for each CMP intersection. The CMP analysis worksheets are provided in TIA Appendix R (see Draft EIR **Appendix E**).

Table IV.N-15
Summary of CMP Intersection Analysis

CMP Station #	Intersection	Data Collection Date	Peak Hour	Peak Hour Time	V/C Ratio	LOS
1	S Fremont Ave/ W Valley Boulevard	Thursday, 4/27/17	AM	7:15 - 8:15	0.937	E
			PM	5:00 - 6:00	0.957	E
69	W Valley Boulevard/ I-710 NB Offramp	Thursday, 4/27/17	AM	7:15 - 8:15	0.774	C
			PM	5:00 - 6:00	0.815	D
Source: Kimley-Horn, 2019						

As discussed above under the analysis of the Project's intersection impacts, the intersection of S. Fremont Avenue and W. Valley Boulevard would be significantly impacted by the Project in the Cumulative Future (2028) With Project scenario. The Project increases the V/C ratio at the intersection by 0.080 in the AM peak and 0.074 in the PM peak. This impact would be **significant**.

(vi) CMP Freeway Analysis

The CMP guidelines require that freeway monitoring locations must be examined if a project will add 150 or more trips (in either direction) during either the weekday AM or PM peak hours. The nearest CMP mainline freeway monitoring locations are along I-10 at the Los Angeles city limit (station 1014), along I-10 at Atlantic Boulevard (station 1015), and along I-710 south of State Route 60 (station 1081).

As shown in Table IV.N-16, the Project would not add 150 or more trips along I-10 and I-710 in either peak hour. Therefore, the further analysis of CMP freeway facilities is not required for CMP purposes. Project impacts would be **less than significant**.

Table IV.N-16
Summary of CMP Freeway Screening

CMP Freeway Station	Peak Period	Project Volumes	CMP Criteria	Analysis Required?
Interstate 710	AM	69	150	No
	PM	59	150	No
Interstate 10	AM	40	150	No
	PM	34	150	No
Source: Kimley-Horn, 2019				

(vii) Other Circulation System Impacts

Development of the Project would not have an adverse effect upon the Potential Class III Bike Routes or bicycle parking areas identified for the adjacent to the Project Site. Similarly, Project development would not have an adverse effect on existing transit stops or routes located adjacent to the Project Site. Sidewalks adjacent to the Project, along with improved pedestrian- and bicyclist-oriented amenities and features, would be maintained with Project development. Therefore, Project impacts with respect to pedestrian, transit, and bicycle facilities would be less than significant.

The Project would be consistent with the following General Plan objectives and policies:

- **Policy M-1B** At major intersections where two major arterials intersect (such as along Fremont, Valley, Mission, and Garfield), peak hour LOS E or F may be acceptable. In these locations, balance the efficiency and convenience of vehicular operations with other General Plan goals and policies.
- **Policy M-1C** Plan and maintain the City's transportation facilities in a way that provides adequate and safe access for all users, including pedestrians, bicyclists, and motorists of all ages and abilities.
- **Goal M-2** A circulation system that accommodates and encourages the use of alternative modes of transportation, including walking, bicycling, and transit.
- **Policy M-2A** Ensure that new development accommodates, and does not have a negative impact on, alternative transportation modes.

The Project would be inconsistent with the following General Plan objectives and policies:

- **Policy M-1A** Maintain peak hour LOS D for intersections on secondary arterial and collector roadways, and, as feasible, on major arterials.

Overall, Project impacts with respect to non-vehicular components of the circulation system would be **less than significant**.

(viii) Impact Conclusion

Per the above discussion, the Project would have a **significant** operational impact with respect to conflict with adopted circulation system programs, policies, ordinances, and plans.

(2) Mitigation Measures

(a) Construction Traffic

No significant impacts related to construction traffic have been identified. Thus, no mitigation measures are required.

(b) Intersection LOS

As discussed previously, the Project would result in significant impacts with respect to intersection LOS under both Buildout Scenario 1 and Buildout Scenario 2. A summary of the Project's significant intersection impacts under the two buildout scenarios is presented in Tables IV.N-17 and IV.N-18, respectively.

Table IV.N-17
Summary of Significantly Impacted Intersections - Buildout Scenario 1

Signalized Study Intersections		Cumulative (2028) With Project Compared to Cumulative (2028) Without Project	
		AM Peak Hour	PM Peak Hour
1	S Fremont Ave/W Mission Rd	X	X
2	S Fremont Ave/Project Driveway		
3	S Fremont Ave/Orange St		X
7	S Fremont Ave/Poplar Blvd		
10	S Fremont Ave/Concord Ave		
11	S Fremont Ave/Montezuma Ave		
12	W Commonwealth Ave/S Palm Ave		
13	Date Ave/W Commonwealth Ave		
14	S Fremont Ave/W Commonwealth Ave		X
15	S Fremont Ave/W Valley Blvd	X	X
16	W Mission Rd/S Palm Ave		
17	W Valley Blvd/S Marengo Ave		
18	S Atlantic Blvd/W Mission Rd		
19	S Marengo Ave/W Mission Rd		X
20	S Marengo Ave/Front St		
21	W Valley Blvd/I-710 NB Off-ramp		
22	W Valley Blvd/I-710 SB On-ramp	X	X
23	S Fremont Ave/W Hellman Ave	X	X
26	S Fremont Ave/Ross Ave		

27	W Valley Blvd/Westmont Dr	**X**	
Unsignalized Study Intersections		**Cumulative (2028) With Project Compared to Cumulative (2028) Without Project**	
		AM Peak Hour	**PM Peak Hour**
4	Date Ave/Orange St		**X**
5	Orange St/S Palm Ave		
6	Chestnut Ave/S Palm Ave		
8	W Mission Rd/Date Ave	**X**	
9	Chestnut St/Date Ave		
24	W Hellman Ave/I-10 WB Ramps (Elm St)		
25	S Fremont Ave/I-10 EB Ramps (Ramona Rd)		
***X** = Intersection with Significant Impact*			

Table IV.N-18
Summary of Significantly Impacted Intersections – Buildout Scenario 2

Signalized Study Intersections		**Cumulative (2024) With Project Compared to Cumulative (2024) Without Project**		**Cumulative (2028) With Project Compared to Cumulative (2028) Without Project**	
		AM Peak Hour	**PM Peak Hour**	**AM Peak Hour**	**PM Peak Hour**
1	S Fremont Ave/W Mission Rd	**X**	**X**	**X**	**X**
2	S Fremont Ave/Project Driveway				
3	S Fremont Ave/Orange St		**X**		
7	S Fremont Ave/Poplar Blvd				
10	S Fremont Ave/Concord Ave				
11	S Fremont Ave/Montezuma Ave				
12	W Commonwealth Ave/S Palm Ave				
13	Date Ave/W Commonwealth Ave				
14	S Fremont Ave/W Commonwealth Ave				
15	S Fremont Ave/W Valley Blvd	**X**	**X**	**X**	**X**
16	W Mission Rd/S Palm Ave				
17	W Valley Blvd/S Marengo Ave				
18	S Atlantic Blvd/W Mission Rd				
19	S Marengo Ave/W Mission Rd		**X**		
20	S Marengo Ave/Front St				
21	W Valley Blvd/I-710 NB Off-ramp				
22	W Valley Blvd/I-710 SB On-ramp	**X**		**X**	
23	S Fremont Ave/W Hellman Ave				
26	S Fremont Ave/Ross Ave				
27	W Valley Blvd/Westmont Dr				
Unsignalized Study Intersections		**Cumulative (2024) With Project Compared to Cumulative (2024) Without Project**		**Cumulative (2028) With Project Compared to Cumulative (2028) Without Project**	
		AM Peak Hour	**PM Peak Hour**	**AM Peak Hour**	**PM Peak Hour**
4	Date Ave/Orange St		**X**		
5	Orange St/S Palm Ave				
6	Chestnut Ave/S Palm Ave				
8	W Mission Rd/Date Ave	**X**			
9	Chestnut St/Date Ave				
24	W Hellman Ave/I-10 WB Ramps (Elm St)				

25	S Fremont Ave/I-10 EB Ramps (Ramona Rd)				
***X** = Intersection with Significant Impact*					

The Project TIA identifies potential mitigation measures for each of the significantly impacted intersections that could reduce the Project's impact below applicable City significance thresholds. Tables IV.N-19 and IV.N-20 present these potential mitigation measures for Buildout Scenarios 1 and 2, respectively.

Table IV.N-19
Summary of Potential Intersection Impact Mitigation Measures for Buildout Scenario 1

Impacted Intersection		Potential Mitigation Measures
1	S Fremont Ave / W Mission Rd	• Add one additional eastbound right turn lane.
3	S Fremont Ave / Orange St	• Add one additional northbound through lane.
14	S Fremont Ave / W Commonwealth Ave	• Add one additional northbound through lane.
15	S Fremont Ave / W Valley Blvd	• Add one additional southbound right turn lane and one additional westbound receiving lane.
19	S Marengo Ave / W Mission Rd	• Add one additional westbound through lane and one additional eastbound right turn lane.
22	W Valley Blvd / I-710 SB On-ramp	• Restripe eastbound approach to change middle lane from through lane to through and right turn lane.
23	S Fremont Ave / W Hellman Ave	• Add one additional northbound through lane.
27	W Valley Blvd / Westmont Dr	• Add one additional westbound through lane.
4	Date Ave / Orange St	• Install a traffic signal.
8	W Mission Rd / Date Ave	• Install a traffic signal.
Source: Kimley-Horn, 2019.		

Table IV.N-20
Summary of Potential Intersection Impact Mitigation Measures for Buildout Scenario 2

Impacted Intersection		Potential Mitigation Measures
1	S Fremont Ave / W Mission Rd	• Add one additional eastbound right turn lane.
3	S Fremont Ave / Orange St	• Add one additional northbound through lane.
15	S Fremont Ave / W Valley Blvd	• Add one additional southbound right turn lane and one additional westbound receiving lane.
19	S Marengo Ave / W Mission Rd	• Add one additional westbound through lane and one additional eastbound right turn lane.
22	W Valley Blvd / I-710 SB On-Ramp	• Restripe eastbound approach to change middle through lane from through lane to through and right turn lane.
4	Date Ave / Orange St	• Install a traffic signal.
8	W Mission Rd / Date Ave	• Install a traffic signal.
Source: Kimley-Horn, 2019.		

Figure IV.N-10 illustrates the potential lane configurations and traffic controls for the future 2028 condition if all of the potential mitigations shown in Tables IV.N-19 and IV.N-20 were to be implemented. Figures IV.N-11 through IV.N-17 provide illustrations of the potential mitigations and the actions that would be required to implement them at the significantly impacted signalized intersections. Figure IV.N-18 illustrates the potential lane configurations and traffic controls for the future 2024 condition (applicable to Buildout Scenario 2) if all of the potential mitigations were to be implemented.

As discussed in the Project TIA, if all of the potential mitigations shown in Tables IV.N-19 and IV.N-20 were to be implemented, all of the Project's significant intersection impacts under each of the two building scenarios could be mitigated to a less-than-significant level. However, existing land uses and property ownership constraints at some of the significantly impacted intersections render the implementation of some of the identified potential mitigations infeasible.

Specifically, the mitigations from Tables IV.N-19 and IV.N-20 above that are concluded to be infeasible for the Project Applicant to implement, along with the rationale for each determination, are as follows:

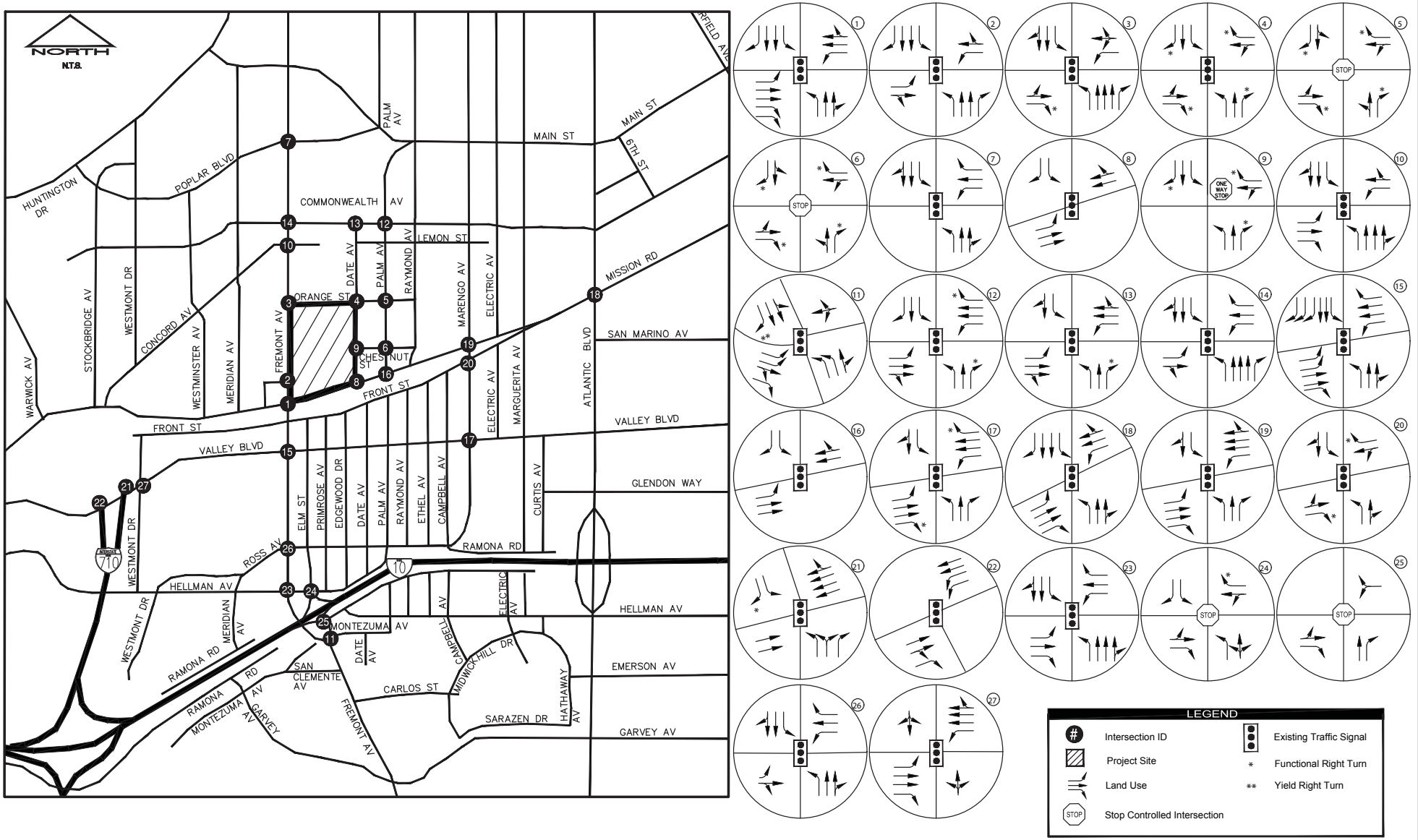
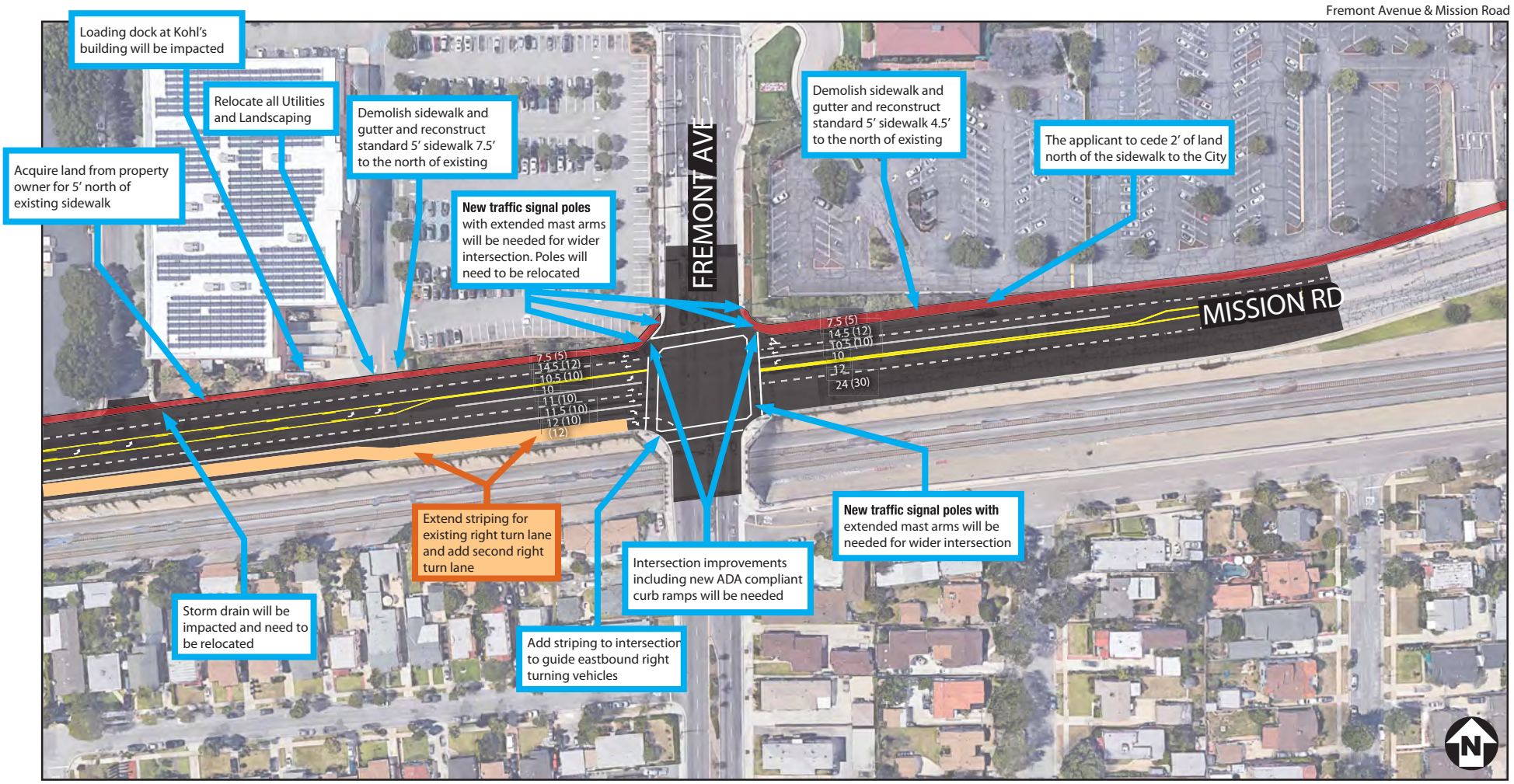


Figure IV.N-10
Future (2028) Study Intersection Lane Configuration and Traffic Control With Potential Mitigation

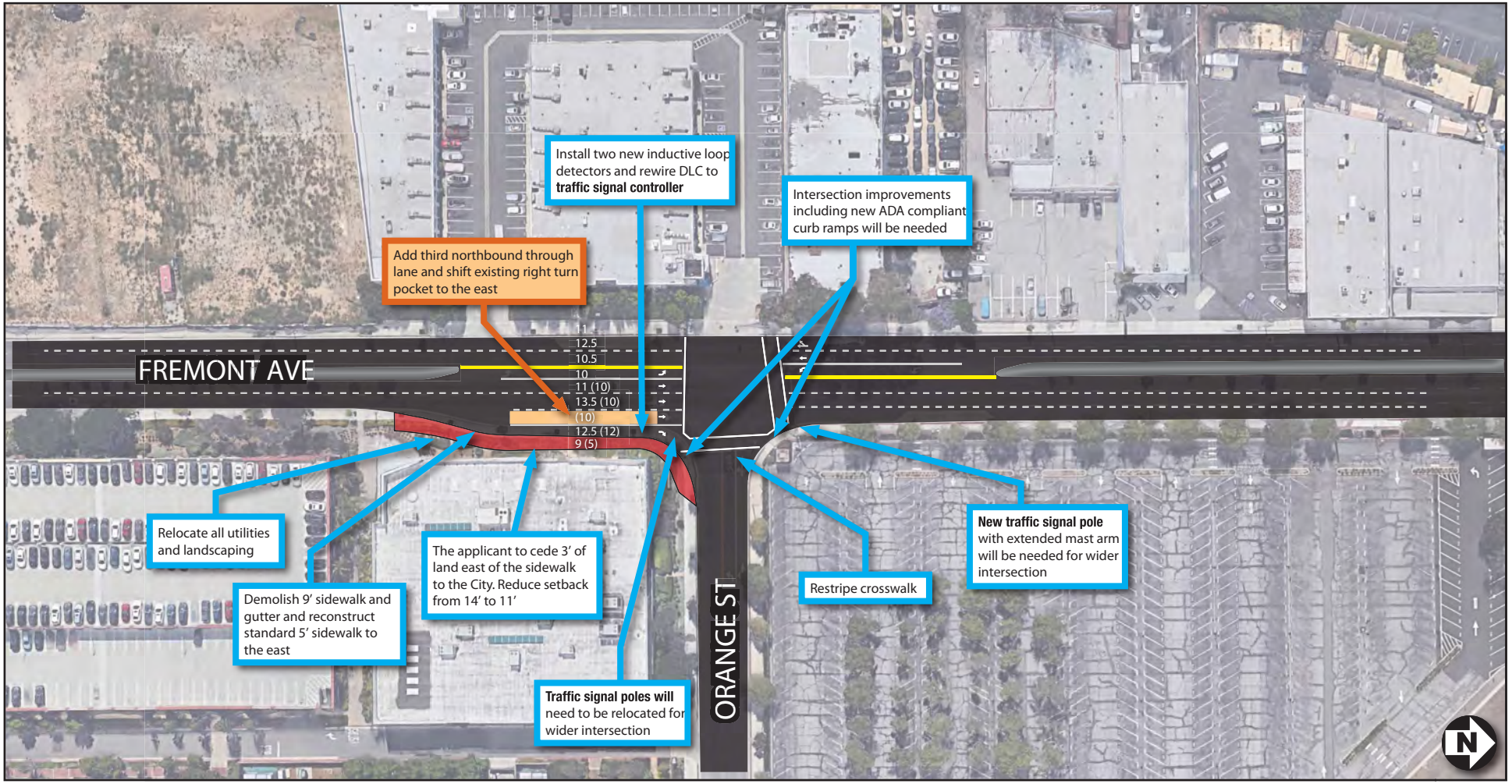
Source: Kimley Horn, June 2019.



Source: Kimley Horn, June 2019.

Figure IV.N-11
Potential Project Mitigation: Fremont Avenue/Mission Road

Fremont Avenue & Orange Street



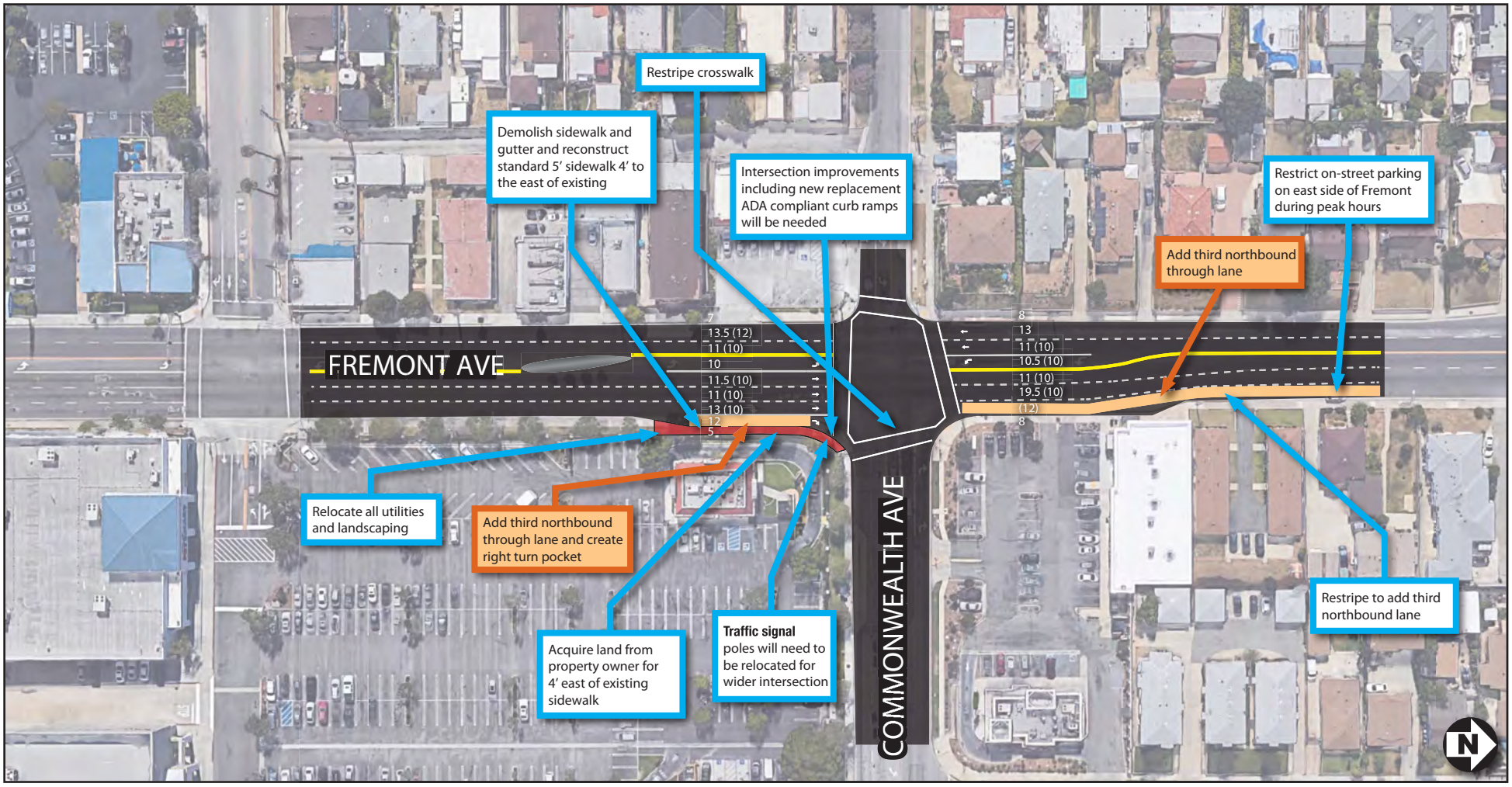
New Sidewalk / Right of Way (ROW) Needed for Widening | Work Required to Construct Potential Mitigation | **Potential Improvements Necessary to Mitigate the Significant Impact**

00/ (00) = Lane/Sidewalk Width - Existing (Proposed)

Source: Kimley Horn, June 2019.

Figure IV.N-12
Potential Project Mitigation: Fremont Avenue/Orange Street

Fremont Avenue & Commonwealth Avenue



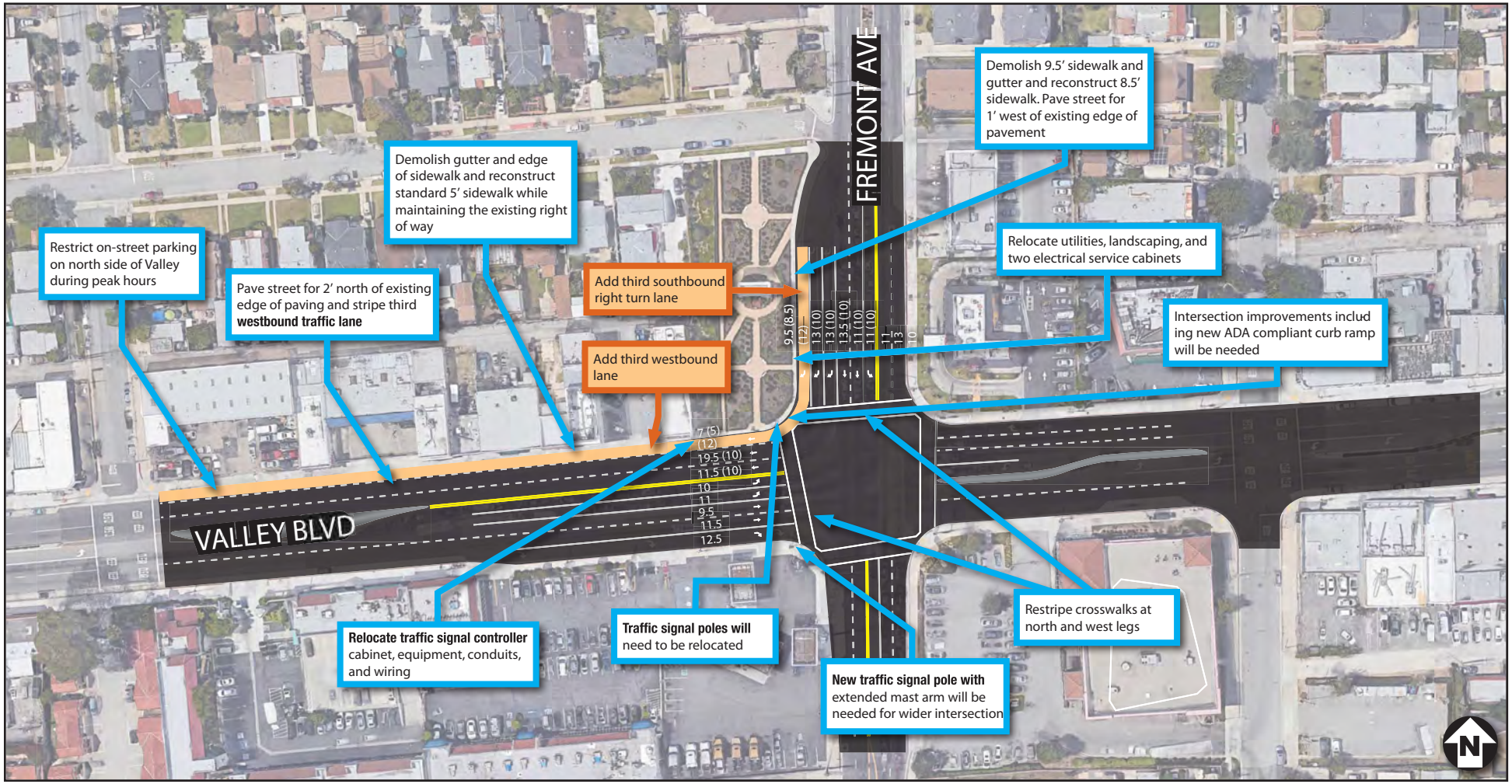
New Sidewalk / Right of Way (ROW) Needed for Widening Work Required to Construct Potential Mitigation **Potential Improvements Necessary to Mitigate the Significant Impact**

00/ (00) = Lane/Sidewalk Width - Existing (Proposed)

Source: Kimley Horn, June 2019.

Figure IV.N-13
Potential Project Mitigation: Fremont Avenue/Commonwealth Avenue

Fremont Avenue & Valley Boulevard



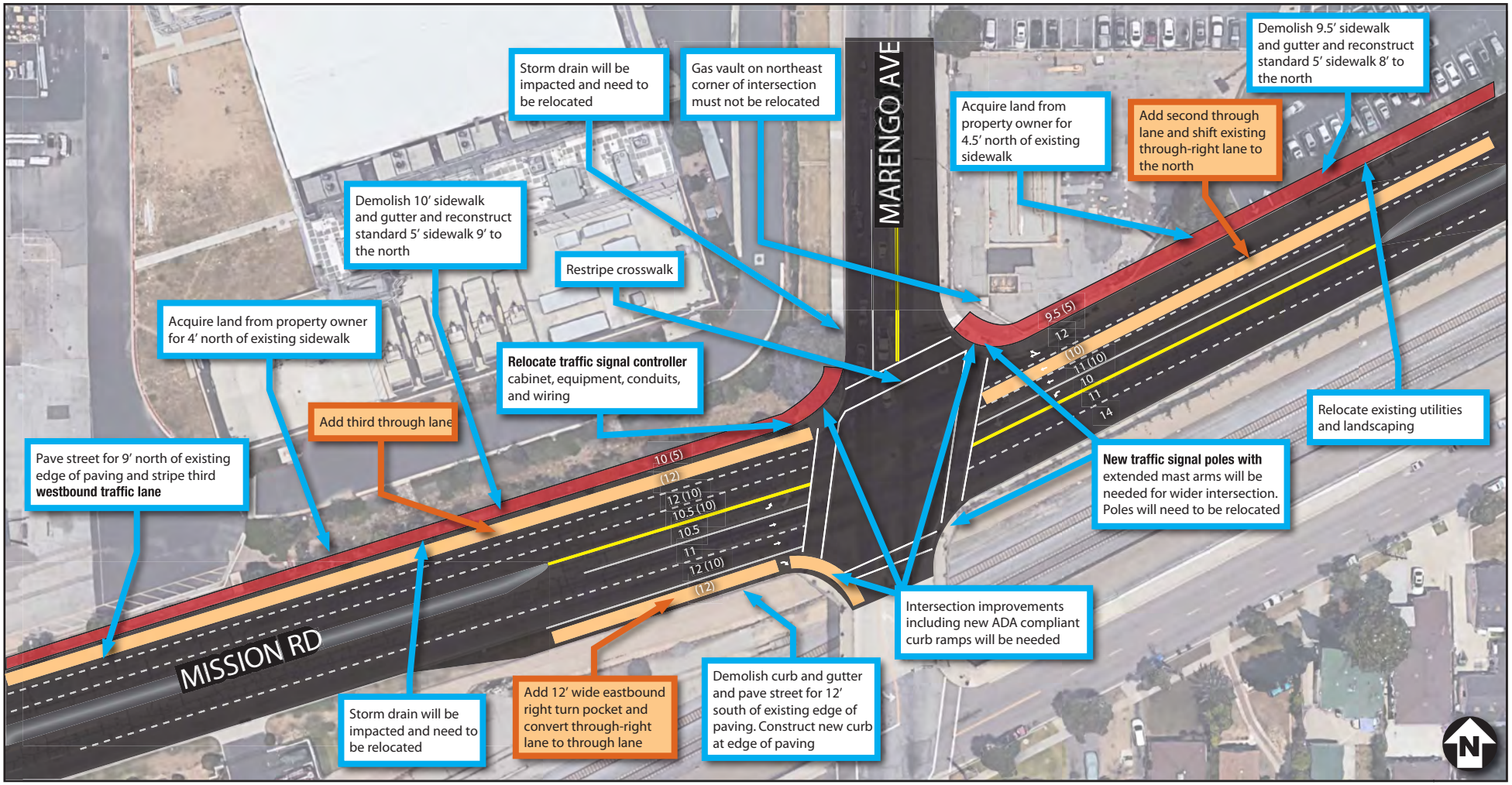
Work Required to Construct Potential Mitigation **Potential Improvements Necessary to Mitigate the Significant Impact**

00/ (00) = Lane/Sidewalk Width - Existing (Proposed)

Source: Kimley Horn, June 2019.

Figure IV.N-14
Potential Project Mitigation: Fremont Avenue/Valley Boulevard

Mission Road & Marengo Avenue



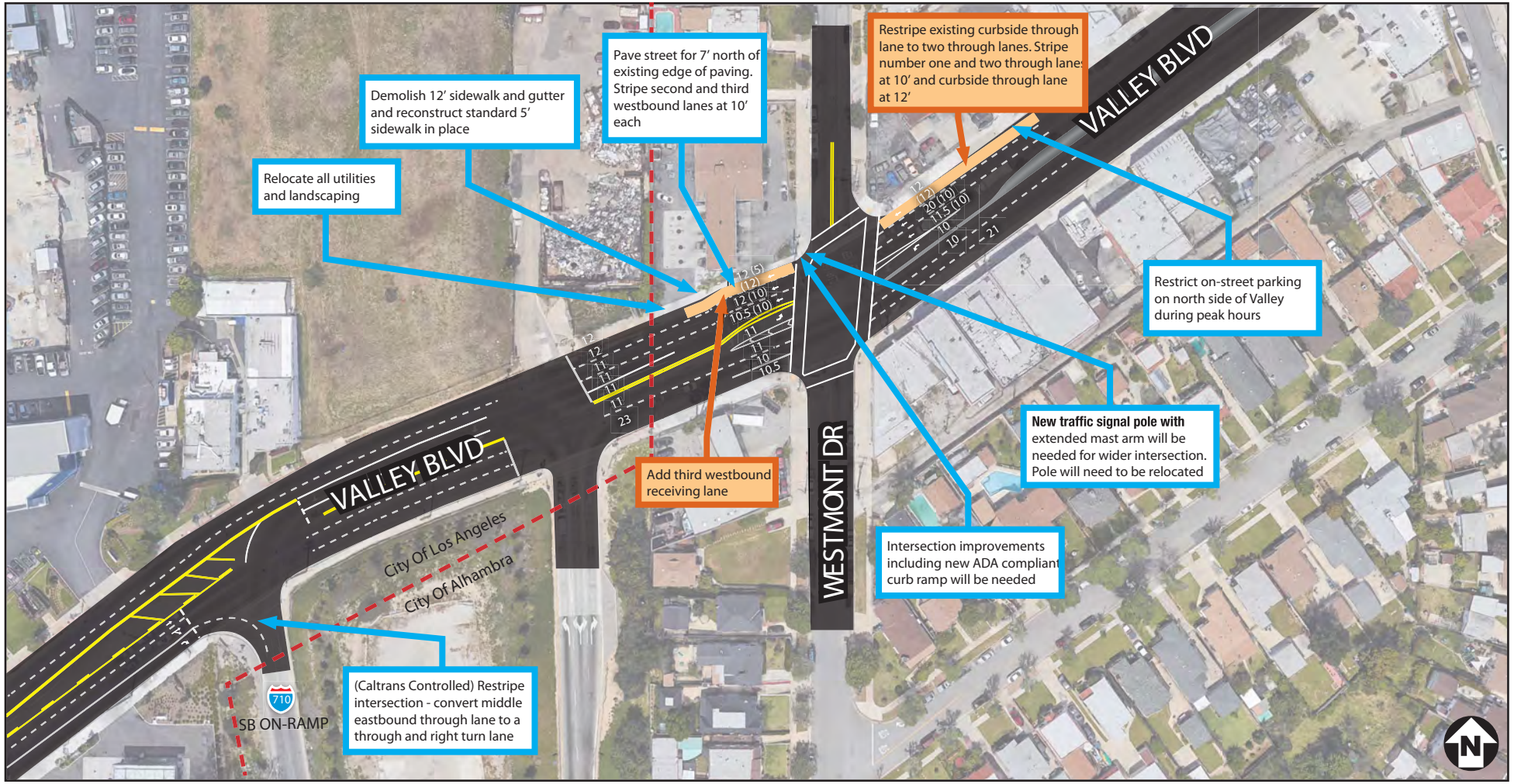
New Sidewalk / Right of Way (ROW) Needed for Widening Work Required to Construct Potential Mitigation **Potential Improvements Necessary to Mitigate the Significant Impact**

00/ (00) = Lane/Sidewalk Width - Existing (Proposed)

Source: Kimley Horn, June 2019.

Figure IV.N-15
Potential Project Mitigation: Mission Road/Marengo Avenue

Valley Boulevard & Westmont Drive



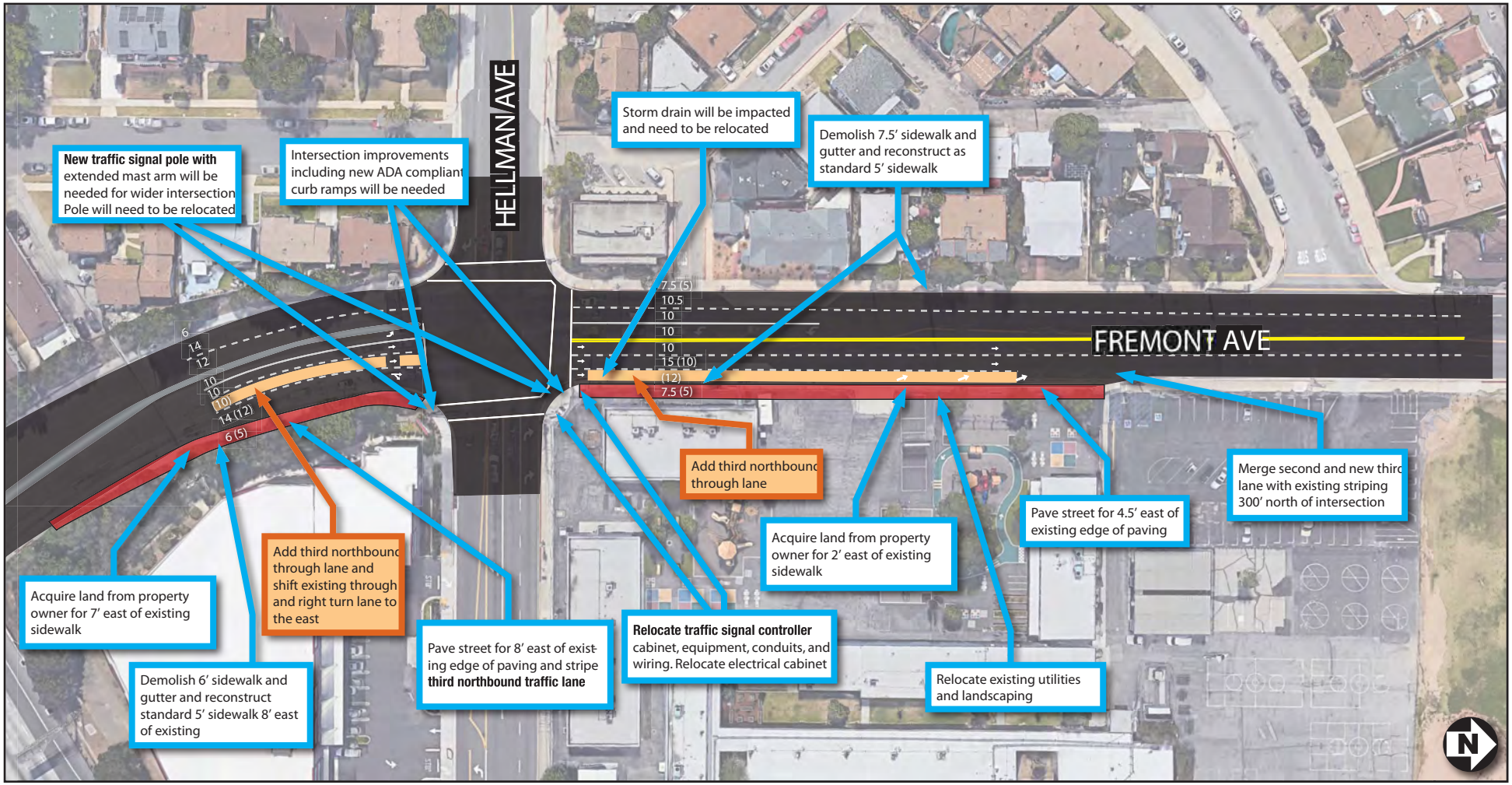
Work Required to Construct Potential Mitigation **Potential Improvements Necessary to Mitigate the Significant Impact**

00/ (00) = Lane/Sidewalk Width - Existing (Proposed)

Figure IV.N-16
Potential Project Mitigation: Valley Boulevard/Westmont Drive

Source: Kimley Horn, June 2019.

Fremont Avenue & Hellman Avenue



New Sidewalk / Right of Way (ROW) Needed for Widening Work Required to Construct Potential Mitigation **Potential Improvements Necessary to Mitigate the Significant Impact**

00/ (00) = Lane/Sidewalk Width - Existing (Proposed)

Source: Kimley Horn, June 2019.

Figure IV.N-17
Potential Project Mitigation: Fremont Avenue/Hellman Avenue

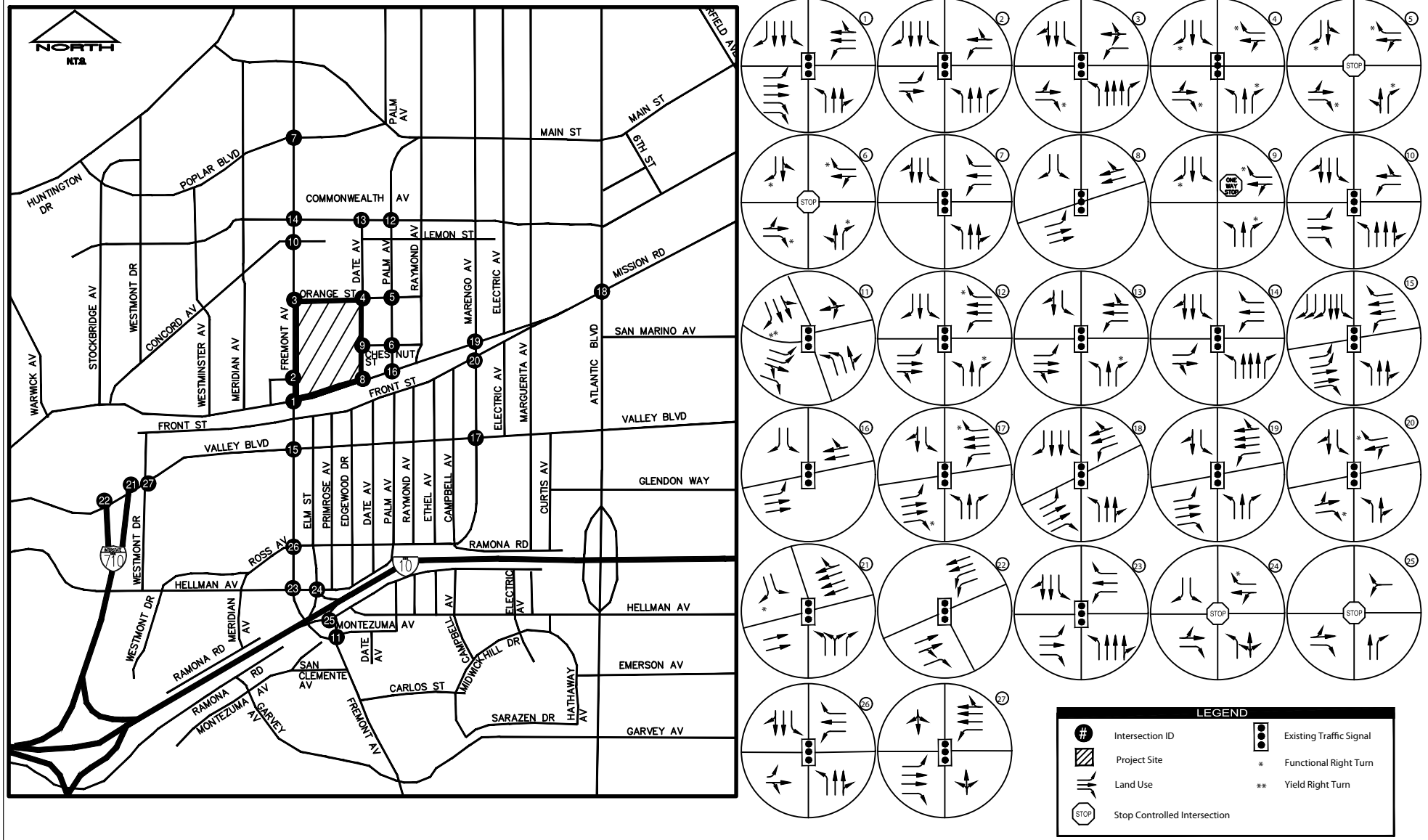


Figure IV.N-18
Future (2024) Study Intersection Lane Configuration and Traffic Control with Potential Mitigation

Source: Kimley Horn, June 2019.

- S. Fremont Avenue/W. Mission Road: *add one additional eastbound right turn lane*. Concluded to be infeasible due to the physical constraints of the public right-of-way. Implementation of this mitigation would require the acquisition of property from private ownership (see Figure IV.N-11).

- S. Fremont Avenue/Orange Street: *add one additional northbound through lane.* Concluded to be infeasible due to the physical constraints of the public right-of-way. Implementation of this mitigation would require the dedication of a portion of the Project Site by the Project Applicant, a reduction in the building setback (existing L.A. Fitness health club), and a reduction in sidewalk width (see Figure IV.N-12).

- S. Fremont Avenue/W. Commonwealth Avenue: *add one additional northbound through lane.* Concluded to be infeasible due to the physical constraints of the public right-of-way. Implementation of this mitigation would require the acquisition of property from private ownership (see Figure IV.N-13).

- S. Fremont Avenue/W. Valley Boulevard: *Add one additional southbound right turn lane and one additional westbound receiving lane.* Concluded to be infeasible due to the physical constraints of the intersection. Implementation of this mitigation would require the acquisition of existing public park space to widen the intersection. The taking of City park space would conflict with the City's General Plan policies regarding public recreation and open space amenities (see Figure IV.N-14).

- S. Marengo Avenue/W. Mission Road: *Add one additional westbound through lane and one additional eastbound right turn lane.* Concluded to be infeasible due to the physical constraints of the public right-of-way. Implementation of this mitigation would require the acquisition of property from private ownership (see Figure IV.N-15).

- W. Valley Boulevard/I-710 S/B On-Ramp: *Restripe eastbound approach to change middle through lane from through lane to through and right turn lane*. Concluded to be infeasible due to the fact that Caltrans controls this intersection and any improvements would require Caltrans approval (see Figure IV.N-16).

- S. Fremont Avenue/W. Hellman Avenue: *add one additional northbound through lane.* Concluded to be infeasible due to the physical constraints of the public right-of-way. Implementation of this mitigation would require the acquisition of property from private ownership (see Figure IV.N-17).

The remaining potential mitigations shown in Tables IV.N-19 and IV.N-20 are concluded to be feasible. Accordingly, the Project would be required to implement the following mitigation measures to address impacts on intersection LOS:

- **TR-MM-1**: If the Project Applicant elects to develop the Project under Buildout Scenario 1, at the intersection of W. Valley Boulevard/Westmont Drive, add one additional westbound through lane (see Figure IV.N-16).
- **TR-MM-2**: If the Project Applicant elects to develop the Project under either Buildout Scenario 1 or Buildout Scenario 2, at the intersection of Date Avenue/Orange Street, install a traffic signal.
- **TR-MM-3**: If the Project Applicant elects to develop the Project under either Buildout Scenario 1 or Buildout Scenario 2, at the intersection of Date Avenue/W. Mission Road, install a traffic signal.

(c) Unsignalized Intersections

To mitigate the Project's significant impacts at the intersections of Date Avenue/Orange Street and Date Avenue/W. Mission Road, Mitigation Measures TR-MM-2 and TR-MM-3 (shown above) will be implemented.

(d) CMP Impacts

As discussed above, it has been concluded that it is infeasible for the Project to mitigate its significant impact at the CMP arterial monitoring intersection of S. Fremont Avenue/W. Valley Boulevard. This impact would remain significant. The Project would have a less-than-significant impact at all CMP freeway monitoring locations and, thus, no mitigation would be required.

(e) Other Circulation System Impacts

The Project's impacts on other components of the circulation system (transit, pedestrian facilities, bicycle facilities, consistency with adopted or proposed circulation plans and policies) would be less than significant. Implementation of Mitigation Measures TR-MM-1 through TR-MM-3 would not impact existing transit stops. No mitigation is required.

(3) Level of Significance After Mitigation

(a) Construction Traffic

Impacts related to construction traffic would be less than significant without mitigation.

(b) Intersection LOS

If the Project were to be developed under Buildout Scenario 1, the required implementation of Mitigation Measures TR-MM-1 through TR-MM-3 would reduce the Project's significant impacts at the W. Valley Boulevard/Westmont Drive, Date Avenue/Orange Street, and Date Avenue/W. Mission Road intersections to a less-than-significant level, as shown in Table IV.N-21 below. However, because the potential mitigation measures at the remaining significantly impacted intersections under Buildout Scenario 1 have been determined to be infeasible to implement, Project impacts at the following 7 intersections would remain **significant and unavoidable**:

- S. Fremont Avenue/W. Mission Road (AM/PM)
- S. Fremont Avenue/Orange Street (PM)
- S. Fremont Avenue/W. Commonwealth Avenue (PM)
- S. Fremont Avenue/W. Valley Boulevard (AM/PM)
- S. Marengo Avenue/W. Mission Road (PM)
- W. Valley Boulevard/I-710 S/B On-Ramp (AM/PM)
- S. Fremont Avenue/W. Hellman Avenue (AM/PM)

Table IV.N-21
LOS Summary with Potential Mitigation – Cumulative (2028) With Project Conditions

Signalized Study Intersections		Cumulative (2028) With Project				Cumulative (2028) With Project Plus Potential Mitigation				Significant Impact Mitigated with Potential Mitigation? (Decrease in V/C)	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	AM	PM
1	S Fremont Ave/W Mission Rd[1]	**1.377**	**F**	**1.285**	**F**	1.163	F	1.165	F	Y (0.21)	Y (0.12)
3	S Fremont Ave/Orange St[1]	0.670	B	**0.907**	**E**	0.634	B	0.742	C	(0.04)	Y (0.17)
14	S Fremont Ave/W Commonwealth Ave[1]	0.794	C	**0.980**	**E**	0.794	C	0.812	D	(-0.00)	Y (0.17)
15	S Fremont Ave/W Valley Blvd[1]	**1.059**	**F**	**1.029**	**F**	0.955	E	0.966	E	Y (0.10)	Y (0.06)
19	S Marengo Ave/W Mission Rd[1]	1.044	F	**1.024**	**F**	0.898	E	0.917	F	(0.15)	Y (0.11)
22	W Valley Blvd/I-710 SB On-ramp[1]	**1.197**	**F**	**0.925**	**E**	0.970	E	0.712	C	Y (0.23)	Y (0.21)
23	S Fremont Ave/W Hellman Ave[1]	**0.900**	**E**	**0.878**	**D**	0.751	C	0.775	C	Y (0.15)	Y (0.10)

Table IV.N-21
LOS Summary with Potential Mitigation – Cumulative (2028) With Project Conditions

Signalized Study Intersections		Cumulative (2028) With Project				Cumulative (2028) With Project Plus Potential Mitigation				Significant Impact Mitigated with Potential Mitigation? (Decrease in V/C)	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	AM	PM
27	W Valley Blvd/Westmont Dr	**0.914**	**E**	0.720	C	0.676	B	0.720	C	Y (0.24)	(0.00)
Unsignalized Study Intersections (Signalized for Mitigation Analysis)		**Cumulative (2028) With Project**				**Cumulative (2028) With Project Plus Potential Mitigation**				**Significant Impact Mitigated with Potential Mitigation?**	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		Delay (s)	LOS	Delay (s)	LOS	V/C	LOS	V/C	LOS	AM	PM
4	Date Ave / Orange St	14.7	B	**50.7**	**F**	0.332	A	0.498	A	Yes	Yes
8	W Mission Rd / Date Ave	**68.7**	**E**	266.2	F	0.772	C	0.618	B	Yes	Yes

[1] The identified potential mitigation at this intersection has been deemed infeasible to implement.
Source: Kimley-Horn, 2019
*Significant impacts shown in **bold**.*

If the Project were to be developed under Buildout Scenario 2, the required implementation of Mitigation Measures TR-MM-2 and TR-MM-3 would reduce the Project's significant impacts at the Date Avenue/Orange Street and Date Avenue/W. Mission Road intersections to a less-than-significant level, as shown in Table IV.N-22 below. However, because the potential mitigation measures at the remaining significantly impacted intersections under Buildout Scenario 2 have been determined to be infeasible to implement, Project impacts at the following 5 intersections would remain **significant and unavoidable**:

- S. Fremont Avenue/W. Mission Road (AM/PM)
- S. Fremont Avenue/Orange Street (PM)
- S. Fremont Avenue/W. Valley Boulevard (AM/PM)
- S. Marengo Avenue/W. Mission Road (PM)
- W. Valley Boulevard/I-710 S/B On-Ramp (AM/PM)

Table IV.N-22
LOS Summary with Potential Mitigation – Cumulative (2024) With Project Conditions

Signalized Study Intersections		Cumulative (2024) With Project				Cumulative (2024) With Project Plus Potential Mitigation				Significant Impact Mitigated with Potential Mitigation? (Decrease in V/C)	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	AM	PM
1	S Fremont Ave/W Mission Rd[1]	**1.290**	**F**	**1.202**	**F**	1.084	F	1.084	F	Y (0.21)	Y (0.12)
3	S Fremont Ave/Orange St[1]	0.640	B	**0.869**	**D**	0.611	B	0.712	D	(0.03)	Y (0.16)
15	S Fremont Ave/W Valley Blvd[1]	**1.010**	**F**	**0.969**	**D**	0.915	E	0.910	E	Y (0.10)	Y (0.06)
19	S Marengo Ave/W Mission Rd[1]	1.004	F	**0.982**	**E**	0.865	D	0.880	D	(0.14)	Y (0.10)
22	W Valley Blvd/I-710 SB On-ramp[1]	**1.144**	**F**	**0.889**	**D**	0.926	E	0.683	B	Y (0.22)	Y (0.21)
Unsignalized Study Intersections (Signalized for Mitigation Analysis)		**Cumulative (2024) With Project**				**Cumulative (2024) With Project Plus Potential Mitigation**				**Significant Impact Mitigated with Potential Mitigation?**	
		AM Peak Hour		**PM Peak Hour**		**AM Peak Hour**		**PM Peak Hour**			
		Delay (s)	**LOS**	**Delay (s)**	**LOS**	**V/C**	**LOS**	**V/C**	**LOS**	**AM**	**PM**
4	Date Ave / Orange St	14.7	B	**50.7**	**F**	0.316	A	0.478	A	Yes	Yes
8	W Mission Rd / Date Ave	**68.7**	**E**	266.2	F	0.726	C	0.574	A	Yes	Yes

[1] The identified potential mitigation at this intersection has been deemed infeasible to implement.
Source: Kimley-Horn, 2019
*Significant impacts not alleviated by mitigation shown in **bold**.*
Note: Under Buildout Scenario 2, three of the same study intersections would be significantly impacted by the proposed development in 2024 and 2028 during the AM and PM peak periods. Due to project phasing, three fewer intersections are impacted in Buildout Scenario 2 as compared to Buildout Scenario 1.

As discussed previously, several transportation projects are programmed to be constructed in the City of Alhambra prior to completion of the Project. These infrastructure projects may result in capacity increases at the study intersections for this analysis to the degree that the Project would no longer produce a significant impact with respect to intersection LOS at one or more of the intersections shown in Tables IV.N-21 and IV.N-22. However, without knowledge of the specific design of each of these infrastructure projects, it is not yet possible to include them in the analyses of future cumulative conditions. In order to present a conservative evaluation of the Project's potential impact, none of the improvements that would be implemented by these projects have been assumed to be in place by 2028, the year of Project buildout.

(c) Unsignalized Intersections

To mitigate the Project's significant impacts at the intersections of Date Avenue/Orange Street and Date Avenue/W. Mission Road, Mitigation Measures TR-MM-2 and TR-MM-3 (shown above) will be implemented. These impacts would be reduced to a **less-than-significant** level.

(d) CMP Impacts

As discussed above, it has been concluded that it is infeasible for the Project to mitigate its significant impact at the CMP arterial monitoring intersection of S. Fremont Avenue/W. Valley Boulevard. This impact would remain **significant and unavoidable** under either Buildout Scenario 1 or Buildout Scenario 2. The Project would have a less-than-significant impact at all CMP freeway monitoring locations without mitigation.

(e) Other Circulation System Impacts

The Project's impacts on other components of the circulation system (transit, pedestrian facilities, bicycle facilities, consistency with adopted or proposed circulation plans and policies) would be **less than significant** without mitigation.

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

As discussed previously, effective January 1, 2019, new Section 15064.3 of the CEQA Guidelines describes a new VMT methodology to be used in the analysis of transportation impacts in CEQA documents. Per Section 15064.3(c), while any agency may immediately apply the new CEQA Guidelines section to its CEQA analyses, a statewide application of the new section is not required until July 1, 2020. For the purposes of this analysis and Draft EIR, a VMT study has not been performed and the evaluation of Project impacts utilizes City-adopted intersection LOS-based significance thresholds in order to make a determination with respect to the Appendix G questions. Therefore, Threshold (b) does not apply to this analysis.

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

(1) Impact Analysis

The Project Site would be accessible by 8 driveways upon Project completion. One driveway (A) along Fremont Avenue would remain a signalized intersection and provide access to the South Plan Area from the west. One driveway (B) along Mission Road would be relocated approximately 280 feet west and would provide access to the South Plan Area from the south. Three driveways along Date Avenue (C, D, and E) would provide

access to the Corner, East, and North Plan Areas from the east. The farthest south driveway on Date Avenue (C) would provide access exclusively to the Corner Plan Area parking structure. Three driveways located along Orange Street (F, G, & H) would provide access to the North and Office Plan Areas.

Driveway A on Fremont Avenue is proposed to remain a full access driveway. The driveway is 40 feet wide at its entrance and provides a westbound left turn lane and a westbound through and right turn lane. Parking is not allowed on Fremont Avenue near the Project Site driveway so no red curb is required to meet line of sight guidelines.

Driveway B on Mission Road is proposed to be located 450 feet east of the intersection of Fremont Avenue and Mission Road. The driveway would be 40 feet wide and would be a full access driveway. There are no line of sight concerns at the driveway. Vehicles are not allowed to stop at any time on the section of Mission Road that borders the Project Site so no red curb is required to meet line of sight guidelines.

Driveway C is the farthest south driveway on Date Avenue and is proposed to lead into a parking garage for the Corner Plan Area. Date Avenue is a two-lane road and is 50 feet wide. Parking is allowed on both sides of Date Avenue. There is an existing 30-foot-long median with a street light at the location of Driveway C. Therefore, access to Driveway C would be restricted to right turns in and out only.

Driveway D is proposed to be a new driveway on Date Avenue that would provide access to the parking structure at the East Plan Area and to the South Plan Area. The driveway would be offset approximately 30 feet south from an existing driveway and would line up with an access road on-site. There is an existing median with a street light at the location of Driveway D, so Driveway D would be restricted to right turns in and out only.

Driveway E on Date Avenue is an existing full access driveway that would provide access to the North Plan Area. The driveway is located across from Chestnut Street and is 30 feet wide. There is an existing 30-foot northbound left turn pocket. The existing amount of red curb along Date Avenue on both sides of the driveway allows for adequate line of sight.

Driveway F on Orange Street is an existing full access driveway that is 30 feet wide and is proposed to allow access to the North Plan Area. There is 30 feet of red curb along Orange Street on both sides of the driveway which allows for adequate sight distance.

Driveway G on Orange Street is an existing full access driveway that is 30 feet wide and is proposed to allow access to the North Plan Area. There is 40 feet of red curb west of the driveway and 45 feet or red curb east of the driveway which allows for adequate sight distance.

Driveway H on Orange Street is an existing full access driveway that is 25 feet wide and provides access to the office uses and parking structure within the Office Plan Area. This driveway is not proposed to be modified as part of the Project.

A queueing analysis was conducted for the five project driveways that are proposed to be used for residential uses. The analysis was conducted for Buildout Scenario 1 for Existing (2018), Existing (2018) With Project, Cumulative (2028), and Cumulative (2028) With Project Conditions to determine the storage lengths necessary to accommodate 95th percentile queues. The analysis was conducted for the weekday AM and PM peak periods.

Queue lengths were tested using the SimTraffic 9 package from Synchro, version 9. The 95th percentile queues for the five project intersections are summarized in Table IV.N-23. The queue analysis sheets are provided in TIA Appendix S (see Draft EIR **Appendix E**).

Table IV.N-23
95th Percentile Queues at Residential Project Driveways

Driveway		95th Percentile Queue (Feet)							
		Existing (2018)		Existing (2018) With Project		Cumulative (2028)		Cumulative (2028) With Project	
		AM	PM	AM	PM	AM	PM	AM	PM
A – Fremont	SBL	33	33	25	64	10	49	21	79
A – Fremont	NBR	58	19	64	63	33	56	45	67
B – Mission	EBL	N/A	N/A	48	75	N/A	N/A	30	207
E – Date	NBL	34	10	42	42	44	23	43	32
F - Orange	WBL	N/A	N/A	N/A	28	N/A	N/A	N/A	10

Source: Kimley-Horn, 2019.

The southbound left turn from Fremont Avenue into Driveway A has 80 feet of storage which provides for the 95th percentile queue for both peak periods in the Existing (2018) With Project and Cumulative (2028) With Project scenarios. The northbound right turn from Fremont Avenue into Driveway A has 80 feet of storage which provides for the 95th percentile queue for both peak periods in the Existing (2018) With Project and Cumulative (2028) With Project scenarios.

Driveway B is proposed to be located 450 feet east of the intersection of Fremont Avenue and Mission Road. The existing westbound left turn lane on Mission Road has 250 feet of storage. East of the left turn lane is a 65-foot taper zone and further east is a two-way left turn lane. There would be 135 feet of two-way left turn storage west of Driveway B. This distance provides adequate storage for 95th percentile queues for an eastbound left turn from Mission Road into Driveway B.

Driveway E on Date Avenue is proposed to allow access to the North Plan Area. The driveway is located opposite Chestnut Street on Date Avenue. There is an existing 30-foot northbound left turn pocket. The distance does not provide adequate storage for 95th percentile queues in either the PM peak period for Existing (2018) With Project or the PM peak period for Cumulative (2028) With Project scenarios. Under Project Design Feature TR-PDF-3, the northbound left turn lane would be lengthened to 65 feet to provide adequate storage for 95th percentile queues at Project Driveway E.

Driveway F on Orange Street is also proposed to allow access to the North Plan Area. The 95th percentile queue for the westbound left turn lane into Driveway F is 32 feet in the PM Peak in the Cumulative (2028) With Project scenario. There is existing red curb on the north side of Orange Street for 30 feet across from the driveway. Vehicles traveling westbound on Orange Street beyond Driveway F can pass westbound left queued vehicles using the space that prohibits parking.

All Project driveways would operate at acceptable levels. All ingress/egress points associated with the Project would be designed and constructed in accordance with City requirements. No sharp curves, dangerous intersections, or incompatible uses are being proposed in the Project's access and circulation system. Therefore, the Project would not substantially increase hazards due to a design feature or incompatible uses and its impacts would be **less than significant**.

(2) Mitigation Measures

No significant impacts related to hazards due to a design feature or incompatible uses have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to hazards due to a design feature or incompatible uses would be **less than significant** without mitigation.

Threshold d) Would the project result in inadequate emergency access?

(1) Impact Analysis

Emergency vehicle access to the Project Site is provided via local roadways. Prominent roadways in the vicinity of the Project Site include Fremont Avenue, Mission Road, and Valley Boulevard. All development in the City must comply with access requirements of the Alhambra Municipal Code (AMC) and the Alhambra Fire Department (AFD). The Project Applicant would be required to comply with applicable Fire Code, California Fire Code, AMC, and National Fire Protection Association standards. Additionally, the Project Applicant is required to submit an emergency response plan to the AFD for review and

approval prior to occupancy of the Project. The emergency response plan would include, but not be limited to, the following: mapping of emergency exits, evacuation routes for vehicles and pedestrians, location of nearest hospitals, and fire stations. Any required modifications must be identified and implemented prior to occupancy of the Project.

Emergency access is also addressed **in Section IV.M.1, Public Services - Fire Protection**, and **Section IV.M.2, Public Services - Police Protection**, of the Draft EIR. The Project Applicant would be required to submit a plot plan for approval by the AFD to help ensure that Project construction and operations would not impede fire access to and from the Project Site. Pursuant to Fire Code requirements, emergency access shall be maintained to the Project Site during construction through marked emergency access points approved by the APD. For these reasons, the Project would not result in inadequate emergency access, and impacts would be **less than significant**.

(2) Mitigation Measures

No significant impacts related to inadequate emergency access have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to inadequate emergency access would be **less than significant** without mitigation.

e) Cumulative Impacts

(1) Impact Analysis

An adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, statewide plan, or related planning document that describes conditions contributing to the cumulative effect. The lead agency may also blend the "list" and "plan" approaches to analyze the severity of impacts and their likelihood of occurrence.

(a) Construction

As provided in **Section III, Environmental Setting**, of the Draft EIR, there are nine cumulative development projects within an approximate 1.5-mile radius of the Project Site. Collectively, the cumulative projects involve a variety of residential uses, retail, restaurant, commercial, hotel, and office uses, consistent with existing uses in the Project Site area. While the majority of these cumulative projects are located a substantial

distance from the Project Site (as shown on Figure III-16), one is located in proximity to the Project Site at the southwest corner of Commonwealth and Date Avenues, approximately one block to the north of the Project Site's northern edge. If construction of this project were to occur in concert with construction of the Project, a cumulative effect on local area traffic could result.

However, as is the case with the Project, each of the cumulative projects within the City of Alhambra would be required to implement a City-approved Work Zone Traffic Control Plan (described above under Project Design Feature TR-PDF-2), which would have the combined effect of reducing temporary disruption to and congestion of the local street network. In addition, each cumulative project would be required to mitigate any significant impacts resulting from its construction work.

Because the Project would have a less-than-significant impact with respect to construction-related transportation disruption, it would not result in a cumulatively considerable contribution to a cumulative construction impact on transportation and traffic.

(b) Operation

As discussed previously under Threshold (a), the traffic volumes projected for the Cumulative Future (2024/2028) Conditions and the Cumulative Future With Project scenarios take into account the expected changes in traffic over existing conditions from the two following primary sources:

- An ambient growth factor of 1 percent per year was applied to adjust the Existing (2018) Conditions traffic volumes to reflect the effects of regional growth and development by years 2024 and 2028.
- A total of 9 cumulative development projects were identified in the study area; these projects are listed in Table III-2 in **Section III, Environmental Setting**, of the Draft EIR, and their locations are illustrated in Figure III-16. Traffic from these specific projects was also added to adjust the Existing (2018) Conditions traffic volumes.

The analysis of all future year conditions (2024 and 2028) includes the cumulative impacts (future baseline [cumulative projects + ambient growth] + the Project) of both the Project and other anticipated development. The analysis shows that the Project would create a significant traffic impact at 10 of the analyzed study intersections under the Cumulative Future (2028) With Project conditions under Buildout Scenario 1 and at 7 of the analyzed study intersections under Buildout Scenario 2 (all of which are included in the 10 under Buildout Scenario 1). In addition, one CMP arterial intersection would be significantly impacted by the Project. Therefore, the Project's contribution to impacts under cumulative

conditions would be considerable, and cumulative impacts would be **significant** at those intersections impacted by the Project.

The Project would not make a cumulatively considerable contribution to cumulative impacts with respect to Thresholds (c) or (d).

(2) Mitigation Measures

See Mitigation Measures TR-MM-1 through TR-MM-3 discussed above under Threshold (a).

(3) Level of Significance After Mitigation

While Mitigation Measures TR-MM-1 through TR-MM-3 would partially mitigate the traffic impacts of the Project, Project impacts would remain significant at 7 intersections under Buildout Scenario 1 and at 5 intersections under Buildout Scenario 2 during either the AM or PM peak hour (or both) (see discussion above under Threshold (a)). Therefore, cumulative impacts at these intersections would be considered **significant and unavoidable**.

IV. Environmental Impact Analysis

O. Tribal Cultural Resources

1. Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts on tribal cultural resources. Potential impacts to tribal cultural resources are based on coordination and consultation with California Native American tribes that are traditionally and culturally affiliated with the Project Site, as well as a Sacred Land Files (SLF) records search conducted by the Native American Heritage Commission (NAHC).

This section is based in part on the following reports, included in **Appendices F-2** and **F-4** of the Draft EIR:

F-2 Archaeological and Tribal Cultural Resources Assessment for the Villages At The Alhambra Project, Alhambra, Los Angeles County, California, SWCA Environmental Consultants, April 2019.

F-4 Sacred Lands File Search, Dr. Gayle Totton, California Native American Heritage Commission, April 17, 2018.

2. Environmental Setting

a) Regulatory Framework

(1) Tribal Cultural Resources

On September 25, 2014, Governor Brown signed into law Assembly Bill 52 (AB 52), which amended Public Resources Code (PRC) Section 5097.94 and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3 to require that an analysis of a project's impact on cultural resources include whether the project would impact "tribal cultural resources." As set forth in PRC Section 21074:

> *(a) "Tribal cultural resources" are either of the following:*
>
> > *(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:*

(A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.

(B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.[1]

(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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

For a project for which a Notice of Preparation for a Draft EIR was filed on or after July 1, 2015, the lead agency is required to consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if: (1) the tribe requested to the lead agency, in writing, to be informed by the lead agency of proposed projects in that geographic area; and (2) the tribe requests consultation, prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. Section 21080.3.1(b) of the PRC defines "consultation" with a cross reference to Government Code Section 65352.4, which applies when local governments consult with tribes on certain planning documents and states the following:

"Consultation" means the meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall

[1] *Per subdivision (k) of PRC Section 5020.1, "local register of historical resources" means a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution.*

also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance.

The provisions in Section 21080.3.2(a) of the PRC enumerate topics that may be addressed during consultation, including tribal cultural resources, the potential significance of project impacts, possible mitigation measures, and project alternatives.

Section 21084.3 of the PRC also states that public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. This section of the PRC also includes examples of mitigation measures that may be considered to avoid or minimize the significant adverse effects.

Consultation ends when either of the following occurs prior to the release of the environmental document:

1. Both parties agree to measures to avoid or mitigate a significant effect on a tribal cultural resource. Agreed upon mitigation measures shall be recommended for inclusion in the environmental document (PRC Section 21082.3(a)); or
2. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Sections 21080.3.2(b)(1)-(2) and 21080.3.1(b)(1)).

(2) Treatment of Human Remains

The disposition of burials falls first under the general prohibition on disturbing or removing human remains under California Health and Safety Code (CHSC) Section 7050.5. More specifically, remains suspected to be Native American are treated under CEQA at California Code of Regulations (CCR) Section 15064.5. PRC Section 5097.98 illustrates the process to be followed if remains are discovered. If human remains are discovered during excavation activities, the following procedure shall be observed:

- Stop immediately and contact the County Coroner.
- If the remains are determined to be of Native American descent, the Coroner has 24 hours to notify the NAHC.
- The NAHC will immediately notify the person it believes to be the most likely descendant (MLD) of the deceased Native American.
- The MLD has 48 hours to make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods.

- If the owner does not accept the MLD's recommendations, the owner or the MLD may request mediation by the NAHC.

b) Existing Conditions

The Project Site is located in the Los Angeles Basin physiographic province, which is subdivided into four structural blocks bounded by major fault zones extending into underlying crystalline basement, particularly within the northeastern block, which is characterized as a triangular wedge about 35 miles in length from north to south and about 18 miles wide from east to west. The northwestern boundary of the block is delineated by the Raymond fault, which creates a topographic break between sedimentary and basement rocks to the north and deep alluvium to the south. The elevation at the Project Site is approximately 460 feet above mean sea level. The surrounding topography is characterized as a broad alluvial plain drained by seasonal streams that flow southwest through dissected hills and discharge into the Los Angeles River. An unnamed meandering seasonal stream is located approximately 1,000 feet northwest of the Project Site.

The surface sediments at the Project Site are described as Quaternary alluvium (Pleistocene-age and Holocene-age sediments deposited by water), which characterizes most of the low-lying areas in the Los Angeles Basin and San Gabriel Valley. The surficial alluvial and fluvial sediments making up the floor of the San Gabriel Valley are derived from alluvial fan and floodplain deposits of the numerous local washes. The depth of these valley deposits may reach as much as 200 feet.

A geotechnical study was conducted for the Project and is included in **Appendix G** of the Draft EIR. The study included a single subsurface bore and other studies conducted nearby that were used to characterize the geophysical setting. The single bore is considered sufficient for describing the setting because of the geological uniformity of the subsurface materials within the vicinity. The soils are characterized as a relatively thin stratum of artificial fill overlaying alluvium. Within the bore sample the artificial fill measured approximately five feet thick and consisted of sandy silt to silty sand. The native alluvium below extended to the depth of the sample, 50 feet below the surface, and is composed of sandy silts, and silty sands to sands.

(1) Cultural Setting

(a) Prehistory

As discussed in the Archaeological and Tribal Cultural Resources Assessment (TCR Assessment; see **Appendix F-2** of the Draft EIR), in the past several decades, researchers have devised numerous prehistoric chronological sequences to aid in understanding cultural changes in southern California. Building on early studies and

focusing on data synthesis, Wallace (1955, 1978) developed a prehistoric chronology for the southern California coastal region that is still widely used today and is applicable to near-coastal and many inland areas. Four horizons are presented in Wallace's prehistoric sequence: Early Man, Milling Stone, Intermediate, and Late Prehistoric. Although Wallace's 1955 synthesis initially lacked chronological precision due to a paucity of absolute dates, this situation has been alleviated by the availability of thousands of radiocarbon dates that have been obtained by southern California researchers in the last three decades. As such, several revisions were subsequently made to Wallace's 1955 synthesis using radiocarbon dates and projectile point assemblages. The summary of prehistoric chronological sequences for southern California coastal and near-coastal areas presented below is a composite of information in Wallace (1955) and Warren (1968), as well as more recent studies, including Koerper and Drover (1983).

(i) Horizon I: Early Man (CA. 10,000–6,000 BC)

The earliest accepted dates for archaeological sites on the southern California coast are from two of the northern Channel Islands, located off the coast of Santa Barbara. On San Miguel Island, Daisy Cave clearly establishes the presence of people in this area approximately 10,000 years ago. On Santa Rosa Island, human remains have been dated from the Arlington Springs site to approximately 13,000 years ago. Present-day Orange and San Diego counties contain several sites dating from 9,000 to 10,000 years ago. Although the dating of these finds remains controversial, several sets of human remains from the Los Angeles Basin (e.g., "Los Angeles Man," "La Brea Woman," and the Haverty skeletons) apparently date to the middle Holocene, if not earlier.

Recent data from Horizon I sites indicate that the economy was a diverse mixture of hunting and gathering, with a major emphasis on aquatic resources in many coastal areas, and a greater emphasis on large-game hunting inland.

(ii) Horizon II: Milling Stone (6,000–3,000 BC)

Set during a drier climatic regime than the previous horizon, the Milling Stone horizon is characterized by subsistence strategies centered on collecting plant foods and small animals. The importance of the seed processing is apparent in the dominance of stone grinding implements in contemporary archaeological assemblages, namely milling stones (metates) and handstones (manos). Recent research indicates that Milling Stone horizon food procurement strategies varied in both time and space, reflecting divergent responses to variable coastal and inland environmental conditions.

(iii) Horizon III: Intermediate (3,000 BC–AD 500)

The Intermediate horizon is characterized by a shift toward a hunting and maritime subsistence strategy, along with a wider use of plant foods. An increasing variety and abundance of fish, land mammal, and sea mammal remains are found in sites from this horizon along the California coast. Related chipped stone tools suitable for hunting are more abundant and diversified, and shell fishhooks became part of the toolkit during this period. Mortars and pestles became more common during this period, gradually replacing manos and metates as the dominant milling equipment and signaling a shift away from the processing and consuming of hard seed resources to the increasing importance of the acorn.

(iv) Horizon IV: Late Prehistoric (AD 500–Historic Contact)

In the Late Prehistoric horizon, there was an increase in the use of plant food resources in addition to an increase in land and sea mammal hunting. There was a concomitant increase in the diversity and complexity of material culture during the Late Prehistoric horizon, demonstrated by more classes of artifacts. The recovery of a greater number of small, finely chipped projectile points suggests increased use of the bow and arrow rather than the atlatl (spear thrower) and dart for hunting. Steatite cooking vessels and containers are also present in sites from this time, and there is an increased presence of smaller bone and shell circular fishhooks; perforated stones; arrow shaft straighteners made of steatite; a variety of bone tools; and personal ornaments such as beads made from shell, bone, and stone. There was also an increased use of asphalt for waterproofing and as an adhesive. Late Prehistoric burial practices are discussed in the Ethnographic Overview section below.

By AD 1000, fired clay smoking pipes and ceramic vessels were being used at some sites. The scarcity of pottery in coastal and near-coastal sites implies that ceramic technology was not well developed in that area, or that ceramics were obtained by trade with neighboring groups to the south and east. The lack of widespread pottery manufacture is usually attributed to the high quality of tightly woven and watertight basketry that functioned in the same capacity as ceramic vessels.

During this period, there was an increase in population size accompanied by the advent of larger, more permanent villages. Large populations and, in places, high population densities are characteristic, with some coastal and near-coastal settlements containing as many as 1,500 people. Many of the larger settlements were permanent villages in which people resided year-round. The populations of these villages may have also increased seasonally.

In Warren's (1968) cultural ecological scheme, the period between AD 500 and European contact, which occurred as early as 1542, is divided into three regional patterns: Chumash (Santa Barbara and Ventura counties), Takic/Numic (Los Angeles, Orange, and western Riverside counties), and Yuman (San Diego County). The seemingly abrupt introduction of cremation, pottery, and small triangular arrow points in parts of modern-day Los Angeles, Orange, and western Riverside counties at the beginning of the Late Prehistoric period is thought to be the result of a Takic migration to the coast from inland desert regions. Modern Gabrielino, Juaneño, and Luiseño people in this region are considered to be the descendants of the Uto-Aztecan, Takic-speaking populations that settled along the California coast in this period.

(b) Ethnographic Overview

The Project Site is in an area historically occupied by the Gabrielino. Surrounding native groups included the Chumash and Tatataviam/Alliklik to the north, the Serrano to the east, and the Luiseño/Juaneño to the south. There is well-documented interaction between the Gabrielino and many of their neighbors in the form of intermarriage and trade.

The name Gabrielino (sometimes spelled Gabrieleno or Gabrieleño) denotes those people who were administered by the Spanish from Mission San Gabriel. This group is now considered to be a regional dialect of the Gabrielino language, along with the Santa Catalina Island and San Nicolas Island dialects. In the post-European contact period, Mission San Gabriel included natives of the greater Los Angeles area, as well as members of surrounding groups such as Kitanemuk, Serrano, and Cahuilla. There is little evidence that the people we call Gabrielino had a broad term for their group; rather, they identified themselves as an inhabitant of a specific community through the use of locational suffixes (e.g., a resident of Yaanga was called a Yabit, much the same way that a resident of New York is called a New Yorker).

Native words that have been suggested as labels for the broader group of Native Americans in the Los Angeles region include Tongva (or Tong-v) and Kizh (Kij or Kichereno, although there is evidence that these terms originally referred to local places or smaller groups of people within the larger group that we now call Gabrielino. Nevertheless, many present-day descendants of these people have taken on Tongva as a preferred group name because it has a native rather than Spanish origin. Within this analysis, the term Gabrielino is used to designate native people of the Los Angeles Basin and their descendants.

The Gabrielino subsistence economy was centered on gathering and hunting. The surrounding environment was rich and varied, and the tribe exploited mountains, foothills, valleys, deserts, riparian, estuarine, and open and rocky coastal eco-niches.

Like that of most native Californians, acorns were the staple food (an established industry by the time of the early Intermediate period). Inhabitants supplemented acorns with the roots, leaves, seeds, and fruits of a variety of flora (e.g., islay, cactus, yucca, sages, and agave). Freshwater and saltwater fish, shellfish, birds, reptiles, and insects, as well as large and small mammals, were also consumed.

The Gabrielino used a variety of tools and implements to gather and collect food resources. These included the bow and arrow, traps, nets, blinds, throwing sticks and slings, spears, harpoons, and hooks. Groups residing near the ocean used oceangoing plank canoes and tule balsa canoes for fishing, travel, and trade between the mainland and the Channel Islands. Gabrielino people processed food with a variety of tools, including hammer stones and anvils, mortars and pestles, manos and metates, strainers, leaching baskets and bowls, knives, bone saws, and wooden drying racks. Food was consumed from a variety of vessels. Catalina Island steatite was used to make ollas and cooking vessels.

At the time of Spanish contact, the basis of Gabrielino religious life was the Chinigchinich cult, centered on the last of a series of heroic mythological figures. Chinigchinich gave instruction on laws and institutions, and also taught the people how to dance, the primary religious act for this society. He later withdrew into heaven, where he rewarded the faithful and punished those who disobeyed his laws. The Chinigchinich religion seems to have been relatively new when the Spanish arrived. It was spreading south into the southern Takic groups even as Christian missions were being built and may represent a mixture of native and Christian belief and practices.

Deceased Gabrielino were either buried or cremated, with inhumation more common on the Channel Islands and the neighboring mainland coast, and cremation predominating on the remainder of the coast and in the interior. Remains were buried in distinct burial areas, either associated with villages or without apparent village association. Cremation ashes have been found in archaeological contexts buried within stone bowls and in shell dishes, as well as scattered among broken ground stone implements. Archaeological data such as these correspond with ethnographic descriptions of an elaborate mourning ceremony that included a variety of offerings, including seeds, stone grinding tools, otter skins, baskets, wood tools, shell beads, bone and shell ornaments, and projectile points and knives. Offerings varied with the sex and status of the deceased.

(i) Native American Communities

The closest ethnographically documented Gabrielino community to the Project Site is called Otsungna (also spelled Ochuunga). According to José Zalvidea (1780–1846), a Spanish Franciscan missionary, Otsungna was located approximately three miles from San Gabriel on the road to Los Angeles. The name is believed to reference the

Gabrielino word for wild roses, '*ochuur* (also spelled *otsur*), which were cited by another of Harrington's Gabrielino informants, Felicitas Serrano Montaño, as growing in abundance and also the source of the Spanish name for the location as "Rosa de Castilla." Johnston's notes on the site refer more generally to a "Halfway House" located in a pass along a route leading south away from the San Gabriel Mission. The road, which Johnston reports as following high ground over the present-day Monterey Pass, was apparently the preferred route for rancheros such as Juan Matias Sanchez of Rancho Potrero Grande, who was the presumed source of Johnston's information. Johnston also cites the earlier Gabrielino association for the place with the word for roses, but no other information is provided. According to Casen (1994), the village site was located in the Los Angeles neighborhood of El Sereno within the modern campus of California State University, Los Angeles.

The Project Site is also notably situated between the village of Yaanga, 4.8 miles to the southwest near the former Pueblo of Los Angeles, and two important Gabrielino locations near the San Gabriel Mission, 2.7 miles to the northwest named Shevaanga (also spelled Sibangna) and Toviscangna. Travel between the Pueblo of Los Angeles and San Gabriel Mission took on increased significance during the Spanish and Mexican Periods. The system of roads running between major Spanish settlements, including those between the San Gabriel Mission and Pueblo of Los Angeles, were memorialized in the early twentieth century as El Camino Real, though the "road" was never a single route. Many of these early thoroughfares were likely established along the routes previously used by Native Americans for foraging, communication, travel, and trade. Though foot trails can be ephemeral and completely change course from year to year, such trails are known to have existed between significant Gabrielino settlements, and temporary camps or other types of Native American features (such as burials) would have been common along these paths, especially where they intersect water sources or are located near other natural resources and culturally significant landmarks, including favorable viewsheds. The earliest survey maps created after California's annexation into the United States offer some indication of the trail system operating prior to this time. Unfortunately, maps of Native American trails were never drawn after Spanish contact and the routes described in ethnographic sources refer to more general routes. As a result, textual sources alone cannot definitively establish that a given trail or road was established by Native Americans.

Yaanga (alternative spellings and names include Yang-na, Yangna, and Yabit), is generally believed to have been located near present-day Union Station in downtown Los Angeles, approximately 5.5 miles west of the Project Site. The precise location of the village site has been much disputed. Dillon (1994) presented an exhaustive review of the potential locations, most within several blocks of the pueblo plaza. Johnston (1962:122) concluded that "in all probability *Yangna* lay scattered in a fairly wide zone

along the whole arc [from the base of Fort Moore Hill to Union Station], and its bailiwick included as well seed-gathering grounds and oak groves where seasonal camps were set up." A second village, known as Geveronga, has also been described in ethnographic accounts as immediately adjoining the Pueblo of Los Angeles, though much like Yaanga, its location can only be inferred from ethnographic information. The preponderance of the available evidence indicates that one or more early historic Native American communities were situated west of the Los Angeles River in the vicinity of the original plaza site. This assumption is supported through several lines of ethnographic evidence including the expedition journal of Fr. Juan Crespi and engineer Miguel Costansó, both of whom were associated with the 1769 Portolá expedition. The notes from these sources indicate the village was located between 1.3 and 1.5 miles west-southwest from the Los Angeles River on high-level ground. The Pueblo of Los Angeles was documented to have been founded directly adjacent to this village.

The San Gabriel Mission is known to have been established near a Gabrielino village, although it is not entirely clear what this village was called, two placenames have the strongest possibility. One possibility is that it was the village of Shevaanga (sometimes spelled Sibanga and alternately known as Sibàpet or šivápet, meaning "stones" or "flint"). A Native American consultant told ethnographer J. P. Harrington that šivápet was located at a place near San Gabriel, in a ravine "near where the old Los Angeles road crossed the river" (McCawley 1996:41). This accords well with Reid's account that places the village on the side of a fertile hollow near the mission on the Angeles road. However, Harrington's consultant went on to state that the name referred to the whole locality around San Gabriel, or to a place a little beyond the mission, and not to San Gabriel itself.

A second possibility for the Gabrielino village next to the San Gabriel Mission is Toviscanga (variants: Toviscangna, Tuvasak or Toviska-, meaning "white earth" or "old man") or Tōŋwe (meaning a place where people grind their seeds on rocks). Writing in 1860, Alexander Taylor noted that the "site of the Mission was called Toviscanga, and nearby was a large rancheria" (McCawley 1996:41). He didn't say which mission site he was referring to, but the second site is more likely. Since he was writing in 1860, he is likely to have called the first site "La Misión Vieja", or the old mission.

Contemporary Gabrielino (Kizh) historian Andrew Salas feels that Shevaanga was located near La Misión Vieja, in the Whittier Narrows area, which may have been thought of as a part of the broader San Gabriel area at the time (Dietler et al. 2015: 20). Based on oral history and early twentieth century maps, he believes that the name for the 100-acre Savannah ranch, established in the 1850s in what is now the City of Rosemead, was derived from the earlier place name, Shevaanga. Thus, Rosemead's Savannah School on Rio Hondo Avenue is in the approximate location of Shevaanga, or at least its outskirts. Based on the notation in Serra's 1778 book of confirmations, Mr.

Salas believes that the name of the closest community to the current San Gabriel Mission location was Toviscanga. It is possible that these names were synonymous, that one name supplanted the other over time, or that one (Toviscanga) applied to a specific neighborhood, while the other (Shevaanga) referred to the broader region.

(c) History

Post-Contact history for the state of California is generally divided into three periods: the Spanish period (1769–1822), Mexican period (1822–1848), and American period (1848–present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish period in California begins with the establishment in 1769 of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823. Independence from Spain in 1821 marks the beginning of the Mexican period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican–American War, signals the beginning of the American period, when California became a territory of the United States.

(i) Spanish Period (1769-1822)

Spanish explorers made sailing expeditions along the coast of southern California between the mid-1500s and mid-1700s. In search of the legendary Northwest Passage, Juan Rodríquez Cabríllo stopped in 1542 at present-day San Diego Bay. With his crew, Cabríllo explored the shorelines of present Catalina Island as well as San Pedro and Santa Monica bays. Much of the present California and Oregon coastline was mapped and recorded in the next half-century by Spanish naval officer Sebastián Vizcaíno. Vizcaíno's crew also landed on Santa Catalina Island and at San Pedro and Santa Monica bays, giving each location its long-standing name. The Spanish crown laid claim to California based on the surveys conducted by Cabríllo and Vizcaíno.

More than 200 years passed before Spain began the colonization and inland exploration of Alta California. The 1769 overland expedition by Captain Gaspar de Portolá marks the beginning of California's Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. With a band of 64 soldiers, missionaries, Baja (lower) California Native Americans, and Mexican civilians, Portolá established the Presidio of San Diego, a fortified military outpost, as the first Spanish settlement in Alta California. In July 1769, while Portolá was exploring southern California, Franciscan Fr. Junípero Serra founded Mission San Diego de Alcalá at Presidio Hill, the first of the 21 missions that would be established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823.

The Portolá expedition first reached the present-day boundaries of Los Angeles in August 1769, thereby becoming the first Europeans to visit the area. Father Juan Crespí, a member of the expedition, named "the campsite by the river *Nuestra Señora la Reina de los Angeles de la Porciúncula*" or "Our Lady the Queen of the Angeles of the Porciúncula." Two years later, Fr. Junípero Serra returned to the valley to establish a Catholic mission, the Mission San Gabriel Arcángel, on September 8, 1771 (Engelhardt 1927). In 1781, a group of 11 Mexican families traveled from Mission San Gabriel Arcángel to establish a new pueblo called El Pueblo de la Reyna de Los Angeles (the Pueblo of the Queen of the Angels). This settlement consisted of a small group of adobe-brick houses and streets and would eventually be known as the Ciudad de Los Angeles (City of Angels).

(ii) Mexican Period (1822-1848)

A major emphasis during the Spanish period in California was the construction of missions and associated presidios to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns, but just three pueblos were established during the Spanish period, only two of which were successful and remain as California cities (San José and Los Angeles). Several factors kept growth within Alta California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain (Mexico and the California territory) won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants.

Extensive land grants were established in the interior during the Mexican period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. The secularization of the missions following Mexico's independence from Spain resulted in the subdivision of former mission lands and establishment of many additional ranchos. During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of nonnative inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities.

(iii) American Period (1848-Present)

War in 1846 between Mexico and the United States began at the Battle of Chino, a clash between resident Californios and Americans in the San Bernardino area. This battle was a defeat for the Americans and bolstered the Calfiornios' resolve against American rule, emboldening them to continue the offensive in later battles at Dominguez Field and in San Gabriel. However, this early skirmish was not a sign of things to come and the Americans were ultimately the victors of this two-year war. The Mexican-American War officially ended with the Treaty of Guadalupe Hidalgo in 1848, which resulted in the annexation of California and much of the present-day southwest, ushering California into its American period.

California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as U.S. territories. Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the southern California economy through 1850s. The Gold Rush began in 1848, and with the influx of people seeking gold, cattle were no longer desired mainly for their hides but also as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from southern to northern California to feed that region's burgeoning mining and commercial boom. Cattle were at first driven along major trails or roads such as the Gila Trail or Southern Overland Trail, then were transported by trains when available. The cattle boom ended for southern California as neighbor states and territories drove herds to northern California at reduced prices. Operation of the huge ranchos became increasingly difficult, and droughts severely reduced their productivity.

On April 4, 1850, only two years after the Mexican–American War and five months prior to California's achieving statehood, Los Angeles was officially incorporated as an American city. Settlement of the Los Angeles region continued steadily throughout the early American period. Los Angeles County was established on February 18, 1850, one of 27 counties established in the months prior to California's acquiring official statehood in the United States. Many of the ranchos in the area now known as Los Angeles County remained intact after the United States took possession of California; however, a severe drought in the 1860s resulted in many of the ranchos being sold or otherwise acquired by Americans. Most of these ranchos were subdivided into agricultural parcels or towns.

The history of Alhambra is closely related to the history of the San Gabriel Mission, founded on September 8, 1771. The unique topography and geomorphology consisting of fertile soil and an abundance of Native American laborers was key in the prosperity and colonization of the region. A good portion of Alhambra was initially a land grant of 300,000 acres made in 1784 by the Spanish government to Manuel Nieto, a soldier who

served with the Gaspar de Portola expedition of 1769. After independence from Spain, the newly formed Mexican Republic shut down the San Gabriel Mission by the 1830s and granted Mexican citizenship to Native Americans exploited by the Spanish missions. The Mexican rule did not last very long and the territory was annexed to the United States after the Mexican-American War (1846–1848).

The early development of Alhambra has been associated to a wealthy Tennessee trader and trapper named Benjamin D. Wilson (1811–1878), who became intrigued by the San Gabriel Valley. By the mid-1850s Wilson was the landowner of parts of Los Angeles, Westwood, Pasadena, San Gabriel, San Pedro, and Alhambra. One of Wilson's land acquisitions included the Rancho Huerta de Cuati, formerly part of the Mission San Gabriel lands. He acquired the property in 1854 from Hugo Reid's widow, Victoria Reid, one of the only people of Native American descent who were able to own land under Mexican administration. Wilson expanded Huerta de Cuati and renamed it Lake Vineyard Ranch, which included citrus orchards and wine grapes.

After marriage to his daughter in 1867, Wilson would take on his son-in-law James de Barth Shorb (1842–1896) as a business partner, originally as part of the wine operation, and later as part of large land developments. Wilson and Shorb filed papers in 1871 to incorporate the Lake Vineyard Land an d Water Company. In 1874, as the Lake Vineyard and Water Association, Inc., the two purchased a 275-acre lot, subdivided the land, and developed a housing tract they called "The Alhambra Tract," which was notable at the time for its use of iron pipes in bringing water to each the lots - one of Shorb's unique contributions. Looking to repeat their success, a much larger property (2,500 acres) was purchased and developed as "The Alhambra Addition Tract." The two tracts were conveniently located in close proximity to the Southern Pacific Railroad that was finished in 1873. In 1886 the Shorb station was completed and a spur line ran north to Shorb's San Gabriel Winery, which he established in 1882. At the time of Wilson's passing in 1878, Shorb continued trying to improve on the company's real estate investments with the development Shorb Tract. Unfortunately, the population boom was waning in the late 1870s and the reduced housing demand was taking its toll. It wasn't long before much of the Lake Vineyard Land and Water Association's holdings were sold off, and in 1894 the company disincorporated. Shorb's subsequent focus on the San Gabriel Wine Company was unsuccessful in his later years and the company failed shortly after Shorb's death in 1896.

In the 1880s the residents of Alhambra began a push for the incorporation of the city through the creation of an improvement association. The association was aimed at improving the streets, the sanitary and living conditions, including safety. On July 11, 1903, the City of Alhambra was officially incorporated. The city continued growing and by 1910 there were 5,000 residents. Alhambra was originally composed of four smaller

communities: Alhambra, Ramona, Shorb, and Dolgeville, with each being developed separately.

The Project Site is located in what was the town of Dolgeville, named after German immigrant Alfred Dolge. Having relocated from New York in 1899 after the failure of his felt mill, Dolge partnered with Henry Huntington to construct a new felt factory. Dolge had also hoped that Huntington's prominence in real estate development would help him realize his vision of a model factory town consistent with the socialist philosophy he applied to his felt business in New York. In 1904, Huntington, having earlier acquired Shorb's San Gabriel Wine Company, converted the winery buildings and 20 acres of land to the Alfred Dolge Manufacturing Company. Under Huntington's influence, other small businesses came to the burgeoning town of Dolgeville and he began developing residential lots surrounding the factory, for which the Dolgeville Land Company had been incorporated in 1903. Subdivisions and lot sales were the focus of the land company, though the sale of homes (rather than rental) to factory workers was at odds with the social welfare approach Dolge had established in New York. After Dolge's bumbled design for the model town, Huntington's urban designers and engineers drafted a plan for Dolgeville. House building was slow but consistent enough to support small service businesses and amenities that sprang up in 1904. By 1908 sales had slowed amid a real estate recession, and it was becoming apparent that the vision of the model factory town had failed to manifest, which Huntington blamed on Dolge's underperforming felt factory. Phelps cites the failure to realize the vision of a factory town was rooted more in low wages and the lack of jobs that created too high of a risk for purchasing a home. Dolgeville was annexed into Alhambra in 1908, though the land company continued selling lots and Dolge remained at the felt factory until being forced out by Huntington in 1910.

From the very beginning, single family residential subdivisions were to define Alhambra's development. Individual tracts of land were purchased by Americans relocating from the east who proceeded to build unique homes spanning different styles. Even after incorporation in 1903 and the following boom in population, houses were still constructed by individual land owners. Further development occurred with another population boom in the 1920s, but the use of small contractors meant that neighborhoods developed slowly and contained a number of different architectural designs. Industrial development was sparse for most of Alhambra's history, concentrated primarily within Shorb, along Fremont Avenue and Mission Road, with the city's commercial properties extending along Main Street and Garvey Avenue. This "Industrial District" was clearly separated from the rest of the city, but provided a number of incentives, such as railway facilities, reliable water, cheap real estate, and inexpensive utilities.

By the 1930s, the community had grown to nearly 40,000 residents. The city had the Southern Pacific Railroad station on Date Street, two Pacific Electric Interurban utility lines, and its own airport. The impacts of the Great Depression occurred in Alhambra as they did in most of the country - many businesses closed and large numbers of people were out of work. Beginning with World War II, Alhambra saw a new area of development in the arms industry and people from all over the United States were moving to southern California with the intent to find employment. The post-war years saw a change in the demographics of the population and by the 1950s many Italian immigrants had settled in Alhambra, followed by waves of Mexican immigrants in the 1960s, and Chinese and Taiwanese in the late 1970s and 1980s.

(d) Historical Development of the Project Site

The Project Site is located in the southwestern portion of the city. Situated on the east side of Fremont Avenue, between Orange Street and Mission Road, and bordered by Date Avenue, the Project Site was home to the CF Braun & Company petrochemical engineering company. Originally located in San Francisco, the company was founded in 1909 by Carl Franklin Braun. Specializing in the manufacture of ship parts, by the end of World War I the company saw a drastic decrease in sales, which inspired Braun to shift his company to petroleum processing plants. Due to the need for expansion, the company was moved south to Alhambra because of its proximity to rail, sea, and the opportunities afforded by growth occurring in the cities of the greater Los Angeles area. Braun purchased land along Fremont Avenue (formerly Monterey County Road and Fair Oaks Avenue) and Mission Road (formerly San Gabriel County Road) and in 1922 the new plant and headquarters were opened. The facilities were rebuilt and expanded in the 1940s and 1950s, some of which remain standing today. The company was purchased first by Santa Fe Industries, followed by the Kuwait Oil Corporation, and lastly by Halliburton which closed the Alhambra offices in 1997 before selling the property to the Ratkovich Company who currently manage the property. For a more detailed discussion of the history of on-site development, see **Section IV.D, Cultural Resources**, of the Draft EIR.

(2) California Historical Records Information System Records Search

(a) Previously Conducted Cultural Resources Studies

Results of the California Historical Records Information System (CHRIS) records search at the South Central Coast Information Center (SCCIC) indicate that 17 cultural resource studies have been conducted within 0.5 miles of the Project Site (refer to Table 1 in **Appendix F-2**). One study by PCR Services Corporation (Heumann 1999a) was conducted within the Project Site but included only historical built-environment

resources. None of the previous studies on file in the CHRIS have included archaeological field surveys or assessments of the Project Site.

(b) Previously Recorded Cultural Resources

A total of 45 previously recorded cultural resources were documented in the CHRIS within a 0.5-mile radius of the Project Site (refer to Table 2 in **Appendix F-2**). Of the 45 resources, 43 are historic buildings, one is a historic district, and one is a historic structure (Union Pacific Railroad). The historic district is located within the Project Site and comprises buildings associated with the former CF Braun & Company. The district and its constituents were recorded in 1999 by PCR Services Corporation as part of the Fremont Avenue Widening Project (Heumann 1999a; Heumann 1999b) (for a detailed discussion, refer to **Section IV.D, Cultural Resources**). The remaining 44 resources identified in the 0.5-mile radius are located outside the Project Site.

(3) Archival Research

The TCR Assessment prepared for the Project conducted an archival research that included a review of historical maps and descriptions of the Project Site, with a focus on documenting historical modifications to the physical setting and identifying any potential natural or artificial features with relevance to use by Native Americans or (e.g., stream courses, vegetation, historical topography, roads, habitation markers) or use of the location by non-Native American people in the Historic period.

The earliest map drawn using a modern coordinate system that includes the Project Site is a cadastral map of the township. The map draft is undated but based on comparison with an 1871 copy it appears to have been created no later than 1871 and could be as early as 1850. Both the undated map and the 1871 copy depict three trails (two annotated as “Roads”) passing through the Project Site. The southernmost of the trails approximates what would become Mission Road. The braided network of roads or trails generally trend northeast/southwest between the San Gabriel Mission and the historic core of Los Angeles. The route between these locations is part of what is referred to as El Camino Real.

In 1876, two years after the Lake Vineyard Land and Water Association incorporated, a map was prepared delineating the company’s holdings and identified adjacent land owners. The Project Site, within the southwest quarter of Section 16 on this map, is situated outside of a small residential development to the northeast in Sections 9, 10, 15, and the eastern portion of Section 16. The shading in the adjacent section-quarters seems to indicate that the Project Site was not owned at the time by the Lake Vineyard Land and Water Association. An 1877 map of Los Angeles County with land owners shows the Project Site within the western margin of an area labeled as the Lake Vineyard Land and Water Association. In 1882 a survey was commissioned for the

Pasadena and Monterey County Road (now Fremont Avenue) and the Lake Vineyard Land and Water Association is still listed as the land owner for the parcels east of the road that include the Project Site.

None of the archival documents inspected make it explicitly clear whether portions of the Project Site were under cultivation or otherwise improved during the years it was owned by the Lake Vineyard Land and Water Association (1874-1894), or if it was retained by Shorb as part of his San Gabriel Wine Company during the 1880s and early 1890s. The Project Site did not appear to be included in the lands owned by the Lake Vineyard Land and Water Association as indicated in the 1876 map; however, ownership and land use between ca. 1894 and 1904 is unknown.

Huntington's 1903 Dolgeville layout notably excludes the west half of the Project Site and shows that none of the lots along Cypress Avenue had been sold, while only five of the lots along Date Avenue had been sold. It's unclear why the swath adjacent to Fair Oaks (later Fremont Avenue) was excluded from the Dolgeville design, but given the stalled sales of lots in general, it is likely that the lots along Cypress Avenue adjacent to the excluded portion remained vacant through the 1910s and 1920s.

A low-altitude aerial photograph taken in 1924 shows the southern half of the Project Site. At that time the Project Site was occupied primarily by the CF Braun & Company facilities, but the single-family homes fronting Date Avenue can be seen. Vacant fields within the Project Site are evident but it is not clear whether they had been previously ploughed and planted, though some type of surface modification appears to have occurred, possibly from grading or livestock grazing.

Very few changes to the Project Site are evident when comparing the 1927 and 1938 aerial photographs. During the late 1920s and early 1930s several of the lots fronting Date Avenue on the east margin of the Project Site were occupied by single-family dwellings, with the CF Braun & Company facilities occupying the southern portion. By the late 1930s industrial buildings gradually began to infill vacant lots adjacent to some of the residences. Sanborn Fire Insurance maps and aerial photos show the significant developments that occurred following World War II as the Braun facilities were modified and expanded, and the remaining vacant lots were developed by industrial facilities, replacing some of the residential structures along Date Avenue. At this time other companies had buildings within the Project Site: Alhambra Lumber Company; Union Oil Company; and Southern California Edison Company. All the buildings were serviced by a spur line extending north into the Project Site from the Southern Pacific line that ran directly south of what is now Mission Road. By the late 1960s and early 1970s the small manufacturing and industrial businesses had completely pushed out the residential buildings within the Project Site, and during the 1980s and 1990s many of the 1930s- and 1950s-era industrial buildings were demolished and replaced by parking lots that

remain to the present-day. For a more detailed discussion, refer to **Section IV.D, Cultural Resources** of the Draft EIR.

(4) Sacred Lands File Research

In response to an SLF search and contact list request, in a letter dated July 10, 2018, the NAHC indicated that there are no sacred sites in the SLF documented within the Project Site. The NAHC noted that the lack of recorded sites on the surface does not indicate the absence of Native American cultural resources below the surface. A list of 16 Native American contacts was provided and the letter suggests contacting them to provide information on sacred lands that may not be listed in the SLF. All Native American coordination for the Project is being conducted as part of the City's compliance with AB 52 (PRC Section 21082.3) as described below. The Native American coordination documents for the Project are included in Appendix C of the TCR Assessment included in **Appendix F-2**.

(5) AB 52 Notification and Tribal Consultation

The City issued a Notice of Preparation (NOP) for the Project's Draft EIR on October 10, 2017. The City notified the NAHC and on October 16, 2017 received a letter from the NAHC confirming receipt of the NOP for a Draft EIR. As lead agency, the City mailed AB 52 notification letters to five Native American contacts on October 12, 2017. The letter included a description of the proposed Project under review by the City, and a notification that requests for consultation under AB 52 must be received within 30 days. In response to these notification letters, the City received one reply from the Gabrieleño Band of Mission Indians - Kizh Nation (Tribe). In a letter dated October 23, 2017, Chairman Andrew Salas indicated that the Project is located in a sensitive area and may cause a substantial adverse change in the significance of tribal cultural resources and requested formal consultation.

On October 24, 2018, a consultation meeting took place between the Tribe, City, and Project Applicant. The Project Applicant provided information on the Project description, historical uses of the Project Site, and intended timeline for the Project buildout. The Tribe discussed the Tribal history, traditional practices, and reasons they consider the Project Site to be sensitive for tribal cultural resources. The notification letters are included in Appendix C of the TCR Assessment (see **Appendix F-2** of the Draft EIR). Pursuant to PRC Section 21082.3(c), the Tribal response letter and all other records of correspondence are exempt from public disclosure and have been included as a confidential attachment in the TCR Assessment. Consultation with the Tribe is ongoing, and any additional correspondences will be appended to the confidential attachment.

Table IV.O-1 summarizes the results of Native American outreach conducted in compliance with AB 52 (PRC Section 21082.3).

Table IV.O-1
Native American Outreach Results

Native American Contact	City Consultation Effort	Tribal Response
Gabrieleno/Tongva Tribe Bernie Acuna, Tribal Chairman 1999 Avenue of the Stars, Suite 1100 Los Angeles, CA 90067-4618	**October 12, 2017:** Letter sent by U.S. Mail	No response.
Gabrieleno/Tongva Tribe Sam Dunlap, Cultural Resources Director PO Box 86908 Los Angeles, CA 90086	**October 12, 2017:** Letter sent by U.S. Mail	No response.
Gabrieleno/Tongva San Gabriel Band of Mission Indians Anthony Morales, Chairperson P.O. Box 693 San Gabriel, CA 91778	**October 12, 2017:** Letter sent by U.S. Mail	No response.
Joseph Ontiveros, Cultural Resources Director P.O. Box 487 San Jacinto, CA 92581	**October 12, 2017:** Letter sent by U.S. Mail	No response.
Andrew Salas, Chairperson Gabrieleño Band of Mission Indians-Kizh Nation P.O. Box 393 Covina, CA 91723	**October 12, 2017:** Letter sent by U.S. Mail **October 24, 2018:** Attended consultation meeting; provided summary of proposed Project description and phased approach to Project buildout.	**October 23, 2017:** Response letter sent acknowledging receipt of notification letter and indicating the area is sensitive for tribal cultural resources and requesting consultation. **October 24, 2018:** Attended consultation meeting; provided additional background on tribal history and practices that occurred in the Project vicinity.

Source: SWCA Environmental Consultants, April 2019.

(6) Sensitivity Assessment

As discussed previously, the CHRIS records search and archival research did not identify any archaeological resources within a 0.5-mile radius of the Project Site. All of the resources identified by the CHRIS search are built-environment resources, including a historic district located within the Project Site (see **Section IV.D, Cultural Resources**). The NAHC returned negative results in their SLF search.

Review of ethnographic literature indicated that the ethnographically documented Gabrielino community known as Otsungna was estimated to have been located more than two miles to the southwest of the Project Site. The Project Site is situated along a series of trails running between the Gabrielino village of Yaanga (southwest near the historic core of Los Angeles) and the Gabrielino settlement next to the San Gabriel Mission to the northeast. Trails used by the Spanish are reported as having followed existing paths used by the Gabrielino, certainly during the early expeditions. Having established the San Gabriel Mission and Pueblo of Los Angeles as prominent places, repeated use of the trails between these locations would have intensified during the nineteenth century. A township map created before 1871 shows three trails intersecting the Project Site, the two northernmost of which are labeled “roads,” the southernmost of which approximates the current alignment of Mission Road. These trails are part of a braided network of paths that lead to several areas within the local geography, but generally trend northeast-southwest and form part of the travel corridor between the San Gabriel Mission and the historic core of Los Angeles.

Historical maps show a small, meandering seasonal stream to the northwest of the Project Site. The stream flows southwest through the pass north of City Terrace and ultimately discharges into the Los Angeles River. It is unlikely the stream offered a permanent source of water, though other types of important natural resources may be more common along its banks. The closest documented permanent water sources include those formed along the Raymond Fault, running east-west along what is now Huntington Drive in San Marino, approximately 3.25 miles northwest of the Project Site. Other permanent sources in closer proximity were likely present but were not identified in archival research.

The geotechnical analysis describes five feet of artificial fill overlying native Quaternary-age alluvial sediments composed of sandy silts, and silty sands to sands. The composition and depth of the fill is likely to vary across the site and it is not clear whether the fill was imported and deposited on top of the former surface or if it is simply disturbed sediments that once formed the surface. Deeply buried archaeological deposits can exist within alluvium below or intermixed with Historic-period disturbances (i.e., artificial fill), but site-specific conditions must be considered. Thus, the presence of artificial fill does not preclude the existence of prehistoric archaeological resources

being present, nor does the presence of alluvium below the fill assure that any such archaeological material would be preserved.

The proximity of the Project Site to the travel corridor between significant Gabrielino communities increases the overall sensitivity for unknown prehistoric archaeological resources to higher than low background levels, particularly for the archaeological remains of temporary open camps, typically identified by the presence of hearth features and other associated Native American artifacts. Individual burials, though unlikely, could also be located along such trails. The potential for any such prehistoric archaeological features or artifacts to be preserved is decreased by the ground disturbances associated with the historical modifications to the Project Site, which may be relatively minimal in some locations. Where these disturbances have occurred, they have likely displaced any archaeological resources formerly located in the Project Site and the sensitivity is lower than in native alluvial soils. Given these factors, the Project Site is concluded to have a moderate sensitivity for containing prehistoric archaeological resources.

Considerations for tribal cultural resources are essentially identical to those for prehistoric archaeological resources. The results of the CHRIS and SLF searches were negative for previously recorded tribal cultural resources within the Project Site. The City submitted notification letters to the five tribal parties pursuant to AB 52. The City received one response requesting consultation from the Gabrieleño Band of Mission Indians-Kizh Nation. The initial letter from Chairman Andrew Salas indicated a high sensitivity for tribal cultural resources and requested consultation on the Project. During the tribal consultation meeting the Project Applicant provided information on the Project description, historical uses of the Project Site, and the intended timeline for the Project buildout; the Tribe discussed the Tribal history, traditional practices, and reasons they consider the Project Site to be sensitive for tribal cultural resources. Consultation with the Tribe is currently on-going.

The Project Site was assessed for the potential to contain deeply buried, previously unidentified archaeological materials, including those that meet the definition of a tribal cultural resource. Based upon the foregoing discussion, it is concluded that the Project Site has a moderate sensitivity for containing tribal cultural resources.

3. Project Impacts

a) Methodology

This section presents an overview of the methodology used to identify the potential for archaeological resources within the Project Site.

(1) CHRIS Records Search

On March 14, 2018, a confidential search of the CHRIS records at the SCCIC, located on the campus of California State University, Fullerton, was conducted to identify previously documented archaeological resources within a 0.5-mile radius of the Project Site. The SCCIC maintains records of previously documented archaeological resources (including those that meet the definition of a tribal cultural resource) and technical studies; it also maintains copies of the OHP's portion of the Historic Resources Inventory. Confidential CHRIS results include specific information on the nature and location of sensitive archaeological sites, which should not be disclosed to the public or unauthorized persons and are exempt from the Freedom of Information Act. The information included in a confidential CHRIS records search is needed to assess the sensitivity for undocumented tribal cultural resources and inform the impact analysis. The search included any previously recorded archaeological resources (i.e., excludes historic buildings) within the Project Site and surrounding 0.5-mile area.

(2) Archival Research

Concurrent with the confidential CHRIS records search, property-specific historical and ethnographic context research was reviewed to identify information relevant to the Project Site. Research focused on a variety of primary and secondary materials relating to the history and development of the Project Site, including historical maps, aerial and ground photographs, ethnographic reports, and other environmental data. Historical maps drawn to scale were georeferenced using ESRI ArcMAP v10.5 to show precise relationships to the Project Site. Sources for maps of Native American villages and placenames referenced in the Ethnographic Overview include Gumprecht (2001), King (1994), Kirkman (1938), McCawley (1996), and Southwest Museum (1962; as reproduced in Johnston [1962]). Other sources consulted included the following publicly accessible data sources:

- City of Los Angeles OHR (SurveyLA);
- City of Alhambra (building permits);
- David Rumsey Historical Map Collection;
- Huntington Library Digital Archives;
- Library of Congress;
- Los Angeles Public Library Map Collection;
- Sanborn Fire Insurance Company Maps (Sanborn maps);

- USGS historical topographic maps;
- University of California, Santa Barbara Digital Library (aerial photographs); and
- University of Southern California Digital Library.

In addition to the above, the geotechnical report prepared for the Project by Geotechnologies, Inc. was reviewed (see **Appendix G**).

(3) Sensitivity Assessment

In circumstances where a known archaeological resource or tribal cultural resource is not present, the TCR Report assessed the potential for an undocumented resource (in the form of a buried archaeological site) to be present. That determination considers historical use of the Project vicinity, broadly, and the physical setting, specifically, including an assessment of whether the setting is capable of containing buried archaeological material. Lacking any data specifically gathered to assess the presence or absence of archaeological material below the surface, the resulting sensitivity is by nature qualitative, ranging along a spectrum of increasing probability for encountering such material, designated here as low, moderate, and high. The TCR Report assessed the sensitivity of the Project Site to contain tribal cultural resources, including either prehistoric or historic-period Native American archaeological resources. In general, for areas in which there was historical use and poor physical integrity within the Project Site, (e.g., high levels of disturbances from recent development), the resulting sensitivity assessment would be low. Areas that show some evidence of activity or a likelihood based on the presence of natural features (e.g. perennial water), and retain sediments dated to the approximate time period of that activity, the resulting sensitivity assessment will be either moderate or high. In some cases, evidence of archaeological material from non-archaeological sources (e.g. geotechnical boring logs, anecdotal accounts by local residents or listed in historical accounts) can be sufficient for elevating the sensitivity.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with the State CEQA Guidelines Appendix G (Appendix G), the Project would have a significant impact related to tribal cultural resources if it would:

a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resource 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:

a. 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

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

c) Project Design Features

No specific Project Design Features are proposed with regard to tribal cultural resources.

d) Analysis of Project Impacts

Threshold 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 size and scope of the landscape, sacred place, or object with cultural value to a California Native tribe, and that is 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 is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?***

(1) Impact Analysis

The Project Site does not contain any known tribal cultural resources. No previously recorded tribal cultural resources were identified within the Project Site. The Project Site was further assessed for the potential to contain deeply buried, previously unidentified archaeological materials, including those that meet the definition of a tribal cultural resource. Given the location of the Project Site within a well-established travel corridor between known prominent Gabrielino communities (increased sensitivity), and the extent of disturbances to the physical setting (decreased sensitivity), the potential for unknown prehistoric archaeological resources and tribal cultural resources to exist at the Project Site is found to be moderate. Specifically, there is potential to encounter

subsurface remains of temporary camps that include hearth features, stone tools or debris, shell and faunal remains, and ceramic sherds. Though unlikely, individual Native American burial findings could also occur. If present, such resources have the potential to be significant under CEQA. If present, it is possible that unidentified tribal cultural resources may be inadvertently discovered through implementation of the Project. In the event of this occurrence, Project impacts could potentially be **significant**.

(2) Mitigation Measures

Mitigation Measures CUL-MM-4 through CUL-MM-7 in **Section IV.D, Cultural Resources**, of the Draft EIR include procedures to follow in the event of an inadvertent discovery of tribal cultural resources. However, if additional measures for the inadvertent discovery of tribal cultural resources are required as a result of AB 52 consultation, they should be carried out in concert with Mitigation Measures CUL-MM-4 through CUL-MM-7.

(3) Level of Significance After Mitigation

With implementation of Mitigation Measures CUL-MM-4 through CUL-MM-7, the Project would result in **less-than-significant** impacts to tribal cultural resources.

e) Cumulative Impacts

(1) Impact Analysis

As provided in **Section III, Environmental Setting**, of the Draft EIR, there are nine cumulative development projects within an approximate 3-mile radius of the Project Site. While the majority of these cumulative projects are located a substantial distance from the Project Site (as shown in Figure III-16), one is located in proximity to the Project Site at the southwest corner of Commonwealth and Date Avenues, approximately one block to the north of the Project Site's northern edge. Collectively, the cumulative projects involve a variety of residential uses, retail, restaurant, commercial, hotel, and office uses, consistent with existing uses in the Project Site area.

The Project and the cumulative projects are located within an urbanized area that has been disturbed and developed over time. In the event that tribal cultural resources are uncovered, each cumulative project would be required to comply with applicable regulatory requirements in the event of inadvertent discovery. In addition, all cumulative projects and other future development within the area would be required to comply with the consultation requirements of AB 52 to determine and mitigate any potential impacts to tribal cultural resources. Therefore, cumulative impacts to tribal cultural resources would be **less than significant**.

(2) Mitigation Measures

Cumulative impacts related to tribal cultural resources would be less than significant and no mitigation is required.

(3) Level of Significance After Mitigation

Cumulative impacts related to tribal cultural resources would be **less than significant** without mitigation.

IV. Environmental Impact Analysis

P.1. Utilities and Service Systems – Wastewater

1. Introduction

This section addresses the potential impacts of the Project on wastewater services and facilities. This analysis includes a description of the existing systems and the proposed wastewater systems for the Project. An estimation of the amount of wastewater that would be generated by the Project is also included. This section is based on a Sewer Analysis performed by AKM Consulting Engineers in March 2018, which is included as Appendix 4.12 to the Civil Engineering Support Studies document, included as **Appendix J** of the Draft EIR.

J Civil Engineering Support Studies for The Villages At The Alhambra, Fuscoe Engineering Inc., April 17, 2019.

2. Environmental Setting

a) Regulatory Framework

(1) State

(a) California Green Buildings Standard Code

The California Green Building Standards Code, commonly referred to as the CALGreen Code, is set forth in California Code of Regulations (CCR) Title 24, Part 11, and establishes voluntary and mandatory standards pertaining to the planning and design of sustainable site development and water conservation, among other issues. Under the CALGreen Code, all water closets (i.e., flush toilets) are limited to 1.28 gallons per flush, and urinals are limited to 0.5 gallon per flush. In addition, maximum flow rates for faucets are established at 2.0 gallons per minute (gpm) at 80 pounds per square inch (psi) for showerheads, 1.2 gpm at 60 psi for residential lavatory faucets, and 1.8 gpm at 60 psi for kitchen faucets.

(b) State Water Resources Control Board

On May 2, 2006, the State Water Resources Control Board (SWRCB) adopted the Statewide General Waste Discharge Requirements for publicly owned sanitary sewer systems that are greater than 1.0 mile in length and that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in California. Under the Statewide General Waste Discharge Requirements, the owners of such systems must comply with the following requirements: (1) acquire an online account from the SWRCB and report all sanitary sewer overflows online; and (2) develop and implement a written plan referred to as a Sewer System Management Plan to control and mitigate sanitary sewer overflows and make it available to any member of the public upon request in writing.

(2) Local

(a) City of Alhambra General Plan

The City's General Plan provides direction regarding the City's vision for future development in the City and includes several chapters to help guide the design of future development. It also contains several broad goals, objectives, and policies for neighborhood design to create a more livable city for existing and future residents. These goals and policies are stated not in terms of specific design guidelines, but in terms of general neighborhood-wide design policies.

The General Plan serves as a guide for the City's overall long-range growth and development policies and serves as a guide to update community plans, specific plans, and the citywide elements. These citywide elements address functional topics that cross community boundaries, such as transportation, and address these topics in detail.

The City has recently updated its General Plan in August 2019. A draft of the updated General Plan had been released in July 2018 for public review and a revised draft released in early 2019. The updated General Plan is intended to allow land use and policy determinations to be made within a comprehensive framework that incorporates public health, safety, and qualities of life considerations. The General Plan consists of seven elements, including a Land Use Element, Circulation Element, and Open Space Element. Each element addresses its respective subject and the City's 20-year vision for the future. With regard to sewers and/or wastewater, the General Plan's Services and Infrastructure Chapter establishes the following goal and policies:

- **Goal SI-10:** A wastewater and stormwater collection and treatment system that meets the needs of existing and planned development.
    - **Policy SI-10A** Maintain, upgrade, and expand wastewater and stormwater collection facilities to ensure that wastewater and stormwater generated in Alhambra can be effectively managed.
    - **Policy SI-10B** Track regional treatment system capacity and, as necessary and appropriate, participate in efforts to upgrade or expand treatment capabilities.
    - **Policy SI-10C** Require that development be connected to the municipal sewer system and ensure that adequate capacity is available for the treatment of generated wastewater flows and safe disposal of generated sludge.
    - **Policy SI-10D** Explore ways in which gray water can be used to reduce demands on groundwater and other water supplies.

(c) Sewer System Management Plan

In accordance with the Statewide General Waste Discharge Requirements, the City acquired online accounts from the SWRCB and began reporting sanitary sewer overflows by the due date of January 2, 2007. The City's Sewer System Management Plan was last updated in April 2014 and is required to be updated on a five-year schedule. The Sewer System Management Plan sets forth the management practices, policies, and specific programs and implementation mechanisms that are necessary to comply with the Statewide General Waste Discharge Requirements. The Sewer System Management Plan describes the City's operations and maintenance program, design and performance metrics, overflow emergency response plan, fats/oil/grease control program, and system evaluation and capacity assurance plan for its sanitary sewer system.

(d) Alhambra Municipal Code

The Alhambra Municipal Code (AMC) addresses the public sewer system in Chapter 16. Section 16.28 requires City approval of a sewer permit prior to connection to the sewer system. New connections to the sewer system are assessed a sewer connection fee pursuant to Section 16.28 of the AMC. Through this permit process, the City performs a sewer capacity review in order to determine if there is adequate capacity existing in the sewer collection system to safely convey the newly generated sewage to the appropriate sewage treatment plant or if system improvements will be necessary to accommodate the increase in sewage.

b) Existing Conditions

(1) Existing Facilities

(a) Wastewater Collection

The Project Site is bounded on all four sides by eight-inch, 12-inch, and 15-inch public sewers located in the City streets surrounding the site. These eight-inch sewer lines are smaller than the City's current desired standard of 10 inches. All of these sewers flow in a southwesterly direction and converge at the intersection of Fremont Avenue and Mission Road, adjacent to the Project Site's southwestern corner. House connection sewer laterals also exist, primarily along Date Avenue on the Project Site's eastern border. These laterals feed sewage from nearby properties into the larger under-street sewers described above. From the intersection of Fremont Avenue and Mission Road, the combined sewage flow is conveyed under the Union Pacific Railroad trench via the use of a double 12-inch barrel siphon.[1] This siphon then outflows to a 21-inch City sewer located in Front Street. This sewer continues under Edgewood Drive, Ramona Road, and Glendon Way to ultimately outflow to a Sanitation Districts of Los Angeles County (Sanitation Districts) main sewer under New Avenue. The Sewer and Storm Drain Division of the City's Utilities Department maintains and operates the sanitary sewer collection system within the City. This system consists of 2,800 manholes and seven lift stations with main sewer lines ranging from four to 36 inches in diameter. Virtually all of the system is composed of vitrified clay pipe.[2]

(b) Wastewater Treatment

Alhambra does not operate its own wastewater treatment plant. All wastewater is conveyed through the City sewer system to the Sanitation Districts system, from whose transmission lines sewage is transferred to one of two reclamation plants. The Sanitation Districts manage wastewater and solid waste by means of 24 independent special districts serving about 5.5 million people. The Sanitation Districts' wastewater system includes approximately 1,400 miles of sewers, 48 active pumping plants, and 11 wastewater treatment plants that transport and treat about half of the wastewater in Los Angeles County. In particular, wastewater generated in the City is be treated at one of three off-site regional treatment plants: the Joint Water Pollution Control Plant (JWPCP), the Whittier Narrows Water Reclamation Plant (WNWRP), and the Los Coyotes Water Reclamation Plant (LCWRP). These treatment plants are each a part of

[1] *A siphon allows sewers to pass under obstructions such as rivers or other depressed landscape features where reliance upon gravity is insufficient. Unlike a main sewer pipe, which flows by gravity, the siphon pipes flow under pressure and must have flow velocities greater than three feet per second in order to keep material suspended.*

[2] *2019 General Plan, City of Alhambra, Page 86.*

the Joint Outfall System (JOS) that provides sewage transfer, conveyance, and treatment for a large portion of coastal Los Angeles County. The JWPCP has a treatment capacity of 400 million gallons per day (mgd) and currently treats approximately 253.4 mgd; thus, it has 146.6 mgd of available capacity. The WNWRP has a treatment capacity of about 15 mgd and currently treats approximately 7.3 mgd; thus, it has 7.7 mgd of available capacity. The LCWRP has a treatment capacity of 37.5 mgd and currently treats 20.4 mgd, resulting in 17.1 mgd of available capacity. The three plants together have a combined total excess capacity of 171.4 mgd.

(c) Existing Wastewater Generation at Project Site

The vast majority of the wastewater currently being generated at the Project Site is attributable to the office and health club uses in the Office Plan Area. Smaller amounts are generated by the building in the Corner Plan Area. The office building in the North Plan Area has been vacant for approximately 20 years and, thus, does not currently contribute wastewater to the sewer system. Most of the remaining on-site area consists of parking lots, warehouses, and storage sheds that contribute little, if any, wastewater to the City's sewer system.

For purposes of this analysis, the Office Plan Area is excluded from the calculation of existing wastewater generation from the Project Site, as the Project would not alter any of the existing uses in the Office Plan Area. For the remainder of the Project Site, calculations of existing wastewater flow are characterized by the street containing the sewer line each portion of the site is connected to. These sewer catchment boundaries do not exactly match the Plan Area boundaries shown on Project plans. As shown in Table IV.P.1-1, existing uses on the Project Site (exclusive of the Office Plan Area) generate a peak dry weather wastewater flow of approximately 16,631 gallons per day (gpd).

Table IV.P.1-1
Existing Wastewater Flow

Land Use/Sewer Tributary	Size	Wastewater Generation Rates	Total Dry Weather Flow (gpd)
Professional Office – Orange Street (North)	1.63 acres	2,640 gpd/acre	4,303
Professional Office – Date Avenue (East)	2.81 acres	2,640 gpd/acre	7,418
Professional Office – Mission Road (South)	1.86 acres	2,640 gpd/acre	4,910
Total	**6.3 acres**		**16,631**

Notes: gpd = gallons per day

Existing development in the Office Plan Area that contributes wastewater to sewers in Fremont Avenue is excluded from this table as the Project would not alter this portion of the Project Site.

Source: Civil Engineering Support Studies for The Villages At The Alhambra, Fuscoe Engineering Inc., April 17, 2019.

3. Project Impacts

a) Methodology

To evaluate wastewater impacts associated with construction and operation of the Project, the analysis below compares the wastewater flow (for both construction and operation) of the Project with the capacity of the existing wastewater treatment facilities that would serve the Project Site area.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with Appendix G of the State CEQA Guidelines, the Project would have a significant impact related to wastewater if it would:

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

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.

c) Project Design Features

No specific Project Design Features are proposed with regard to wastewater.

d) Analysis of Project Impacts

Threshold a) ***Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?***

This section addresses Project impacts with respect to wastewater facilities. For an analysis of the Project's impacts with respect to water facilities, see **Section IV.P.2, Utilities and Service Systems – Water**, of the Draft EIR. For an analysis of the Project's impacts with respect to stormwater drainage, see **Section IV.I, Hydrology and Water Quality**, of the Draft EIR. For an analysis of the Project's impacts with respect to electric power and natural gas facilities, see **Section IV.E, Energy**, of the Draft EIR.

(1) Impact Analysis

(a) Wastewater Treatment

As stated previously, the Project Site is located within the service areas of the JWPCP, the WNWRP, and the LCWRP, which treat sewage from the City of Alhambra and other nearby municipalities. The Project would generate wastewater that is typically associated with residential land uses; thus, no industrial discharge into the wastewater system would occur. As the JWPCP, WNWRP, and LCWRP are in compliance with the State's wastewater treatment requirements, the Project would not exceed wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board.[3] Therefore, impacts would be less than significant.

[3] *California Regional Water Quality Control Board, Los Angeles Region, NPDES No. CA0053813, Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for Joint Outfall System, Joint Water Pollution Control Plant; NPDES No. CA0054011, Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for Joint Outfall System, Los Coyotes Water Reclamation Plant; and NPDES No. CA0053716, Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for Joint Outfall System, Whittier Narrows Water Reclamation Plant.*

(b) Wastewater Generation

(i) Construction

During construction, a negligible amount of wastewater would be generated by construction employees. It is anticipated that portable toilets would be provided by a private company and the waste disposed of off-site. No new connections to the public sewer system would be required for the construction employees. The limited potential impacts on sewer facilities would not cause an increase in flows beyond the available capacity of the existing conveyance and treatment systems. Construction impacts would be less than significant.

Off-site construction for sewer connection and related infrastructure upgrades for the Project, if required, would not be expected to create a significant impact to the physical environment because: (1) existing service would not be disrupted; (2) replacement of the sewer lines, if required, would be within public and private rights-of-way; and (3) the existing infrastructure (sewer lines and connectors) would be replaced with improved infrastructure in areas that have already been significantly disturbed. However, the replacement or addition of infrastructure could potentially result in temporary lane closures and delays. As discussed in **Section IV.N, Transportation** of the Draft EIR, the Project would implement a Work Zone Traffic Control Plan under Project Design Feature TR-PDF-2. Implementation of the Plan would facilitate the flow of traffic during the potential off-site wastewater upgrade activities near the Project Site, and impacts would be less than significant.

(ii) Operation

As shown on Table IV.P.1-2, the Project is estimated to generate a net increase of approximately 195,569 gallons per day (gpd) (or 0.196 mgd) of wastewater over existing uses in the North, East, Corner, and South Plan Areas of the Project Site. As discussed previously, because no changes would be made to the uses in the Office Plan Area as part of the Project, wastewater flows from this portion of the Project Site would not change and are thus excluded from this analysis.

Table IV.P.1-2
Estimated Project Wastewater Generation

Land Use/Sewer Tributary[a]	Size[a]	Wastewater Generation Rates (gpd)	Total Dry Weather Flow (gpd)
Proposed			
Multi-Family Residential – Orange Street (North)	262 du	200 gpd/du	52,400
Multi-Family Residential – Date	331 du	200 gpd/du	66,200

Table IV.P.1-2
Estimated Project Wastewater Generation

Land Use/Sewer Tributary[a]	Size[a]	Wastewater Generation Rates (gpd)	Total Dry Weather Flow (gpd)
Avenue (East)			
Multi-Family Residential – Mission Road (South)	293 du	200 gpd/du	58,600
Multi-Family Residential – Fremont Avenue (West)	175 du	200 gpd/du	35,000
Gross Proposed	**1,061 du**		**212,200**
Less Existing (Total for All Sewer Tributary Areas to be Redeveloped)			**16,631**
Net Proposed			**195,569**

Note: du = dwelling units; gpd = gallons per day

[a] *Because the boundaries of the sewer catchment areas on the Project Site do not align with the Project Plan Area boundaries, the number of dwelling units proposed to drain to sewers located in each of the four streets surrounding the Project Site does not match the number of dwelling units proposed within the North, Corner, and South Plan Areas, as described in Section II, Project Description.*

Source: Civil Engineering Support Studies for The Villages At The Alhambra, Fuscoe Engineering Inc., April 17, 2019.

As discussed previously, the JWPCP, WNWRP, and LCWRP have a combined total available excess capacity of 171.4 mgd above their existing levels of wastewater treatment. The Project's 0.196 mgd net increase in wastewater generation over the existing Project Site conditions represents approximately 0.1 percent of the combined remaining capacity at the three treatment plants. Thus, the JWPCP, WNWRP, and LCWRP would have adequate capacity to accommodate the Project's wastewater treatment demands.

Based upon the sewer system analysis conducted for the Project in 2018 utilizing the citywide sewer network hydraulic model (see **Appendix J** of the Draft EIR), the existing municipal sewer system serving the Project Site would have sufficient capacity to accept and convey Project-generated wastewater under peak dry weather flow conditions. Under peak wet weather flow conditions (which considers the addition of storm runoff to the system), three segments of eight-inch sewer pipe in Mission Road to the south of the Project Site totaling approximately 883 linear feet would not meet the City's established peak wet weather flow criterion with the addition of Project-generated wastewater. The sewer system analysis recommends upsizing these three segments of sewer pipe in Mission Road from eight inches to 10 inches in order to address this insufficiency. As shown in the sewer system analysis, Project wastewater flows would not adversely affect the existing siphon conveying wastewater under the Union Pacific

Railroad corridor south of Mission Road and no improvements to the siphon are expected to be required.

The City's Utilities Department is required by the AMC to review Project plans with respect to sewer connections and to review and approve proposed improvements to the municipal sewer system. The Project Applicant would be required to construct and finance the necessary improvements to convey the wastewater to a point with sufficient capacity prior to issuance of a building permit for the Project. In addition, the Project Applicant would also be responsible for any necessary sewer connection fees.[4] After completion of the required improvements, a final approval of the sewer capacity would be provided, as well as a connection permit. Thus, the Project's operational activities would not require the need for new or expanded wastewater treatment facilities, the construction of which could cause significant environmental effects. Therefore, Project impacts related to wastewater treatment services would be **less than significant**.

(2) Mitigation Measures

Impacts related to wastewater treatment facilities would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to wastewater treatment facilities would be less than significant without mitigation.

Threshold c) Would the Project 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?

(1) Impact Analysis

As discussed under Threshold (a), the Project's demand for wastewater treatment services could be accommodated by existing treatment capacity. As such, the Project would result in a determination by the City's Utilities Department that it has adequate capacity to serve the Project's projected demand in addition to its existing commitments. Therefore, impacts related to wastewater treatment services would be **less than significant**.

(2) Mitigation Measures

[4] *Alhambra Municipal Code, Section 16.28.*

Impacts related to wastewater treatment would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to wastewater treatment would be **less than significant** without mitigation.

e) Cumulative Impacts

(1) Impact Analysis

Implementation of the Project in conjunction with the cumulative projects identified in **Section III, Environmental Setting**, would increase demand for wastewater services provided by the City's sewer system. Of the nine cumulative projects, six would be served by the same City of Alhambra sewer system as the Project, and thus are counted as part of this cumulative analysis. The remaining three cumulative projects would contribute wastewater to the City of Monterey Park's sewer system.

As shown in Table IV.P.1-3, the cumulative projects within the City of Alhambra, in combination with the Project's net increase in wastewater generation, would generate approximately 713,813 gpd (0.714 mgd) of wastewater, with the Project accounting for approximately 38 percent of that projected increase in wastewater generation.

Table IV.P.1-3
Estimated Cumulative Wastewater Generation

Land Use	Total Size/Unit	Wastewater Generation Rates	Total (gpd)
Residential [a]	448 du	468 gallons / unit	209,664
Senior Assisted Living Retirement [a]	177 du	468 gallons / unit	82,836
Retail/Commercial	207,898 sf	1,000 gallons/ 1,000 sf	207,898
Restaurant	14,246 sf	1,000 gallons/ 1,000 sf	14,246
Office	18,000 sf	200 gallons / 1,000 sf	3,600
		Cumulative Projects Subtotal	**518,244**
		Project Net Increase	**195,569**
		Total (Cumulative Projects + Project)	**713,813**

Note: sf = square feet; du = dwelling unit, gpd = gallons per day
Source for wastewater generation rates: City of Alhambra 2018 General Plan Update Draft EIR.
[a] Assumes all residential units and senior retirement facilities are two-bedroom units.

For each cumulative project, the City, as part of the building permit process, would confirm and ensure that there is sufficient capacity in the local and trunk lines to accommodate the cumulative project's wastewater flows. Further detailed gauging and evaluation would be needed as part of the permit process to identify a specific sewer connection point. If the public sewer has insufficient capacity, then the developer would be required to build sewer lines to a point in the sewer system with sufficient capacity. A final approval for sewer capacity and connection permit would be made at that time. Each cumulative project would also pay any required sewer connection fees.

The cumulative projects would rely on the wastewater treatment services provided by the same three treatment plants that would serve the Project, as all cumulative projects are within the service boundaries of Sanitation Districts. The remaining excess capacity of the treatment plants is 171.4 mgd. The cumulative sewage generation would be well within the design capacity of the treatment plants, representing approximately 0.4 percent of the remaining capacity. As such, the Project's incremental effect on cumulative impacts to wastewater treatment capacity would not be cumulatively considerable. Therefore, cumulative impacts related to wastewater would be **less than significant**.

(2) Mitigation Measures

No significant cumulative impacts related to wastewater have been identified, and no mitigation measures are required.

(3) Level of Significance after Mitigation

Cumulative impacts related to wastewater would be **less than significant** prior to mitigation.

IV. Environmental Impact Analysis

P.2. Utilities and Service Systems – Water

1. Introduction

This section evaluates the Project's potential impacts on water supply and infrastructure. The City is a member agency of the San Gabriel Valley Municipal Water District (SGVMWD). The City is a local water purveyor that serves retail customers within its service area. The analysis in this section evaluates the Project's water consumption during construction and operation of the Project, and the capacity of the City's existing water supply and infrastructure. A summary of applicable water regulations is also provided in this section. In addition, the potential cumulative impacts to water supply and infrastructure associated with the Project, in combination with all known cumulative projects are evaluated.

The demand on water supply and infrastructure is assessed by considering the estimated amount of water that would be consumed by the Project during construction and operation and whether the existing water supply has capacity to serve the Project. Based on this analysis, a determination is made as to whether the existing water supply and infrastructure can accommodate the Project's estimated water consumption.

The information and analysis in this section is primarily based on the following items, included in **Appendix J** and **Appendix M** of this Draft EIR:

J Civil Engineering Support Studies for The Villages At The Alhambra, Fuscoe Engineering Inc., April 17, 2019.

M The Villages At The Alhambra Water Supply Assessment, Psomas, March 2018.

2. Environmental Setting

a) Regulatory Framework

(1) Federal

(a) Clean Water Act

The Federal Clean Water Act (CWA) establishes regulatory requirements for potable water supplies, including raw and treated water quality criteria. The United States Environmental Protection Agency (U.S. EPA) established primary drinking water standards in Section 304 of the CWA. States are required to ensure that potable water sold by retail providers to the public meets these standards. The City is required to monitor water quality and conform to the regulatory requirements of the CWA.

(b) Safe Drinking Water Act

Enacted in 1974 and implemented by the U.S. EPA, the federal Safe Water Drinking Act imposes water quality and infrastructure standards for potable water delivery systems nationwide. The primary standards are health-based thresholds established for numerous toxic substances. Secondary standards are recommended thresholds for taste and mineral content.

(2) State

(a) Safe Drinking Water Act

California enacted its own Safe Drinking Water Act in 1976. The California Department of Public Health (CDPH) is responsible for the Safe Water Drinking Act. Title 22 of the California Code of Regulations establishes CDPH authority and stipulates drinking water quality and monitoring standards. These standards are equal to or more stringent than the federal standards.

(b) Senate Bill 610 and Senate Bill 221

Senate Bill 610 (SB 610) and Senate Bill 221 (SB 221) became effective January 1, 2002, amended Sections 10910-10915 of the State Water Code (CWC), and require that counties and cities consider the availability of adequate water supplies for certain new large developments projects as part of the CEQA process and obtain written verification of sufficient water supply from the local water supplier to serve proposed large development projects in their jurisdiction.

Pursuant to SB 610, projects that are required to obtain Water Supply Assessments (WSAs) include the following:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A proposed hotel or motel, or both, having more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- A mixed-use project that includes one or more of the above-identified projects; or
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project.

The requirements of SB 221 and SB 610 have also been incorporated into the Subdivision Map Act, which provides that "[t]he legislative body of a city or county or the advisory agency, to the extent that it is authorized by local ordinance to approve, conditionally approve, or disapprove the tentative map, shall include as a condition in any tentative map that includes a subdivision a requirement that a sufficient water supply shall be available."[1] The public water system's written verification of either its ability or inability to provide sufficient water supplies to meet the projected demand must be supported by "substantial evidence." The "substantial evidence" may include, but is not limited to, any of the following: (1) the public water system's most recently adopted urban water management plan; (2) a water supply assessment completed pursuant to CWC Section 10910; or (3) other information relating to the sufficiency of the water supply that contains analytical information that is substantially similar to the assessment required by Section 10635 of the CWC, which requires every urban water supplier to include an assessment of the reliability of its water service during normal, dry, and multiple dry water years (see California Government Code Section 66473.7(c)). The proposed Project meets the thresholds set forth in SB 610 listed above; therefore, a WSA is required for the Project.

[1] *The definition of "subdivision" includes "a proposed residential development of more than 500 dwelling units….". See Cal. Gov't Code § 66473.7(a)(1). Therefore, the proposed Project meets the definition of a "subdivision" as defined in Government Code Section 66473.7.*

(c) Urban Water Management Planning Act

The California Urban Water Management Planning Act of 1984 requires every municipal water supplier who serves more than 3,000 customers or provides more than 3,000 acre-feet per year (AFY) of water to prepare an Urban Water Management Plan (UWMP) every five years to identify short-term and long-term water resources management measures to meet growing water demands during normal, single-dry, and multiple-dry years. In the UWMP, the water supplier must describe the water supply projects and programs that may be undertaken to meet the total water use of the service area.

A number of new requirements have been added to the Urban Water Management Planning Act, including a narrative description of water demand measures implemented over the past five years and future measures planned to meet 20 percent demand reduction targets by 2020; implementation of a standard methodology for calculating system water loss; a mandatory electronic filing of UWMPs, and a voluntary reporting of passive conservation savings, energy intensity, and climate change; and a requirement to analyze and define water features that are artificially supplied with water.

(d) Executive Order B-29-15

On April 1, 2015, Governor Brown signed Executive Order B-29-15, providing actions that will save water, increase enforcement to prevent wasteful water use, streamline the state's drought response, and invest in new technologies to make California more drought resilient. The Executive Order provides water savings by directing the State Water Resources Control Board (SWRCB) to implement mandatory water reductions in cities and towns to reduce water usage by 25 percent or approximately 1.5 million acre-feet. The Executive Order calls for local water agencies to implement conservation pricing to discourage water waste.[2]

(e) Executive Order B-36-15

In November 2015, Governor Brown issued Executive Order B-36-15, which called for additional actions to build on the State's response to record dry conditions and to assist recovery efforts from devastating wildfires. These included extension of previous executive orders, prioritization of projects that enhance water conservation, support for the extension of water restrictions, and support for projects that remediate wildfire damage and restore power plant operation.

[2] *California Governor: http://gov.ca.gov/news.php?id=18910*

(f) Executive Order B-37-16

On May 9, 2016, Governor Brown signed Executive Order B-37-16 establishing a new water use efficiency framework for California. The order bolstered the state's drought resilience and preparedness by establishing longer-term water conservation measures that include permanent monthly water use reporting, new urban water use targets, reducing system leaks and eliminating clearly wasteful practices, strengthening urban drought contingency plans and improving agricultural water management and drought plans.

(g) Executive Order B-40-17

On April 7, 2017, Governor Brown signed Executive Order B-40-17, which ended the drought state of emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne, where emergency drinking water projects will continue to help address diminished groundwater supplies. It maintains water reporting requirements and prohibitions on wasteful practices. The order was built on actions taken in Executive Order B-37-16, which remains in effect.[3]

(h) Water Plan

As required by the California Water Code Section 10005(a), the California Water Plan is the state's strategic plan for managing and developing water resources statewide for current and future generations. It provides a collaborative planning framework for elected officials, agencies, tribes, water and resource managers, businesses, academia, stakeholders, and the public to develop findings and recommendations and make informed decisions for California's water future.

The California Water Plan is updated every five years and presents the status and trends of California's water-dependent natural resources; water supplies; and agricultural, urban and environmental water demands for a range of plausible future scenarios. The California Water Plan also evaluates different combinations of regional and statewide resource management strategies to reduce water demand, increase water supply, reduce flood risk, improve water quality, and enhance environmental and resource stewardship. The evaluations and assessments performed for the California Water Plan help identify effective actions and policies for meeting California's resource management objectives in the near term and for several decades to come. The California Water Plan was last updated in 2013, and a new update is underway.

[3] *Governor Drought Declaration: http://www.water.ca.gov/waterconditions/declaration.cfm*

(i) Governor's California Water Action Plan

While the California Water Plan is required by the Water Code, the California Water Action Plan (Action Plan) was released by Governor Jerry Brown's administration. The first Action Plan was published in January 2014 and describes a set of essential actions intended to lay the foundation for sustainable water management in the state.[4] The Action Plan discusses the challenges for managing the state's water resources supply, scarcity, and quality, and also considers the effects of ecosystems, flooding, population growth, and climate change and floods.[5] Ten actions were presented: (1) make conservation a California way of life; (2) increase regional self-reliance and integrated water management across all levels of government; (3) achieve the co-equal goals for the Delta; (4) protect and restore important ecosystems; (5) manage and prepare for dry periods; (6) expand water storage capacity and improve groundwater management; (7) provide safe water for all communities; (8) increase flood protection; (9) increase operational and regulatory efficiency; and (10) identify sustainable and integrated financing opportunities. In complementing local efforts, the Action Plan emphasizes collaboration between different levels of government, water agencies, conservationists, tribes, farmers, and other stakeholders. Since the Action Plan Update for 2016 has been released, its implementation progress has also been documented with focuses on policy, funding, and coordinated projects. The Action Plan will continue to be implemented simultaneously with the California Water Plan Update as it is completed.[6]

(3) Regional

As discussed in detail below, the Metropolitan Water District of Southern California (MWD) is a primary source of water supply within southern California. Based on the water supply planning requirements imposed on its member agencies and ultimate customers, MWD has adopted a series of official reports on the state of its water supplies. As described in further detail below, in response to recent developments in the Sacramento Delta, the MWD has developed plans intended to provide solutions that, when combined with the rest of its supply portfolio, will ensure a reliable long-term water supply for its member agencies.

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[4] *California Natural Resources Agency, California Department of Food and Agriculture, California Environmental Project Agency, California Water Action Plan, 2014, http://resources.ca.gov/docs/california_water_action_plan/2014_California_Water_Action_Plan.pdf, accessed July 27, 2018.*

[5] *California Department of Water Resources, Draft California Water Plan Update 2018, https://water.ca.gov/LegacyFiles/waterplan/docs/cwpu2018/sc/dec2017/01_Update2018_Working-Draft_Dec2017.pdf, accessed July 27, 2018.*

[6] *Ibid.*

(a) MWD's Integrated Water Resources Plan

MWD first adopted its Integrated Water Resources Plan (IRP) in 1996. The IRP is updated every five years. The goal of the IRP is for southern California to have a reliable water system that extends to the future. The 2015 IRP Update, adopted in January 2016, provides MWD's strategy for water resource reliability through the year 2040. The 2015 IRP Update calls for stabilizing and maintaining imported water supplies; meeting future growth through increased water conservation and sustaining and developing new local supplies; pursuing a comprehensive transfers and exchanges strategy; building storage in wet and normal years to manage risks and drought; and preparing for uncertainty with Future Supply Actions. Overall, the strategies presented in the 2015 IRP Update include investments to maintain the reliability of imported water supplies, expansion of local water supplies and reduction in water demand through a variety of conservation and water use efficiency initiatives.[7]

(b) MWD's 2015 UWMP

MWD's 2015 UWMP addresses the future of MWD's water supplies and demand through the year 2040.[8] Based on its 2015 UWMP, MWD has supply capabilities that would be sufficient to meet expected demands from 2020 through 2040 under single dry-year and multiple dry-year hydrologic conditions. MWD has comprehensive plans for stages of actions it would undertake to address up to a 50-percent reduction in its water supplies and a catastrophic interruption in water supplies through its Water Surplus and Drought Management and Water Supply Allocation Plans. MWD has also developed an Emergency Storage Requirement to mitigate against potential interruption in water supplies resulting from catastrophic occurrences within the southern California region and is working with the State to implement a comprehensive improvement plan to address catastrophic occurrences that could occur outside of the southern California region. MWD is also working with the State on the Delta Risk Management Strategy to reduce the impacts of a seismic event in the Delta that would cause levee failure and disruption of State Water Project (SWP) deliveries. In addition, MWD has plans for supply implementation and continued development of a diversified resource mix, including programs in the Colorado River Aqueduct, SWP, Central Valley transfers, local resource projects, and in-region storage that enables the region to meet its water supply needs. As set forth in its 2015 UWMP, MWD will also continue investments in water use efficiency measures to help the region achieve the 20 percent per person potable water use reduction by 2020.

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[7] *Metropolitan Water District of Southern California, Integrated Water Resources Plan 2015 Update, January 2016.*

[8] *Metropolitan Water District of Southern California, 2015 Urban Water Management Plan, June 2016.*

(c) MWD's Water Surplus and Drought Management Plan

In 1999, MWD incorporated the water shortage contingency analysis that is required as part of any urban water management plan into a separate, more detailed plan, called the Water Surplus and Drought Management Plan. The overall objective of the Water Surplus and Drought Management Plan is to ensure that shortage allocation of MWD's imported water supplies is not required.[9] The Water Surplus and Drought Management Plan provides policy guidance to manage MWD's supplies and achieve the goals laid out in the agency's IRP. The Water Surplus and Drought Management Plan separates resource actions into two major categories: Surplus Actions and Shortage Actions. The Water Surplus and Drought Management Plan considers the region to be in surplus only after MWD has met all demands for water, including replenishment deliveries. The Surplus Actions store surplus water, first inside and then outside of the region. The Shortage Actions of the Water Surplus and Drought Management Plan are separated into three subcategories: Shortage, Severe Shortage, and Extreme Shortage. Each category has associated actions that could be taken as a part of the response to prevailing shortage conditions. Conservation and water efficiency programs are part of MWD's resource management strategy through all categories.

(d) MWD's Water Supply Allocation Plan

While the Water Surplus and Drought Management Plan included a set of general actions and considerations for MWD staff to address during shortage conditions, it did not include a detailed water supply allocation plan or implementation approach. Therefore, MWD adopted a water supply plan called the Water Supply Allocation Plan (WSAP) in February 2008, and has since been implemented three times, most recently in April 2015. The WSAP includes a formula for determining reductions of water deliveries to member agencies during extreme water shortages in MWD's service area conditions (i.e., drought conditions or unforeseen cuts in water supplies). The formula allocates shortages of MWD supplies and seeks to balance the impacts of a shortage at the retail level, while maintaining equity on the wholesale level and taking into account growth, local investments, changes in supply conditions and the demand hardening aspects of non-potable recycled water use and the implementation of conservation savings programs. The allocation period covers 12 months from July of a given year through the following June.

[9] *Metropolitan Water District of Southern California, Water Surplus and Drought Management Plan: Report No. 1150, August 1999.*

(4) Local

(a) City of Alhambra General Plan

The City's General Plan provides direction regarding the City's vision for future development in the City and includes several chapters to help guide the design of future development. It also contains several broad goals, objectives, and policies for neighborhood design to create a more livable city for existing and future residents. These goals and policies are stated not in terms of specific design guidelines, but in terms of general neighborhood-wide design policies.

The General Plan serves as a guide for the City's overall long-range growth and development policies and serves as a guide to update community plans, specific plans, and the citywide elements. These citywide elements address functional topics that cross community boundaries, such as transportation, and address these topics in detail.

The City has recently updated its General Plan in August 2019. A draft of the updated General Plan had been released in July 2018 for public review and a revised draft released in early 2019. The updated General Plan is intended to allow land use and policy determinations to be made within a comprehensive framework that incorporates public health, safety, and qualities of life considerations. The General Plan consists of seven elements, including a Land Use Element, Circulation Element, and Open Space Element. Each element addresses its respective subject and the City's 20-year vision for the future. With regard to water, the General Plan's Services and Infrastructure Chapter establishes the following goal and policies:

- **Goal SI-9** A reliable water supply, treatment, and distribution system that meets current and future water demand as affordably as possible, while considering the City's goals related to resource conservation.
    - **Policy SI-9A** Maintain, upgrade, and expand water supply, distribution, storage, and treatment facilities to ensure access to adequate water supplies.
    - **Policy SI-9B** Ensure that local drinking water meets or exceeds federal and state drinking water regulatory standards.
    - **Policy SI-9C** Explore opportunities to aid in recharge of local groundwater basins.

(c) Municipal Water Conservation Measures

The City has implemented several measures to both mandate and encourage water conservation. Some of these are incorporated into the Alhambra Municipal Code (AMC),

including specific “green building” standards with which new development or redevelopment projects must comply. Other water demand management measurements are described below.

The City has various water waste prohibition and guidelines incorporated in its Urban Water Shortage Contingency Plan (Plan). The Plan gives the City authority to declare water shortage conditions and implement stages of action to reduce water demands. It defines terms used in the plan and implementation procedures pursuant to the requirements of the CWC. The Plan gives City Water Division staff the authority to monitor and evaluate the projected supply, as well as demand for water by its customers. In the event of a water shortage, and depending on the severity of the water shortage conditions, staff make recommendations to the City Council for water use reduction. At any time during the water shortage period, the City Council may implement another plan. As of June 22, 2015, the City implemented the Water Shortage Plan III (Resolution No. R2M15-12), which includes additional water conservation measures such as restricting landscape watering days or restricting swimming pool refills.

The City has a complete metered system for all customer sectors and separate meters for each unit of multi-family residential, commercial and all institutional/governmental facilities. If there is new development or redevelopment in the City, each unit is individually metered. For the City’s metered distribution system, commodity rates exist for all new and existing connections. According to AMC 15.12.010, all City water used on any premises where a meter is installed must pass through the meter, except as provided in the case of private fire services. No bypass or connection around the meter between the services and the main shall be made or maintained. Customers will be held responsible and charged for all water passing through their meters.

The City has basic system operation fees that vary with the size of the connection, as well as a water usage charge that increases with each increase in water use. Those customers that use between 0 and 12 cubic feet (CCF) pay less per billing unit than a customer that uses between 13 and 20 CCF or more. This tiered water rates structure effectively promotes water conservation by providing financial incentives to its customers through the City's rate schedule.

The City’s Public Works Department also educates the public about water conservation, water awareness, and regulatory mandates. The City has been reaching its customers about these issues through insertions in bi-monthly water bills, notices in the local newspaper, social media, and the City’s website.

The City of Alhambra repairs leaks within its distribution system on an as-needed basis. The City closely monitors its water production and consumption use tabulating the amount of "unaccounted for water". The City's current estimated "unaccounted for water" is

approximately 6 percent. If the City notices an increase in "unaccounted for water" that is not attributed to normal water loss, the City will investigate the cause and repair a leak if necessary. Normal water loss can result from the installation of new water mains, difference in accuracy of meters, water facilities or water connections, street cleaning, and Fire Department training. If water loss is not a result of normal water loss activities, the City can assume there is a faulty meter or a leak in the distribution system, identify the cause, and make the repairs.

(d) Landscaping Water Efficiency

The 2016 California Green Building Standards Code (CalGreen) addresses outdoor water conservation by reducing the area devoted to high-irrigation use lawns and plants, emphasizing natural drought-tolerant plantings and the installation of irrigation controls that respond to local weather conditions. This is consistent with the Model Water Efficient Landscaping Ordinance (MWELO), which was adopted by the State on July 15, 2015. A corresponding ordinance was adopted by the City on January 11, 2016, and is contained in AMC Chapter 23.48, Landscaping Standards. Under Chapter 23.48, all projects that require landscape and irrigation plan review by the Model WELO are required to submit landscape and irrigation plans compliant with the Model WELO for approval by the Design Review Board.

(e) City of Alhambra UWMP

The City's current UWMP provides water supply availability and reliability projections based on population growth estimates over the planning period of the UWMP (2015-2040), with an annual growth rate of approximately 0.57 to 2.6 percent over that time period. Population growth estimates show an increase of 11,789 persons in the City's service area population during the planning period of the UWMP, from 86,036 to 97,825 persons.

The 2015 UWMP is an update to the City's previous UWMP, dated June 2011, which was prepared according to the UWMP Act, CWC Division 6, Part 2.6. The UWMP serves as a long-range planning document for the City of Alhambra service area and it contains the same types of water supply and demand projections that would be included in a WSA.

The City is a local water purveyor that serves retail customers within its service area. The City's Public Works Department manages the City's Utilities Division, which is responsible for providing the community with a dependable source of clean drinking water and efficient disposal of sewage and stormwater by means of a well-maintained infrastructure, high-trained and professional personnel, and state-of-the-art equipment. It also educates the public about water conservation, water awareness, and regulatory mandates. The infrastructure necessary to utilize recycled water is currently unavailable in Alhambra, although there may be future opportunities to incorporate recycled water into landscape

irrigation. As a member of the SGVMWD, the City is a participant in discussions regarding the possibility of utilizing recycled water for groundwater recharge.

b) Existing Conditions

(1) City Water System

The City's Water Service Area consists of the entire area within the limits of the City as the service area boundary coincides with the City boundary. As reported in California Department of Finance (DOF) records, the City's population was 85,545 in 2015. The number of dwelling units in the City totaled 31,245 in 2015 with the following distribution of housing: 44.0 percent single detached, 12.3 percent single attached, 11.9 percent two to four units; 31.6 percent five plus units. The City's population is projected to increase to 97,825 by 2040 as reported in the City's 2015 UWMP, which is an increase of 14.4 percent relative to the population in 2015.

The City's water distribution system is divided into two major pressure zones: northern and southern. The northern zone, which has the higher service elevations, serves water to four service areas through separate booster pump stations, drawing water from an associated reservoir. The City's distribution system includes six reservoirs and five booster pump stations.

As noted above, the City is a member agency of the SGVMWD. The City's primary source of water supply is groundwater. The City has the legal right to pump groundwater from both the Main San Gabriel Groundwater Basin (Main San Gabriel Basin) and the Raymond Groundwater Basin (Raymond Basin). The City produces groundwater for potable water supply from the Main San Gabriel Basin via 10 wells: Longden 1, Longden 2, 7, 8, 9, 11, 12, 13, 14 and 15. Groundwater produced from Well Nos. 7, 8, 11 and 12 is treated at a City water treatment plant to remove volatile organic carbons (VOCs) and reduce nitrate concentrations. The treatment plant, which went online in 2009, uses liquid-phase granular activated carbon to remove VOCs and ion exchange technology to reduce nitrate concentrations. The wells can provide approximately 2,016 acre-feet per year (AFY) of groundwater supply to meet City demands assuming the wells are operated 50 percent of the year. Currently, the City's lone well that produces groundwater from the Raymond Basin (Well No. 2) is out of service due to high nitrate levels. The City is evaluating a blending plan that would enable Well No. 2 to be placed back in service with a production of approximately 500 AFY.

As a supplementary, secondary water supply, the City purchases imported water from the MWD through an agreement with the Upper San Gabriel Valley Municipal Water District (Upper District) called the Cooperative Water Exchange Agreement (CWEA). From Fiscal

Year (FY) 2011 through FY 2015, the City's water supply averaged approximately 74 percent from groundwater and 26 percent from imported water.

(2) City Water Demand

Since the previous 2010 UWMP update, southern California's urban water demand has been largely shaped by the efforts to comply with the Water Conservation Act of 2009. This law requires all California retail urban water suppliers serving more than 3,000 AFY or 3,000 service connections to achieve a 20 percent water demand reduction (from a historical baseline) by 2020. The City has been actively engaged in efforts to reduce water use in its service area to meet the 2015 interim and the 2020 final water use targets. Meeting this target is critical to ensure the City's eligibility to receive future state water grants and loans. In the City's 2015 UWMP, the City's 2015 interim and 2020 final water use targets were determined to be 138 gallons per capita per day (gpcd) and 131 gpcd, respectively.

Historically, prior to 2010, City water use ranged between 142 and 150 gpcd during non-drought years. In response to persistent dry conditions and the Water Conservation Act, the City's water use has dropped significantly. Through water conservation-related ordinances and measures, City water use ranged between approximately 116 and 118 gpcd from FY 2011 to FY 2014. In 2012, the most severe drought in California history began. In April 2015, Governor Brown issued Executive Order B-29-15 that required a collective reduction in statewide urban water use of 25 percent by February 2016, with each agency in the state given a specific reduction target by the Department of Water Resources (DWR). The City was able to meet the mandated water use reduction from June 2015 through February 2016. On May 9, 2016, Governor Brown issued Executive Order B-37-16 that built on temporary statewide emergency water restrictions to establish longer-term water conservation measures, including permanent monthly water use reporting, new permanent water use standards in California communities, and bans on clearly wasteful practices. City water use dropped significantly in 2015 to 104 gpcd, which was well below the City's 2015 interim target of 138 gpcd, and was already below the City's target water use of 131 gpcd set for 2020.

The drought was officially declared to be over in April 2017, and it is anticipated that water use will increase some relative to 2015 water use. However, it is also anticipated that a great deal of water conservation will remain due to permanent measures that have already been implemented for existing City residences and that will be implemented by new development. Such measures include turf removal, conversion to drought resistant landscapes, conversion to more efficient irrigation systems, retrofits to high efficiency clothes washers and toilets, and implementation of weather-based irrigation controllers.

Future City water demands for FY 2020 through FY 2040 (in five-year increments) were conservatively projected in the City's 2015 UWMP based on the projected City population and assuming the City's target of 131 gpcd is achieved in 2020 and then maintained through the year 2040.

(3) Current and Projected City Water Supply

Over the five-year period from 2011 through 2015, Alhambra's water supply has consisted of groundwater, MWD imported water, and a small amount of water from an intertie with San Gabriel County Water District (SGCWD). The percent water supply from groundwater and MWD imported water has been very consistent and has averaged 73.8 and 26.2 percent, respectively, for the five-year period.

(a) San Gabriel Valley Municipal Water District

SGVMWD is a wholesale water supplier that provides untreated State Water Project (SWP) water, which is water imported from the San Francisco-San Joaquin Bay-Delta (Bay-Delta) via the California Aqueduct, to replenish groundwater supplies in the Main San Gabriel Basin (Main Basin). Its member cities are the cities of Alhambra, Azusa, Monterey Park, and Sierra Madre. The SGVMWD was formed in 1959 to meet the supplemental water needs of its member cities which are located within the San Gabriel Valley. In anticipation of its long-term supplemental water needs, SGVMWD entered into a contract with the State of California in 1962 for the ultimate delivery of 25,000 AFY of water from the SWP. A subsequent 1964 amendment to the water supply contract increased the maximum annual entitlement to 28,800 AF. This quantity of water is not guaranteed each year and varies based on hydrologic conditions.

In 1969, voters within SGVMWD rejected a proposal to annex to the MWD. Consequently, SGVMWD constructed a pipeline (Devil Canyon-Azusa Pipeline) to deliver untreated SWP water to the Main Basin as supplemental water for any production in excess of Main Basin water rights by its member agencies and to furnish SGVMWD's portion of make-up water stipulated in the Long Beach Judgment (discussed below). SGVMWD offers low cost replacement water rates to its member cities by utilizing property tax rates to offset a portion of the cost of the replacement water.

(b) Groundwater Supply

The primary source of water for the City is groundwater produced from the Main Basin via 10 City owned and operated wells. The City also produces groundwater from the Raymond Basin via one well, but that well is currently out of service due to high nitrate levels.

(i) San Gabriel Main Basin

Although there is no limit on the quantity of water that may be extracted by parties to the Main Basin adjudication, including the City, groundwater production in excess of water rights, or the proportional share (pumper's share) of the Operating Safe Yield (OSY), requires purchase of SWP imported replacement water from SGVMWD to recharge the Main Basin.

The City's water rights to Main Basin groundwater amounts to 4.45876 percent of the OSY of the Basin. Typically, during non-drought years, the OSY has been 200,000 AF, which provides the City with a pumper's share of 8,918 AFY. However, for FY 2015, following three years of severe drought, the OSY was established at 150,000 AF, which reduced the City's pumper's share in the Main Basin to 6,688 AFY. In any given year, if the City produces more than its allocated pumper's share of Main Basin groundwater, the City must purchase SWP replacement water from SGVMWD, which is used to replenish the Main Basin.

The Main Basin watershed coincides with a portion of the upper San Gabriel River watershed and underlies most of the San Gabriel Valley. The groundwater basin is bounded by the San Gabriel Mountains to the north, San Jose Hills to the east, Puente Hills to the south, and by a series of hills and the Raymond Fault to the west. The watershed is drained by the San Gabriel River and Rio Hondo, a tributary of the Los Angeles River. The surface area of the basin is approximately 167 square miles and the fresh water storage capacity is estimated to be approximately 8.6 million acre-feet (MAF).

The City pumps its groundwater from the westerly portion of the Main Basin, which is referred to as the Alhambra Pumping Hole (APH). The location is an area with limited replenishment due to the tightness of the groundwater formations and limited facilities for direct recharge to the area. Replenishment of the Main Basin in the area from the Rio Hondo east has little effect on the westerly portion of the Basin due to the limited transmissibility through the tighter formation west of the Rio Hondo.

The total fresh water storage capacity of the Main Basin is estimated to be about 9.5 MAF. Of that amount, about 1.1 MAF has been used historically in Main Basin operations. The Main Basin is replenished by stream runoff from the adjacent mountains and hills; by rainfall directly on the surface of the valley floor; subsurface inflow from Raymond Basin and Puente Basin; and by return flow from applied surface water. The Basin is also replenished with imported water.

Three municipal water districts overlie, or partially overlie, the Main Basin: Upper District,

SGVMWD, and Three Valleys Municipal Water District (Three Valleys District). The Baldwin Park Key Well (Key Well) is used as the benchmark for determining how the

groundwater supply for the entire Main Basin is trending. Pursuant to the Main Basin Judgment, the Main Basin Watermaster manages the Main Basin to maintain the groundwater level at the Key Well between 200 feet and 250 feet, to the extent possible.

Five consecutive years of below-average rainfall and stormwater runoff resulted in a decrease in the groundwater elevation at the Key Well to 173.6 feet as of June 30, 2016, which was a historic low. During FY 2017, rainfall was about 110 percent of average. However, replenishment of storm runoff was only about 65 percent of average due to the San Gabriel River watershed infiltrating much of the rainfall before it could flow into rivers or channels. In a concerted effort to offset the lack of stormwater runoff, during FY 2017, the Watermaster and local basin producers coordinated the delivery of about 76,000 acre-feet of untreated imported water for groundwater replenishment. Also, groundwater production totaled about 184,400 acre-feet, which is second lowest production since inception of Watermaster management. Collectively, these actions resulted in a Key Well elevation of 179.4 feet as of June 30, 2017. Although this elevation is about 21 feet below the “low” end of the operating range for the Watermaster, it represents an increase of 5.8 feet from the previous year.

The DWR does not identify the Main Basin as being in overdraft. The basin is adjudicated, and as such, does not require the preparation of a Groundwater Sustainability Plan (GSP) under the Sustainable Groundwater Management Act. Under the terms of the Long Beach Judgment, entered on September 24, 1965, the water supply of the San Gabriel River system was divided at Whittier Narrows between San Gabriel Valley upstream and the coastal plain of Los Angeles County downstream. The area downstream from Whittier Narrows (Lower Area) receives a quantity of usable water annually from the San Gabriel River system comprised of usable surface flow, subsurface flow at Whittier Narrows and water exported to the Lower Area. This annual entitlement is guaranteed by the area upstream of Whittier Narrows (Upper Area) and provision is made for the supply of make-up water by the Upper Area for years in which the guaranteed entitlement is not received by the Lower Area. Make-up water is imported water purchased by the Main Basin Watermaster and delivered to agencies in Central District to satisfy obligations under the Long Beach Judgment. One major result of the Long Beach Judgment was to leave the Main Basin free to manage its water resources so long as it meets its downstream obligation to the Lower Area under the terms of the Long Beach Judgment.

Under the terms of the Main San Gabriel Basin Judgment (Main Basin Judgement), entered on January 4, 1973, all rights to the diversion of surface water and production of groundwater within the Main Basin and its relevant watershed were adjudicated. The Main Basin Judgment is administered by a nine-member board called the Main San Gabriel Basin Watermaster (Basin Watermaster). The Basin Watermaster files an annual report on Main Basin operations with the Court.

The long-term average Main Basin OSY is about 200,000 acre-feet, although the annual OSY has ranged between 140,000 acre-feet and 240,000 acre-feet. An average OSY of 200,000 AFY was assumed in the SGVMWD 2017 Integrated Resources Plan Update to calculate member cities' projected groundwater production rights for an average year. The OSY was established at 150,000 acre-feet for fiscal years 1977, 1978, 2015, and 2016. An OSY of 150,000 AFY was used to calculate member cities' projected groundwater production rights for a "worst-case" year. The City of Alhambra's water rights to Main Basin groundwater amounts to 4.45876 percent of the OSY for a given year.

During the late 1970s and early 1980s, significant groundwater contamination was discovered in the Main Basin. The contamination was caused in part by past practices of local industries that had carelessly disposed of industrial solvents referred to as VOCs, as well as by agricultural operations that infiltrated nitrates into the groundwater. Cleanup efforts were undertaken at the local, state, and federal level.

Local water agencies adopted a joint resolution in 1989 regarding water quality issues that stated the Main Basin Watermaster should coordinate local activities aimed at preserving and restoring the quality of groundwater in the Main Basin. The joint resolution also called for a cleanup plan. In 1991, the Court granted the Main Basin Watermaster the authority to control pumping for water quality purposes. Accordingly, the Main Basin Watermaster added Section 28 which requires development of the Five Year Water Quality and Supply Plan and annual updates, which are submitted to the California Regional Water Quality Control Board, Los Angeles Region.

Section 28 of the Main Basin Watermaster's Rules and Regulations require all producers (including the City) to submit an application to 1) construct a new well, 2) modify an existing well, 3) destroy a well, or 4) construct a treatment facility. In 2006, the Main Basin Watermaster issued a permit to the City to construct a treatment facility to remove VOCs from Wells No. 7, 8, 11, and 12. The treatment facility became operational in April 2009. The wells/treatment facility can provide approximately 2,016 AFY of groundwater supply to meet City demands assuming the wells are operated 50 percent of the year.

The City of Alhambra, SGVMWD, MWD, Upper District, and the Main Basin Watermaster participate in a Cooperative Water Exchange Agreement (CWEA), which mitigates a localized condition that exists in the westerly portion of the Main Basin. The APH is located in an area of the Main Basin that typically receives insufficient replenishment due to its hydrogeologic characteristics. To mitigate low groundwater levels, it was agreed that the City of Alhambra would receive direct delivery of water from MWD service connection USG-5 and, in exchange, would reduce its extractions from the APH by approximately 3,000 AFY. All demands in excess of 3,000 AFY will then be satisfied by groundwater production from the Main Basin. Per the agreement, the City must replace 62.6% of the 3,000 AFY supply, which makes the supply a net supply of 1,222 AFY. A provision of the

CWEA also provides a mechanism for MWD to utilize unused capacity in SGVMWD's Devil Canyon-Azusa Pipeline. The CWEA is cooperatively financed by Alhambra, SGVMWD, Upper District, and the Main Basin Watermaster.

(ii) Raymond Basin

The Raymond Basin is located in the northwesterly portion of the San Gabriel Valley and is bounded on the north by the Angeles National Forest, on the west by the San Rafael Hills and is separated from the Main Basin on the southeast by the Raymond Fault. The Raymond Basin is divided into an eastern unit, which is the Santa Anita Subarea, and the Western unit, which is the Pasadena Subarea and Monk Hill Basin. The area of the Raymond Basin is approximately 40.9 square miles. The principal streams in the Raymond Basin are the Arroyo Seco, Eaton Wash, and Santa Anita Wash. The Arroyo Seco drains to the Los Angeles River, while Eaton Wash and Santa Anita Wash drain to the Rio Hondo.

Water levels in the Raymond Basin have varied over time, but are managed to stay within limits of a long-term mean elevation. No estimate of available groundwater storage has been provided since 1971, when a DWR study estimated the available stored water to be 1,000,000 acre-feet, leaving approximately 450,000 acre-feet of storage space available. The DWR does not identify the Raymond Basin as being in overdraft. The basin is adjudicated, and as such, does not require the preparation of a GSP.

In 1937, the City of Pasadena filed suit to adjudicate water rights of the Raymond Basin. The Safe Yield of the Raymond Basin has been established at 30,622 acre-feet under the Decreed Right of 1955. As a result of the Raymond Basin Judgment, participating Parties were allowed to exceed their water right by no more than 10 percent. The water rights are fixed each year and do not vary. Water demands in excess of a Party's water right must be met by purchasing imported water or using other water sources. Producers may not lease water rights between Subareas. Also, producers may not lease or acquire water rights from other Raymond Basin purveyors between subareas. The Raymond Basin Judgment is administered by the Raymond Basin Management Board.

The City of Alhambra historically has pumped groundwater from the Pasadena Subarea of the Raymond Basin. Pursuant to the Decreed Right of 1955, Alhambra's Decreed Right was established at 1,031 AFY. However, as a result of pumping reductions imposed in the Pasadena Subarea, Alhambra's annual pumping right decreased to 722 AFY as of July 1, 2014. Currently, the City's lone well that produces groundwater from the Raymond Basin (Well No. 2) is out of service due to high nitrate levels. The City is evaluating a blending plan that would enable Well No. 2 to be placed back in service with a production of approximately 500 AFY.

(c) Imported Water

MWD is the wholesale water agency that serves supplemental imported water from northern California through the State Water Project (SWP) and the Colorado River Aqueduct (CRA) to 26 member agencies located in portions of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties. MWD supplies approximately 3,000 AFY of imported water to the City of Alhambra at service connection USG-5 as part of the CWEA. SGVMWD provides untreated SWP water to replenish groundwater supplies in the Main Basin.

(i) Colorado River Aqueduct

The CRA, which is owned and operated by MWD, transports water from the Colorado River to its terminus at Lake Mathews in Riverside County. The actual amount of water per year that may be conveyed through the CRA to MWD's member agencies is subject to the availability of Colorado River water for delivery.

Water from the Colorado River system is available to users in California, Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, as well as to Mexico. California is apportioned the use of 4.4 MAF of water from the Colorado River each year plus one-half of any surplus that may be available for use collectively in Arizona, California, and Nevada. MWD has a basic entitlement of 550,000 AFY of Colorado River water, plus surplus water up to an additional 662,000 AFY when specified conditions exist. MWD has not received surplus water for a number of years.

The Colorado River supply faces current and future imbalances between water supply and demand in the Colorado River Basin due to long term drought conditions. Over the period from 2000-2015, there have only been three years when the Colorado River flow has been above average. Approximately 40 million people rely on the Colorado River system for water with 5.5 million acres of land using Colorado River water for irrigation. Climate change also has the potential to affect future supply and demand as increasing temperatures may increase evapotranspiration from vegetation along with an increase in water loss due to evaporation in reservoirs, therefore reducing the available amount of supply from the Colorado River.

(ii) State Water Project

The SWP consists of a series of pump stations, reservoirs, aqueducts, tunnels, and power plants that supply water from the Bay Delta to 29 urban and agricultural agencies throughout California. More than two-thirds of California's residents obtain some of their drinking water from the SWP, which is owned and operated by DWR. On an annual basis, each of the 29 SWP contractors, including MWD as well as SGVMWD, request an amount of SWP water based on their anticipated yearly demand. In most cases, MWD's

requested supply is equivalent to its full Table A Amount, currently at 1,911,500 AFY. The full Table A amount is defined as the maximum amount of imported water to be delivered and is specified in the contract between the DWR and the contractor. After receiving the requests, DWR assesses the amount of water supply available based on precipitation, snow pack on northern California watersheds, volume of water in storage, projected carry over storage, and Sacramento-San Joaquin Bay Delta regulatory requirements.

Due to the uncertainty in water supply, contractors are not typically guaranteed their full Table A Amount, but instead a percentage of that amount based on the available supply. Once the percentage is set early in the water year, the agency can count on that amount of supply or more in the coming year. The percentage is typically set conservative and then held or adjusted upwards later in the year based on a reassessment of precipitation and snowpack.

Future SWP supplies were most recently estimated using the 2015 SWP Delivery Capability Report distributed by DWR in July 2015. The 2015 Delivery Capability Report presents the current DWR estimate of the amount of water deliveries for current conditions and conditions 20 years in the future. These estimates incorporate restrictions on SWP and Central Valley Project (CVP) operations in accordance with the biological opinions of the U.S. Fish and Wildlife Service and National Marine Fisheries Service biological opinions. In addition, these estimates of future capability also reflect potential impacts of climate change and sea level rise.

Under the 2015 Delivery Capability Report with existing conveyance and low outflow requirements scenario, the delivery estimates for the SWP for 2020 conditions as a percentage of Table A amounts are 12 percent, equivalent to 257 thousand acre-feet (TAF) for MWD, under a single-dry year (1977) condition and 51 percent, equivalent to 976 TAF for MWD, under the long-term average condition.

(d) Projected Future City Water Supply

Projected normal year (non-dry year) supplies by source for the City through the year 2040 are shown in Table IV.P.2-1. The total supply matches the total projected City demand. For a normal water year, the Main Basin Watermaster typically sets the OSY at 200,000 AF and the City's pumper's share is 8,918 AF. The City obtains a net imported water supply of 1,122 AFY from MWD through the CWEA. Groundwater the City pumps in a given year above their pumper's share must be replaced. The City can purchase replacement water from SGVMWD for this basin replenishment or could potentially utilize groundwater from their cyclic storage account (10,000 AF maximum) if it is available from wet year storage.

Table IV.P.2-1
Projected Future Alhambra Water Supply

Supply Sources/Demands	Years (acre-feet)				
	2020	**2025**	**2030**	**2035**	**2040**
Main Basin Groundwater[a]	8,918	8,918	8,918	8,918	8,918
MWD Imported Water[b]	1,122	1,122	1,122	1,122	1,122
Main Basin Replacement Water[c]	2,873	3,329	3,761	4,122	4,481
Cyclic Storage[d]	0	0	0	0	0
Total Supply	**12,913**	**13,369**	**13,801**	**14,162**	**14,521**

[a] 4.45876% of OSY, which is estimated at 200,000 AF for a normal water year.
[b] Net supply per CWEA (37.4% of 3,000 AF).
[c] Water purchased from SGVMWD to replenish the Main Basin for groundwater the City pumps above its pumper's share (typically 8,918 AF for a normal water year).
[d] In lieu of purchasing replacement water from SGVMWD, the City could utilize groundwater from their cyclic storage account (10,000 AF max) if available from wet-year storage.

Source: The Villages at the Alhambra Water Supply Assessment, Fuscoe, March 2018.

(4) City Water Supply Reliability

Reliability is a measure of a water system's ability to manage water shortages. Reliability planning requires information about the following: (1) expected frequency and severity of shortages; (2) how additional water management measures are likely to affect the frequency and severity of shortages; and (3) how available contingency measures can reduce the impact of shortages when they occur. The reliability of the City's water supply is currently dependent on the reliability of both groundwater and imported water supplies.

(a) Groundwater Reliability

In May of each year, the Main Basin Watermaster establishes the OSY for the ensuing fiscal year. This is done on the basis of, among other things, groundwater storage conditions, seasonal rainfall and local water recharge, and water stored in local surface reservoirs. The change in groundwater elevation at the Key Well is representative of changes in groundwater storage in the Main Basin. One foot of elevation change of the groundwater surface at the Key Well is roughly the equivalent of about 8,000 acre-feet of storage.

In order to provide sufficient storage capacity in the Main Basin to capture as much of the local water as practicable, the Main Basin Judgment provides that Supplemental Water will not be spread in the main portion of the Basin when the groundwater elevation at the Key Well exceeds 250 feet, and will be spread, insofar as practicable, to maintain that elevation above 200 feet. If Main Basin storage is low, as indicated by the Key Well elevation, the OSY is usually lowered so that more replacement water can be purchased to increase Main Basin storage. If Main Basin storage is relatively high, the OSY is usually

increased so that replacement water is reduced and Main Basin storage will be beneficially used.

The total fresh water storage capacity of the Main Basin is estimated to be about 8.7 MAF. Of that, only the top 125 feet of storage, or about 1.1 MAF is considered to have been used in historical Basin operations. The highest groundwater elevation (including Cyclic Storage) was recorded at approximately 294 feet in July 1983, while the groundwater elevation reached a historical low of 173.6 feet on September 30, 2016. However, the Key Well elevation was back up to 179.4 feet as of June 30, 2017 as a result of replenishing the Basin with 76,000 AF of untreated imported water and historically low groundwater production in FY 2017.

The Main Basin Watermaster adopted Resolution No. 05-14-263, which established a Water Resource Development Assessment (RDA), that was applied to all production during FY 2015 and FY 2016. The purpose of the RDA is to establish a fund from which untreated imported water may be purchased and delivered to the Basin. It is intended to create a "reservoir" of water that is available to assist in the management of the Basin in the event untreated water is not available in the future as a result of a short-term Statewide emergency.

As a result of the severe five-year drought, resulting in significant reductions of the quantity of local water replenishment to the Basin, the Watermaster expanded the RDA into the Supplemental Water Stormwater Augmentation Program (RDA II) in FY 2017 to help manage Basin water supplies under "worst case" hydrologic conditions, which is assumed to be three consecutive five-year droughts, using the same hydrologic conditions as the recent FY 2012 through FY 2016 severe drought (total of 15 years of drought).

The new program is intended to purchase imported replenishment water for stormwater augmentation to maintain the Key Well elevation above 180 feet by the end of the tenth year, using RDA II funds. A stabilized Key Well elevation essentially ensures continued Basin water supply to the Basin Producers under the perceived worst case, 15-year sustained drought.

Groundwater management and access to supplemental imported water have allowed water producers in the Main Basin to historically meet water demands, including during single and multiple dry years. SGVMWD member cities Alhambra, Azusa, and Monterey Park have historically met all water demands with water supplies from the Main Basin. The San Gabriel Valley is near buildout; therefore, overall water demands are not expected to increase dramatically. Though SGVMWD member cities have access to the Main Basin water supplies and replacement water, the Main Basin's reliability depends on replacement water and RDA requirements for SGVMWD being met.

The Basin Watermaster and Basin producers recognized that prolonged drought conditions will adversely impact untreated imported water availability. Consequently, the Basin Watermaster took proactive measures to increase producer cyclic storage from about 15,000 AF as of the end of June 2010 to 51,000 AF as of June 2017. In addition, the Basin Watermaster, along with the three municipal water districts, collectively have an additional 39,000 AF of imported water in cyclic storage, which can be made available for Basin management. In response to five consecutive years of drought conditions, MWD implemented the WSAP during FY 2016. The WSAP provided an untreated imported water allocation to Upper District of about 25,000 AF and about 4,000 AF to Three Valleys District. Additional untreated imported water requirements, which may be incurred may be deducted from pre-deliveries made by the Basin Watermaster and Basin producers to cyclic storage accounts. As a result of significant precipitation in northern California during the first half of calendar year 2016 and the Governor's Executive Order declaring an end to the drought, MWD suspended the WSAP for FY 2017.

Total groundwater production for FY 2017 from the Main Basin was 184,400 AF, which is higher than the previous year's production of 173,800 AF, but significantly lower than the 10-year average of 222,000 AF. The decrease in groundwater production over time is primarily the result of increased water conservation at the consumer level. Groundwater production is influenced by a variety of conditions, including population, seasonal precipitation, groundwater contamination, and availability of surface water. Excluding the impacts of seasonal precipitation, groundwater production had experienced a gradual long-term increase, consistent with increasing population. The impacts of groundwater contamination during the 1980s and 1990s resulted in reduced groundwater production, offset by an equal increase of treated imported water purchases. Since the late 1990's groundwater production and treatment facilities have become operational, enabling water purveyors to resume use of groundwater. However, since the late-2000s, there has been a significant decrease in groundwater use (and overall) demand, which is likely the result of increased water conservation by consumers.

As discussed previously, Alhambra also holds groundwater pumping rights in the Pasadena Subarea of the Raymond Basin. In January 2008, the Raymond Basin Management Board adopted Resolution 42-01 09 after recognizing declining water levels and impacts on supply in the Pasadena Subarea. Resolution 42-01 09 puts in place self-imposed pumping reductions of 30 percent implemented over five years from July 1, 2009 to July 1, 2014 in the Pasadena Subarea. This resolution was adopted with the goal to reduce total water production to 1955 Decreed Rights (from 17,843 AFY to 12,493 AFY), dissolve the remaining Long-Term Storage accounts, and increase groundwater levels.

(b) Imported Water Reliability

(i) State Water Project

As discussed above, the MWD acquires water from northern California via the SWP and from the Colorado River via the CRA to supply water to most of southern California. Through the Integrated Resources Plan (IRP) and subsequent updates including the 2015 update, the MWD has worked toward identifying and developing water supplies to provide 100 percent reliability. Due to competing needs and uses for all of the water sources and regional water operational issues, MWD has undertaken a number of planning processes: the IRP Process, the Water Surplus and Drought Management (WSDM) Plan, the UWMP, and the WSAP. Combined, these documents provide a framework and guidelines for optimum water planning into the future.

In dry, below-normal conditions, MWD has increased the supplies received from the California Aqueduct by developing flexible Central Valley/SWP storage and transfer programs. For 2014 and 2015, under the pumping restrictions of the SWP, MWD has worked collaboratively with the other SWP contractors to develop numerous voluntary Central Valley/SWP storage and transfer programs. The goal of these storage/transfer programs is to develop additional dry year supplies that can be conveyed through the California Aqueduct during dry hydrologic conditions and regulatory restrictions.

MWD has contractual rights to 65 TAF of flexible storage at Lake Perris (East Branch terminal reservoir) and 154 TAF of flexible storage at Castaic Lake (West Branch terminal reservoir). This storage provides MWD with additional options for managing SWP deliveries to maximize yield. Over multiple dry years, it can provide MWD with 73 TAF of additional supply. In a single-dry year like 1977, it can provide up to 219 TAF of additional supply.

The Bay-Delta's ecosystem is facing challenges caused by a number of factors such as agricultural runoff, predation of native fish species, urban and other discharge, changing ecosystem food supplies, and overall system operation. These and other issues in the Bay-Delta have led to reductions in the availability and reliability of water supply deliveries from the SWP. MWD's Board approved a Delta Action Plan in June 2007 that provides a framework for staff to pursue actions with other agencies and stakeholders to build a sustainable Bay-Delta and reduce conflicts between water supply conveyance and the environment. The Delta Action Plan aims to prioritize immediate short-term actions to stabilize the Bay-Delta while an ultimate solution is selected, and mid-term steps to maintain the Bay-Delta while a long-term solution is implemented.

Currently, MWD is working towards addressing three basin elements: Bay-Delta ecosystem restoration, water supply conveyance, and flood control protection and storage development. In April 2015, the Brown Administration announced California

WaterFix, as well as a separate ecosystem restoration effort called California EcoRestore. Together, the California WaterFix and California EcoRestore will make significant contributions toward achieving the coequal goals of providing a more reliable water supply for California and protecting, restoring and enhancing the Bay-Delta ecosystem established in the Sacramento-San Joaquin Delta Reform Act of 2009.

(ii) Colorado River Aqueduct

According to a report issued by the United States Bureau of Reclamation, future actions must be taken to implement solutions and help resolve the imbalance between water supply and demand in areas that use Colorado River water, such as:

- Resolution of issues related to water conservation, reuse, water banking, and weather modification concepts.
- Costs, permitting, and energy availability issues relating to large-capacity augmentation projects need to be identified and investigated.
- Opportunities to advance and improve the resolution of future climate projections should be pursued.
- Consideration should be given to projects, policies, and programs that provide a wide range of benefits to water users and healthy rivers for all users.

MWD has identified a number of programs that could be used to achieve the regional long-term development targets for the CRA:

- Imperial Irrigation District/MWD Conservation Program
- Palo Verde Land Management, Crop Rotation, and Water Supply Program
- Management of MWD-Owned Land in Palo Verde
- Southern Nevada Water Authority and MWD Storage and Interstate Release Agreement
- Lower Colorado Water Supply Project
- Lake Mead Storage Program
- Quagga Mussel Control Program

(iii) MWD Storage

A key component of MWD's water supply capability is the amount of water in MWD's storage facilities. Storage is a major component of MWD's dry-year resource

management strategy. MWD's likelihood of having adequate supply capability to meet projected demands, without implementing the WSAP, is dependent on its storage resources. In developing the supply capabilities in the 2015 UWMP, MWD assumed the current (2015) storage levels at the start of simulation and used the median storage levels going into each of the five year increments based on the balances of supplies and demands. Under the median storage conditions, there is an estimated 50 percent probability that storage levels would be higher than the assumption used, and a 50 percent probability that storage levels would be lower than the assumption used.

(iv) MWD Supply Management

On the regional level, MWD has taken a number of actions to secure a reliable water source for its member agencies. MWD developed a WSAP and has utilized it initially in 2009 to 2010 and a second time starting in 2015 for dealing with potential shortages that take into consideration the impact on retail customers, changes and losses in local supplies, the investment in and development of local resources, and conservation achievements. Additional actions taken by MWD over the past several years have increased spending on conservation, local projects, and water supply/reliability enhancements significantly.

This spending plan included expenditures for the improvement of water conveyance facilities, water transfers, and providing financial assistance to member agencies' local conservation, recycling, and groundwater clean-up efforts. To fund these past and future expenditures on conservation, recycling, and other local projects, MWD Tier 1 treated water rates were increased by almost 54% for the five-year period from January 1, 2009 to January 1, 2014. Over the next two years, this rate increased more modestly by 3.7 and 2.0 percent each year for 2015 and 2016, respectively. The rates for 2017 and 2018 are similar at 3.9 and 3.7 percent, respectively.

(v) MWD Projected Supply Capability

In its 2015 UWMP, MWD estimated supply capability and projected demands for an average (normal) year based on an average of hydrologies for the years 1922-2012; for a single dry year based on a repeat of the hydrology in the year 1977; and for multiple dry years based on a repeat of the hydrology of 1990-1992. These single and multiple-dry year hydrologies were also used in MWD's 2010 UWMP, 2010 IRP, and 2015 IRP as they historically represent the timing of the least amount of available water resources from the SWP.

MWD developed demand forecasts by first estimating total retail demands for its service area and then factoring out water savings attributed to conservation. Projections of local supplies then were derived using data on current and expected local supply programs and the IRP Local Resource Program Target. The resulting difference between total

demands net of conservation and local supplies is the expected regional demands on MWD supplies. These estimates are summarized by category in Table 5-1 of the Project WSA (see **Appendix M** of the Draft EIR) for average, single-dry and multiple-dry year water supply scenarios. In all scenarios shown in the table, there is a projected surplus, even without adding MWD's Supplies Under Development and Potential Supplies.

(c) SGVMWD Supply Reliability

As the City's pumper's share of the Main Basin's groundwater is 4.45876 percent of the OSY of the Basin, the City can receive up to 8,918 AF in a normal year and up to 6,688 in a worst-case year. Azusa and Monterey Park also have pumper's share of the OSY. If in a given year, a city needs to pump groundwater above their pumper's share, they can purchase replacement water (water used to replenish the Main Basin) from SGVMWD through their SWP entitlement, which can be augmented with cyclic storage and supplemental purchases of water from other SWP contractors.

As discussed previously, SWP contractors including SGVMWD receive specified "Table A" amounts of SWP water each year as a percentage of their 100% maximum entitlements. The percentage allocation is set by DWR based on hydrologic and environmental conditions in the Bay-Delta. In wetter years, the Table A allocation percentage is set higher and in single-dry and multiple-dry years, the percentage is set lower. Estimated SWP allocations for SGVMWD under various hydrologic conditions (as presented in in SGVMWD's 2017 IRP) are shown in Table 5-2 of the Project WSA (see **Appendix M** of the Draft EIR) and are based on SGVMWD's 100% entitlement of 28,800 AF.

SGVMWD can augment their SWP allocations with cyclic storage and supplemental water purchases from other SWP contractors to meet demands. The cyclic storage agreement between the Main Basin Watermaster and SGVMWD permits SGVMWD to deliver and store up to 50,000 acre-feet of imported water in the Main Basin. In its 2017 IRP, SGVMWD estimated its total replacement water obligation at 13,028 AF in 2020 and would gradually increase to a total of 17,071 AF by 2040 based on water demand and supply estimates made in each member city's 2015 UWMP. In addition to providing replacement water demands for Alhambra, Monterey Park, and Azusa, SGVMWD also provides Main Basin replenishment water of approximately 5,000 AF as part of an exchange and purchase agreement with MWD to provide treated imported water to Sierra Madre via a connection designated as SGV-01.

Additionally, since June 2012, SGVMWD must provide for an RDA demand, levied to support the development of new or additional water sources. The RDA may be used by the Main Basin Watermaster to purchase supplemental water to be stored for future use when supplemental water may be unavailable due to emergency water supply conditions.

The base RDA is applicable to every acre-foot of production from the Main Basin. The base RDA was developed to provide about 100,000 AF for emergency storage. SGVMWD's share is about 13,000 AF. In their 2017 IRP, SGVMWD estimated its base RDA requirements to be 900 AFY through FY 2028, and then 400 AF in FY 2029 to fulfill its 13,000 AF base RDA requirement.

A supply deficit (gap) will occur in a given year if SGVMWD's available supply from SWP allocations, cyclic storage, and supplemental water purchases from other SWP contractors does not meet their demands. This has never happened. During dry years and droughts, the SGVMWD has primarily met SWP allocation shortfalls with cyclic storage. During the worst drought in California history between 2011 and 2016, the SGVMWD met all demands with SWP allocations and cyclic storage; and did not require any supplemental water purchases from other SWP contractors.

In addition to SGVMWD, member cities may utilize cyclic storage to fulfill future replacement water requirements. Alhambra may store up to 10,000 acre-feet of water in the Main Basin, according to the cyclic storage agreement between the Main Basin Watermaster, SGVMWD and Alhambra. When SGVMWD approaches its 50,000 AF storage limit, it will look to sell stored water to member cities to help them more fully utilize their storage rights. SGVMWD can also work with the Main Basin Watermaster to increase their storage above 50,000 AF if the opportunity arises.

Based on their history of providing for all demand obligations, and their supply strategy going forward of fully utilizing cyclic storage to mitigate any SWP supply shortfalls that could arise during single-dry and multiple-dry water year conditions, SCVWMD fully expects to supply all member city replacement water needs including the City of Alhambra through the planning period, 2020 to 2040.

(d) Conclusion

Projected City five-year interval normal year water supplies and demands are presented in Table IV.P.2-2. As shown, it is estimated that the City can meet all projected demands through the 2020-2040 planning period using its Main Basin groundwater pumper's share; imported water from MWD per the CWEA; and replacement water for the Main Basin either from water purchased from SGVMWD (SWP allocation, cyclic storage, and/or supplemental water purchases from other SWP contractors) or groundwater from the City's cyclic storage account (10,000 AF max) if it is available from wet year storage.

Table IV.P.2-2
Alhambra Projected Normal Year & Single Dry Year Water Supply & Demand

Supply Sources/Demands	Years (acre-feet)				
	2020	2025	2030	2035	2040
Supply					
Main Basin Groundwater[a]	8,918	8,918	8,918	8,918	8,918
MWD Imported Water[b]	1,122	1,122	1,122	1,122	1,122
Main Basin Replacement Water[c]	2,873	3,329	3,761	4,122	4,481
Cyclic Storage[d]	0	0	0	0	0
Total Supply	**12,913**	**13,369**	**13,801**	**14,162**	**14,521**
Demand					
Total City Demands in 2015 UWMP[e, f]	12,913	13,273	13,634	13,995	14,354

[a] 4.45876% of OSY, which is estimated at 200,000 AF for a normal and single dry water year.
[b] Net supply per CWEA (37.4% of 3,000 AF).
[c] Water purchased from SGVMWD to replenish the Main Basin for groundwater the City pumps above its pumper's share (typically 8,918 AF for a normal and single dry water year).
[d] In lieu of purchasing replacement water from SGVMWD, the City could utilize groundwater from their cyclic storage account (10,000 AF max) if available from wet-year storage.
[e] All demands include estimated 6.0% water loss consistent with the 2015 UWMP.
[f] Normal year demand as projected in the City's 2015 UWMP.

Source: The Villages at the Alhambra Water Supply Assessment, Fuscoe, March 2018.

It was assumed in SGVMWD's 2017 IRP that city member demands would not change during a single-dry water year relative to estimated demands during a normal water year, and that the OSY for the Main Basin would remain at 200,000 AF, which means the City of Alhambra's pumper's share would remain at 8,918 AF. Accordingly, the demand and supply comparison for a single-dry water year is the same as for a normal water year as shown in Table IV.P.2-2. It is estimated that the City can meet all single dry year demands through the planning period with available supplies.

City multiple-dry year supplies and demands are presented in Table IV.P.2-3. It was estimated in SGVMWD's 2017 IRP that the OSY would be 200,000 AF in the first dry year; 180,000 AF in the second dry year; and 170,000 in the third dry year. Accordingly, the City of Alhambra's pumper's rights would be 8,918 AF in the first dry year (normal); 8,026 AF in the second dry year; and 7,850 AF in the third dry year. In SGVMWD's 2017 IRP, it was estimated that replacement water for member cities would increase from 12.3% to 9.4% (2040 to 2020) during the second dry year relative to the first dry year (normal); and would increase from 18.4% to 14.1% (2040 to 2020) during the third dry year relative to the first dry year (normal). This increase in replacement water demand along with the estimated decreased groundwater supply (as a result of a lower OSY in both the second and third dry years) means that the City of Alhambra's demands are estimated to be from 4.2% to 3.3% lower (2020 to 2040) in the second dry year and from

6.3% to 4.9% lower (2020 to 2040) in the third dry year. This slight decrease in demands in the second and third year of a drought should easily be attainable based on results of previous demand decreases during drought due to conservation by consumers. It is estimated that the City can meet all multiple dry year demands through the planning period with available supplies.

Table IV.P.2-3
Alhambra Projected Multiple-Dry Year Water Supply and Demand

Supply Sources/Demands	Years (acre-feet)				
	2020	2025	2030	2035	2040
First Dry Water Year Supply					
Main Basin Groundwater[a]	8,918	8,918	8,918	8,918	8,918
MWD Imported Water	1,122	1,122	1,122	1,122	1,122
Main Basin Replacement Water	2,873	3,329	3,761	4,122	4,481
Cyclic Storage	0	0	0	0	0
Total Supply	**12,913**	**13,369**	**13,801**	**14,162**	**14,521**
First Dry Water Year Demand					
Total Demand[b]	12,913	13,273	13,634	13,995	14,354
Second Dry Water Year Supply					
Main Basin Groundwater[a]	8,026	8,026	8,026	8,026	8,026
MWD Imported Water	1,122	1,122	1,122	1,122	1,122
Main Basin Replacement Water	3,226	3,709	4,164	4,535	4,903
Cyclic Storage	0	0	0	0	0
Total Supply	**12,375**	**12,857**	**13,312**	**13,683**	**14,051**
Second Dry Water Year Demand					
Total Demand[b]	12,375	12,761	13,145	13,516	13,884
Third Dry Water Year Supply					
Main Basin Groundwater[a]	7,580	7,580	7,580	7,580	7,580
MWD Imported Water	1,122	1,122	1,122	1,122	1,122
Main Basin Replacement Water	3,402	3,899	4,363	4,741	5,113
Cyclic Storage	0	0	0	0	0
Total Supply	**12,104**	**12,601**	**13,066**	**13,443**	**13,816**
Third Dry Water Year Demand					
Total Demand[b]	12,104	12,505	12,899	13,276	13,649

[a] The OSY is projected to be 200,000 AF in the first dry year; 180,000 AF in the second dry year; and 170,000 AF in the third dry year.
[b] All demands include estimated 6.0% water loss consistent with the 2015 UWMP.

Source: The Villages at the Alhambra Water Supply Assessment, Fuscoe, March 2018.

(5) Existing Water Usage at Project Site

Three City water meters read normal water demands for the entire Project Site, not including fire flows, which are metered by separate fire meters. The normal water demands include both building (indoor) and irrigation (outdoor) site water demands.

Metered water demands for the entire Project Site totaled 59 AF in FY 2015.[10] Indoor water use for the entire Project Site is estimated to be 36 AF based on the assumption that all metered water use in December and January (6 AF) was indoor water use, and that all metered water use above 6 AF for the rest of the year is irrigation demand (23 AF).

The portion of the Project Site that would be redeveloped for the proposed Project encompasses approximately 54 percent of the total Project Site surface area. An existing landscape irrigation demand of 12.5 AF was estimated for the redevelopment area, assuming that 54 percent of the total existing Project Site landscape demand comes from the proposed redevelopment area. With respect to indoor metered water usage, the vast majority occurs within the Office Plan Area under existing conditions, which would not be altered by the proposed Project.

(6) Water Conveyance Infrastructure

The Project Site is bounded on all four sides by public water mains of various sizes. The Project Site is largely served by an 8" service lateral with a backflow device off Date Avenue directly across from Chestnut Street. Two other backflow devices, signifying service points, are visible from the public right-of-way: one near the existing building just north of the Fremont Avenue Project Site driveway, and one near the LA Fitness health club in the northwestern corner of the Project Site. Of the two, there is a potential that the one near the Fremont Avenue entrance is part of a looped system with the Date Avenue service noted above while the one near LA Fitness is likely serving only that building. No existing water service problems or deficiencies at the Project Site are known to exist.

3. Project Impacts

a) Methodology

To evaluate water impacts associated with construction and operation of the Project, the analysis below compares the Project's estimated water demand for both construction and operation of the Project to the existing and projected water supply that would be available to the Project Site. Indoor residential water demand for the Proposed Project was estimated by multiplying the estimated future residential population of the Project by indoor residential unit water use factors in gallons per capita per day (gpcd) that are in accordance with AB 1668. AB 1668, which was last amended in the Senate on September 8, 2017, would require the SWRCB, in coordination with DWR, to adopt long-term standards for the efficient use of water. As part of this bill, the standard for indoor residential water use would be established at 55 gpcd until January 1, 2025; then

[10] *The Villages at the Alhambra Water Supply Assessment, Fuscoe, March 2018, p. 3-2.*

established at 52.5 gpcd until January 1, 2030; and then established at 50 gpcd thereafter. With respect to landscaping irrigation, the State's new MWELO restricts landscape water irrigation for residential and non-residential areas to an Evapotranspiration Adjustment Factor (ETAF) of 0.55 and 0.45, respectively, or less. As the Project consists of residential land use, an ETAF of 0.55 would apply. Existing water demand within the portion of the Project Site that is being proposed for redevelopment under the Project was then subtracted from the Project's total water demand to determine the Project's net water demand. This estimated net water demand is compared to the City's existing and planned future water supplies during normal, single-dry, and multiple-dry years hydrologic conditions to determine if the City would be able to accommodate the Project's water demands.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with Appendix G of the State CEQA Guidelines, the Project would have a significant impact related to water if it would:

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

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

c) Project Design Features

No specific Project Design Features are proposed with regard to water. See the Project Design Features listed in **Section IV.G, Greenhouse Gas Emissions** of the Draft EIR for Project features related to efficient landscaping irrigation techniques, such as "smart irrigation" technology, and overall water demand.

d) Analysis of Project Impacts

Threshold a) ***Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or***

telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

This section addresses Project impacts with respect to water facilities. For an analysis of the Project's impacts with respect to wastewater facilities, see **Section IV.P.1, Utilities and Service Systems – Wastewater**, of the Draft EIR. For an analysis of the Project's impacts with respect to stormwater drainage, see **Section IV.I, Hydrology and Water Quality**, of the Draft EIR. For an analysis of the Project's impacts with respect to electric power and natural gas facilities, see **Section IV.E, Energy**, of the Draft EIR.

(1) Impact Analysis

The Project would redevelop the eastern and southern portions of the Project Site. The total area proposed to be redeveloped by the Project comprises approximately 54 percent of the entire Project Site surface area. Existing infrastructure supplying water to the Office Plan Area (including LA Fitness) would not be affected by the proposed Project, as the development in this portion of the Project Site is not proposed to be altered.

With respect to the provision of domestic and landscaping irrigation water for the proposed residential uses of the Project, it is anticipated that each proposed building would individually connect to the available public water system mains located within Date Avenue, Orange Street, and Mission Road adjacent to the Project Site. The two buildings proposed for the southwest portion of the North Plan Area that would not have street frontage would be served via a common or shared connection to the public main in Date Avenue. No off-site improvements to the public water supply infrastructure system are anticipated to be necessary to serve the Project.

With respect to fire flow requirements, see **Section IV.M.1, Public Services – Fire Protection**, of the Draft EIR. As stated therein, there is a potential that system improvements would be needed to supply the required 6,000 gpm fire flow water to the Project. The fire system would connect to the existing water lines in Mission Road, Date Avenue, and Orange Street. In order to achieve the anticipated fire flow requirements for the Project, all proposed Fire Water piping (other than fire hydrant laterals) would need to be sized at 12 inches. Fire hydrants (and associated underground fire water supply piping) would be required at a spacing of approximately 300 feet along the private internal access roads. The magnitude of the system required would lend itself to potentially dedicating the underground supply line as a public main. Should that become the case, this dedicated public main should likely serve all water service needs for the Project. Meters and backflows would likely be located along the internal private roadway system as they would traditionally be located along the public street frontage. All fire water infrastructure required to serve the Project would be installed per applicable Alhambra Fire Code (AFC) requirements for the Project.

Prior to the issuance of grading/building permits, the City would determine if the existing water supply infrastructure maintains sufficient capacity to accommodate the Project's demand for water. If a deficiency or service problem is discovered during the permitting process, the Project Applicant would be required to fund any necessary upgrades to adequately serve the Project. Water main and related infrastructure upgrades would not be expected to create a significant impact to the physical environment because: (1) any disruption of service would be of a short-term nature; (2) replacement of the water mains would be within public and private rights-of-way; and (3) the existing infrastructure would be replaced with new infrastructure in areas that have already been significantly disturbed.

Thus, the Project would not require or result in the construction of new water facilities or expansion of existing facilities, the construction of which would cause significant environmental effects. Therefore, Project impacts related to water facilities would be **less than significant**.

(2) Mitigation Measures

No significant impacts related to water infrastructure have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to water infrastructure would be **less than significant** without mitigation.

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

(1) Impact Analysis

(a) Construction

Water consumption would be required to accommodate construction activities, such as soil watering (i.e. for fugitive dust control), clean up, masonry, painting, and other related activities. As construction of the Project would occur in various stages over a multi-year period, construction activities requiring water would occur intermittently and would be temporary in nature. Further, the activities requiring water would not create substantial water demand. Typically, fugitive dust watering is provided by private purveyors and not provided by on-site water sources. Reclaimed water can be used for dust control. Overall, construction activities would require minimal water consumption and would not be expected to have an adverse impact on available water supplies or existing water distribution systems. In addition, as concluded in Alhambra's 2015 UWMP, projected water demand for the City would be met by the available supplies during an average year,

single-dry year, and multiple-dry year in each year from 2020 through 2040 as shown in Table IV.P.2-2. Project construction is anticipated to be completed in 2028. As such, the Project's temporary and minimal demand for water during construction could be met by the City's available supplies during each year of Project construction. Therefore, the Project's construction-related water supply impacts would be **less than significant**.

(b) Operation

Once completed, the Project would require water for the purposes of domestic consumption and landscaping/maintenance. As discussed in **Section II, Project Description** of the Draft EIR, the Project could be developed under one of two different buildout scenarios. In Buildout Scenario 1, the entire Project would be developed in one phase with completion and occupation occurring in 2028. In Buildout Scenario 2, the Project would be built in two phases, with Phase I coming on-line in 2024 and Phase II in 2028.

The State's new MWELO restricts landscape water irrigation for residential and non-residential areas to an Evapotranspiration Adjustment Factor (ETAF) of 0.55 and 0.45, respectively, or less. As the Project would consist of residential land use, an ETAF of 0.55 would apply. The total landscape area of the Project (excluding the portions of the Project Site that are not proposed for redevelopment) would be 230,457 square feet per preliminary landscape plans prepared by the Project landscape architect (see Figures II-39 through II-41). Per these plans, 87 percent of the landscaped area would be low water planting with a Plant Factor (PF) of 0.3 and an Irrigation Efficiency (IE) of 0.81 using drip irrigation; and 13 percent would be turf area with a PF of 0.7 and an IE of 0.75 using overhead spray irrigation. The reference Evapotranspiration (ETo) for the Project Site is 52.3 inches, and the Estimated Total Water Use (ETWU) for the proposed Project landscaping (excluding the existing Office Plan Area) is calculated at 10.2 AF as shown in Table 3-4 of the Project WSA (see **Appendix M** of the Draft EIR). This ETWU translates to an ETAF of 0.44, which is less than the maximum allowable ETAF of 0.55 for new residential areas. The Maximum Applied Water Allowance is calculated to be 12.6 AF using an ETAF of 0.55.

The existing landscape irrigation water demand for the portion of the Project Site that is proposed for redevelopment was estimated to be 12.5 AF, which means that the new landscaping associated with the Project would result in a net decrease in landscape irrigation demand of 2.3 AF. However, to be conservative in the calculation of overall Project water demand, it has been assumed that the net new landscaping water demand is zero.

All existing commercial and office buildings and warehouses in redevelopment portion of the Project Site (with the exception of Building A0 in the South Plan Area, which would

be relocated) would be demolished to make room for the new residential development. Of these existing buildings to be demolished, only Building B8 had a water demand in FY 2015. However, the FY 2015 metered water demand for Building B8 was only 0.63 AF, which is negligible and would not significantly affect the overall net water demand estimates for the Project.

As discussed previously, indoor residential water demands for the Project were estimated by multiplying the estimated Project population by indoor residential unit water use factors in gallons per capita per day (gpcd) that are in accordance with proposed AB 1668. Estimated water demand for the Project is shown in Table IV.P.2-4. As shown, the population estimated for each housing type in each Project Plan Area was multiplied by the appropriate indoor water use factor per AB 1668 consistent with the proposed Project phasing year for that Plan Area under Buildout Scenario 2. Population estimated for the housing units in the North Plan Area was multiplied by 52.5 gpcd for 2025, as the North Plan Area is scheduled to start occupancy in 2024 under Buildout Scenario 2; and then multiplied by 50.0 gpcd for the period 2030 through 2040. Population estimated for housing units in the South and Corner Plan Areas was multiplied by 50.0 gpcd for the period 2030 through 2040, as these areas are scheduled to finish development by late 2028.

As discussed above, the net irrigation demand for each Plan Area is estimated to be zero. Four community pools would be installed, each with an estimated surface area of 7,500 square feet and an annual makeup water demand of 0.5 gallons per square foot. As shown in Table IV.P.2-4, the total new annual net water demand for the Project is estimated to be 91 AF in 2025 (under Buildout Scenario 2 only) and 158 AF for the period 2030 through 2040 (under both buildout scenarios). These amounts represent increases over existing conditions as they do not include the existing Office Plan Area uses that would be continuing unchanged following Project development.

Table IV.P.2-4
Estimated Project Water Demand

Plan Area	Population	2025 Net Increase in Water Demand (acre-feet)	2030-2040 Net Increase in Water Demand (acre-feet)
East	0	0	0
North	1,228	91	87
Corner	364	0	24
South	933	0	51
Total	**2,525**	**91**	**158**

Net change in landscaping irrigation compared to existing conditions is conservatively assumed to be zero.

Source: The Villages at the Alhambra Water Supply Assessment, Fuscoe, March 2018.

As shown in Table IV.P.2-4, the Project would result in a net increase in water consumption at the Project Site of approximately 91 acre-feet per year by 2025 (with Phase I under Project Buildout Scenario 2 built and occupied) and approximately 158 acre-feet per year following full Project buildout in 2028. It is conservatively assumed that the demand projections included the City's 2015 UWMP did not account for the proposed Project. Projected City water demands with the addition of the net Project demands would range from 0.7% to 1.2% of the total City water demand from 2025 through 2040.

It is estimated that the City can meet all projected normal year, single-dry year, and multiple-dry year demands through the planning period including demands from the Project using their Main Basin groundwater pumper's share; imported water from MWD per the CWEA; and replacement water for the Main Basin either from water purchased from SGVMWD (SWP allocation, cyclic storage, and/or supplemental water purchases from other SWP contractors) or groundwater from the City's cyclic storage account (10,000 AF max) if it is available from wet year storage.

The Project WSA identifies a sufficient and reliable water supply for the City, now and into the future, including a sufficient water supply for the Project. These supplies are also sufficient to provide for overall City-wide growth at the rate projected in the City's 2015 UWMP. Further, the Project would incorporate sustainability features, such as efficient plumbing features, updated landscaping, modern irrigation, and efficient appliances that would reduce the Project's net increase in water demand. For these reasons, the Project would not require new or expanded water entitlements. As such, the Project could be served from projected City water supplies over the planning period covered by the WSA. Therefore, Project impacts related to water supply would be **less than significant**.

(2) Mitigation Measures

Impacts related to water supply would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to water supply would be **less than significant** without mitigation.

e) Cumulative Impacts

(1) Impact Analysis

Implementation of the Project in conjunction with the cumulative projects identified in **Section III, Environmental Setting** of the Draft EIR would increase demand for water from the City. Of the nine cumulative projects, six are located within the City of Alhambra. The remaining three cumulative projects are located within the City of Monterey Park and

would receive water services from that municipality and thus are not considered in this cumulative analysis.

(a) Water Supply

As discussed previously, the City's 2015 UWMP forecasts adequate water supplies to meet all projected water demands in the City for normal, single-dry, and multi-dry years from 2020 to 2040. Furthermore, as outlined in the 2015 UWMP, the City is committed to providing a reliable water supply for the City. The 2015 UWMP takes into account climate change and the concerns of drought and dry weather and notes that the City will meet all new demand for water supply associated with projected population growth through the combination of water conservation and augmented supplies. The 2015 UWMP also addresses future SWP supply shortages and concludes that MWD's actions in response to the threats to the SWP would ensure continued reliability of its water deliveries.

As discussed previously, demographic projections were considered in the City's UWMP. The City's service area population is expected to continue to grow over the next 20 years. As shown in Tables IV.P.2-2 and IV.P.2-3, projected water demand for the City would be met by the available supplies during an average year, single-dry year, and multiple-dry year in each year from 2020 through 2040. These projections account for growth within the City, including that represented by the six individual cumulative projects within Alhambra. Therefore, cumulative impacts related to water supply would be **less than significant**.

(b) Water Infrastructure

Implementation of the Project in conjunction with cumulative projects located in the vicinity of the Project Site would result in an increased cumulative demand for water conveyance infrastructure. However, as with the Project, the cumulative projects would be subject to review by the City to ensure that existing infrastructure would be adequate to meet the water demand requirements for each project. All development in the City is subject to City requirements regarding potential infrastructure improvements needed to meet respective water delivery needs. Additionally, all development in the City is required to comply with Fire Code requirement for fire flow and other fire protection requirements and is subject to ongoing evaluations by the City and the Alhambra Fire Department to ensure that water conveyance infrastructure is adequate. Compliance with existing regulations would ensure that cumulative impacts related to water infrastructure would be **less than significant**.

(2) Mitigation Measures

No significant cumulative impacts related to water supply and infrastructure have been identified, and no mitigation measures are required.

(3) Level of Significance after Mitigation

Cumulative impacts related to water supply and infrastructure would be **less than significant** prior to mitigation.

IV. Environmental Impact Analysis

P.3. Utilities and Service Systems – Solid Waste

1. Introduction

This section evaluates the Project's potential impacts on solid waste facilities. The analysis in this section evaluates the Project's generation of solid waste during construction and operation and the capacity of existing solid waste facilities. A summary of applicable regulations and solid waste standards is also provided in this section. In addition, the potential cumulative impacts to solid waste facilities associated with the Project, in combination with all known cumulative projects, are evaluated.

The demand on solid waste services and facilities is assessed by considering the amount of solid waste generated by the Project during construction and operation periods and whether an existing landfill(s) has capacity to serve the Project's solid waste needs. Based on this analysis, a determination is made as to whether the existing solid waste facilities could accommodate the Project's solid waste disposal needs.

2. Environmental Setting

a) Regulatory Framework

(1) State

(a) Assembly Bill 939

Assembly Bill (AB 939) was enacted to reduce, recycle, and reuse solid waste generated in the State to the maximum extent feasible. Specifically, AB 939 requires city and county jurisdictions to construct an implementation schedule to divert at least 50 percent of the total waste stream from landfill disposal by 2000, and to maintain that 50 percent diversion rate beyond 2000. AB 939 also requires each city and county to promote source reduction, recycling, and safe disposal or transformation. In 2016, the City achieved a 65 percent diversion rate.[1]

[1] *2018 Alhambra General Plan Update Draft Environmental Impact Report, July 2018, Page 274.*

AB 939 further requires each city and county to conduct a Solid Waste Generation Study and to prepare a Source Reduction and Recycling Element (SRRE) to describe how it would reach the required diversion goals. The SRRE contains diversion programs and policies and must be updated annually to account for changing market and infrastructure conditions. As projects and programs are implemented, the characteristics of the waste stream, the capacities of the current solid waste disposal facilities, and the operational status of those facilities are upgraded, as appropriate. California cities and counties are required to submit annual reports to the California Integrated Waste Management Board (CIWMB), now known as CalRecycle, to update their progress toward the AB 939 goals (i.e., source reduction, recycling and composting, and environmentally safe land disposal).[2]

(b) Assembly Bill 1327 – California Solid Waste Reuse and the Recycling Access Act of 1991

The California Solid Waste Reuse and the Recycling Access Act of 1991 (Public Resources Code Sections 42900 – 42911, AB 1327), as amended, requires each local jurisdiction to adopt an ordinance requiring commercial, industrial, or institutional building, marina, or residential buildings having five or more living units to provide an adequate storage area for the collection and removal of recyclable materials. The sizes of these storage areas are to be determined by the appropriate jurisdictions' ordinance.

(c) Senate Bill 1374 – Construction and Demolition Waste Materials Diversion Requirements

Passed in 2002, the Construction and Demolition Waste Materials Diversion Requirements require jurisdictions to include a synopsis of the amount of construction and demolition (C&D) waste diverted in their annual AB 939 report. The legislation also required that the CIWMB (e.g., CalRecycle) adopt a model ordinance for diverting 50 to 75 percent of all C&D waste from landfills.

(d) Assembly Bill 1826 – Mandatory Commercial Organics Recycling

Assembly Bill (AB) 1826 (Chapter 727, Statutes of 2014 [Chesbro, AB 1826]) requires businesses that generate a specified amount of organic waste per week to arrange for recycling services for that waste, and for jurisdictions to implement a recycling program to divert organic waste from businesses subject to the law, as well as report to CalRecycle on their progress in implementing an organic waste recycling program.

[2] *California Public Resources Code, §40050 et seq.*

(e) Zero Waste California

Zero Waste California is a state-launched program that promotes a new vision of waste. The concept is premised on maximizing existing recycling and reuses efforts, while ensuring that products are designed for the environment and have the potential to be repaired, reused, or recycled. The Zero Waste California program promotes the goals of market development, recycled product procurement, and research and development of new and sustainable technologies.

(f) California Green Building Standards

The 2016 California Green Building Standards Code (CALGreen Code) sets standards for new structures to minimize the state's carbon output. California requires that new buildings reduce water consumption, increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials. Each local jurisdiction still retains the administrative authority to exceed the new CALGreen standards. The 2016 CALGreen Code went into effect January 1, 2017.

(g) Assembly Bill 341

Assembly Bill 341 (AB 341), signed on February 10, 2011, directed that no less than 75 percent of solid waste generated in California be source reduced, recycled, or composted by 2020, and required CalRecycle to provide a report to the Legislature that recommends strategies to achieve the policy goal by January 1, 2014. AB 341 also mandated local jurisdictions to implement commercial recycling by July 1, 2012.

(2) Regional

(a) Los Angeles County Integrated Waste Management Plan

The California Integrated Waste Management Plan (CIWMP), approved on June 23, 1999, is a set of planning documents that provides a regional approach for the management of solid waste through source reduction, recycling and composting, and environmentally safe transformation and disposal. The CIWMP recognizes that landfills will remain an integral part of the County's solid waste management system in the foreseeable future and assures that the waste management practices of cities and other jurisdictions in the County are consistent with the solid waste diversion goals of AB 939. The CIWMP is updated annually, and the annual reports analyze solid waste disposal and estimated future remaining capacity at County landfills. The 2016 Annual Report, which was completed by the Los Angeles County Department of Public Works (LACDPW) in September 2017, assessed future landfill disposal needs over a 15-year planning horizon based in part on forecasted waste generation and available landfill capacity. Several factors were used in the 2016 Annual Report to determine landfill capacity,

including (1) the expiration of various landfill permits (e.g., land use permits, waste discharge requirement permits, solid waste facilities permits, and air quality permits); (2) restrictions on the processing of waste generated outside given landfills' jurisdictions and/or watershed boundaries; and (3) operational constraints.

As discussed in the 2016 Annual Report, reliance on existing permitted in-County landfill capacity alone would be insufficient in meeting the County's long-term disposal needs (i.e., through 2031). Similar to previous years, the 2016 Annual Report also considered six scenarios (e.g., maximization of waste reduction and recycling; expansion of existing landfills; development of alternative technologies; expansion of transfer and processing infrastructure, and the use of out-of-County disposal options) to assess the County's ability to meet the solid waste daily disposal demand. The analyses of the scenarios demonstrated that the County would be able to meet the disposal needs of all jurisdictions through 2031. However, the County acknowledged in the 2016 Annual Report that there will be significant challenges in developing the processing capacity needed by the 2020 deadline of meeting the 75 percent statewide recycling goal as set forth by AB 341 (see discussion above). Accordingly, they concluded that maintaining adequate reserve (excess) capacity will be essential to ensuring that the disposal needs of the County are met through 2031.[3]

(3) Local

(a) City of Alhambra General Plan

The City's General Plan provides direction regarding the City's vision for future development in the City and includes several chapters to help guide the design of future development. It also contains several broad goals, objectives, and policies for neighborhood design to create a more livable city for existing and future residents. These goals and policies are stated not in terms of specific design guidelines, but in terms of general neighborhood-wide design policies.

The General Plan serves as a guide for the City's overall long-range growth and development policies and serves as a guide to update community plans, specific plans, and the citywide elements. These citywide elements address functional topics that cross community boundaries, such as transportation, and address these topics in detail.

The City has recently updated its General Plan in August 2019. A draft of the updated General Plan had been released in July 2018 for public review and a revised draft released in early 2019. The updated General Plan is intended to allow land use and policy determinations to be made within a comprehensive framework that incorporates public

[3] *County of Los Angeles Department of Public Works, Countywide Integrated Waste Management Plan 2016 Annual Report, September 2017.*

health, safety, and qualities of life considerations. The General Plan consists of seven elements, including a Land Use Element, Circulation Element, and Open Space Element. Each element addresses its respective subject and the City's 20-year vision for the future. With regard to solid waste, the General Plan's Services and Infrastructure Chapter establishes the following goal and policies:

- **Goal SI-11** Solid waste services that meet the demands of residents and businesses while meeting applicable solid waste diversion requirements.
    - **Policy SI-11A** Provide an adequate and orderly system for collection and disposal of solid waste for existing and future development.
    - **Policy SI-11B** As feasible, emphasize source reduction and recycling in order to maximize diversion of waste from area landfills.
    - **Policy SI-11C** As area landfills close, explore alternative strategies for minimizing waste generation and disposing of waste in an environmentally sensitive manner.

(c) Alhambra Municipal Code

The Alhambra Municipal Code (AMC) addresses integrated waste management in Chapter 6. Section 6.16 sets forth City regulations concerning the awarding and management of solid waste collection franchises and licenses as well as requirements governing recycling, self-hauling, and waste cleanup.

b) Existing Conditions

(1) Solid Waste Collection and Disposal

Alhambra contracts with Republic Services to provide complete residential and commercial trash, solid waste, and recycling services, including residential curbside trash, recycling and yard waste collection, pick up of bulky items, and electronic waste pickup, for all single and multi-family homes. Under the ownership of Republic Services, Allied Waste Services provides residential service and Consolidated Disposal provides commercial service to Alhambra.[4]

As mentioned previously, Alhambra must meet the solid waste diversion mandates established in AB 939. The City is in compliance with all state recycling requirements, including legislation that imposes mandatory commercial recycling on all businesses that generate at least four cubic yards of trash per week, and also on all multi-family dwellings

[4] *2018 Alhambra General Plan Update Draft Environmental Impact Report, Page 270.*

that have five units or more.[5] The City's waste haulers send both residential and commercial solid waste to Materials Recovery Facilities (MRFs) where recyclable items are pulled out of the waste stream and recycled. These facilities are very effective at extracting valuable recycling items from the waste stream. Sending solid waste to MRFs has helped increase the City's diversion rate over what is achieved through the curbside recycling program.[6]

Consistent with AB 1826, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units (although multi-family dwellings are not required to have a food waste diversion program). Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law phases in the mandatory recycling of commercial organics over time, while also offering an exemption process for rural counties.[7]

(2) Landfills

According to CalRecycle's Disposal Reporting System (DRS), in the fourth quarter of 2016, solid waste generated in Alhambra is disposed of at 14 different landfills, recycling centers, and waste recovery and conversion facilities.[8] Landfills that serve Alhambra are shown on Table IV.P.3-1. As shown, the landfills serving the City have a remaining daily throughput capacity of approximately 97,658 tons per day (tpd).

[5] *Ibid.*

[6] *Ibid.*

[7] *Id, Page 273.*

[8] *Id, Table 43, Page 274.*

Table IV.P.3-1
Regional Landfill Capacity

Landfill Facility	Maximum Remaining Throughput (tpd)	Maximum Permitted Capacity (tons)[2]	Remaining Capacity (tons)
Azusa Land Reclamation Co. Landfill	8,000	64,457,408	41,209,761
Lancaster Landfill & Recycling Center	5,100	22,160,000	11,611,718
Chiquita Canyon Sanitary Landfill	6,000	51,120,000	6,893,701
Commerce Refuse-to-Energy Facility	1,000	1,000	N/A
Sunshine Canyon City/County Landfill	12,100	112,720,000	77,440,000
Antelope Valley Public Landfill	3,564	0	14,642,618
Savage Canyon Landfill	3,350	15,469,960	7,608,666
Southeast Resource Recovery Facility	2,240	1,792	N/A
Prima Deshecha Sanitary Landfill	4,000	138,320,000	69,907,839
Olinda Alpha Sanitary Landfill	8,000	119,040,000	27,360,000
Frank R. Bowerman Sanitary Landfill	11,500	212,800,000	164,000,000
El Sobrante Landfill	16,054	147,944,000	116,424,000
Mid-Valley Sanitary Landfill	7,500	81,040,000	54,016,000
Simi Valley Landfill & Recycling Center	9,250	95,680,000	95,680,000
Total:	**97,658**	**1,060,754,160**	**686,794,303**

Note: The list of solid waste disposal sites for Alhambra varies by quarter (Aurora Environmental, Inc. 2017). The list used in this table is from the 4th quarter of 2016. Source: CalRecycle, Disposal Reporting System, 2016.

Table Source: 2018 Alhambra General Plan Update Draft Environmental Impact Report, Table 43, Page 271.

Recyclables are collected in separate containers in Alhambra at single-family residences, some multi-family residences, businesses, and agencies. The City's two waste haulers, Allied Waste Services and Consolidated Disposal, achieve most of their waste diversion through mixed waste processing at MRFs. In accordance with AB 939, recyclables are sorted, and the residual waste is transferred to the landfill. Per CalRecycle's Disposal Reporting System, in 2016, the City of Alhambra disposed of 40,858 tons of waste. The City's 2016 diversion rate of 65 percent would result in approximately 14,301 total gross tons of residual waste. In 2016, the City's contract hauler collected 1.40 tons of waste per single-family household.[9] Republic Services processes an average of 4,800 tons of material daily using automated and manual sorting systems.

Alhambra's 65 percent diversion rate exceeds the 50 percent diversion rate established by the State. In order to achieve this diversion rate, the City and the City's residential and

[9] *Id, Page 273*

commercial contract haulers divert waste through source reduction, source separated recycling, mixed waste processing, green and wood waste chipping and grinding, composting, and waste-to-energy.

(3) Transformation Facilities and Conversion Technologies

There are two solid waste transformation facilities located in Los Angeles County, the Commerce Refuse-to Energy Facility and the Southeast Resource Recovery Facility. The Commerce Refuse-to-Energy Facility, located in the City of Commerce, has a permitted intake of 1,000 tpd and is currently accepting an average of 398 tpd. It has a daily intake availability of 602 tpd.[10] The Southeast Resource Recovery Facility, located in the City of Long Beach, has a permitted intake of 2,240 tpd and accepts an average of 1,427 tpd. It has a daily intake availability of 813 tpd.[11] It is expected that these two facilities will continue to operate at their current permitted capacities.

The County is exploring the use of conversion technologies to reduce future disposal needs as well as address global climate change. These technologies encompass a variety of processes that convert normal household trash into renewable energy, biofuels, and other useful products. The County has launched the Southern California Conversion Technology Demonstration Project, which seeks to promote, evaluate, and establish a demonstration facility for the conversion of solid waste into clean energy.[12]

(4) Construction and Demolition Debris

The U.S. Environmental Protection Agency (U.S. EPA) report, *Characterization of Building-Related Construction and Demolition Debris in the United States*, characterizes the quantity and composition of building-related construction and demolition (C&D) debris generated in the United States, and summarizes the waste management practices for this waste stream.[13] The State defines C&D debris as concrete, asphalt, wood, drywall, metals, and many miscellaneous and composite materials generated by the demolition and/or new construction of structures such as residential and commercial buildings and roadways. Construction debris from building sites typically consists of trim scraps of construction materials, such as wood, sheetrock, masonry, and roofing materials. There is typically much less concrete in construction debris than demolition debris, although

[10] *County of Los Angeles, Countywide Integrated Waste Management Plan, 2015 Annual Report, December 2016.*

[11] *Ibid.*

[12] *Los Angeles County Phase II Conversion Technology Evaluation Report - October 2007, http://www.socalconversion.org/pdfs/LACo_Conversion_PII_Report.pdf, April 2017.*

[13] *U.S. EPA Report No EPA530-98-010, Characterization of Building Related Construction and Demolition Debris in the United States, June 1998, website: http://www.epa.gov/osw/hazard/generation/sqg/cd-rpt.pdf, April 2017.*

some construction projects produce considerable quantities of concrete, often depending on the technology used to build concrete structures such as walls. Trim scraps from residential construction sites typically represent between six and eight percent of the total weight of the building materials delivered to the site, excluding the foundation, concrete floors, driveways, patios, etc. There is typically very little concrete waste to dispose of from residential construction projects.

When buildings are demolished, large quantities of waste may be produced in a relatively short period of time, depending on the size of the building(s) and the demolition technique used. On a per building basis, demolition waste quantities may be 20 to 30 times as much as construction debris.

Several Sanitation Districts facilities are available for C&D debris disposal and recycling, including the nearby Puente Hills MRF that shares the same entrance as the Puente Hills Landfill. The Puente Hills MRF accepts a range of waste for recycling and disposal, including commercial, construction/demolition, and residential wastes. The Puente Hills MRF is permitted to accept 4,400 tpd and 24,000 tons per week of municipal solid waste.[14] In 2014, the Puente Hills Intermodal Facility was completed[15] and provides a Materials Recovery Facility/Transfer Station for the Waste to Rails system to the Mesquite Regional Landfill in Imperial County.[16] The Mesquite Landfill can accept 20,000 tpd, with an overall capacity of 600 million tons and a lifespan of 100 years.[17]

(5) Existing Solid Waste Generation

The vast majority of the solid waste currently being generated at the Project Site is attributable to the office and health club uses in the Office Plan Area. Smaller amounts are generated by the building in the Corner Plan Area. The office building in the North Plan Area has been vacant for approximately 20 years and, thus, does not currently generate solid waste. Most of the remaining on-site area consists of parking lots, warehouses, and storage sheds that require little solid waste collection.

For purposes of this analysis, the Office Plan Area is excluded from the calculation of existing solid waste generation at the Project Site, as the Project would not alter any of the existing uses in the Office Plan Area. For the remainder of the Project Site, calculations of existing solid waste generation are characterized by the generalized land

[14] *County Sanitation Districts, Puente Hills MRF Fact Sheet: http://www.lacsd.org/solidwaste/swfacilities/mrts/phmrf/phmrffactsheet.asp, September 2018.*

[15] *County Sanitation Districts, Waste-By-Rail: http://www.lacsd.org/solidwaste/wbr/default.asp, September 2018.*

[16] *Puente Hills Landfill: http://www.lacsd.org/civica/filebank/blobdload.asp?BlobID=3708, September 2018.*

[17] *Mesquite Regional Landfill: http://www.mrlf.org/index.php?pid=5, September 2018.*

use for the structures within each Plan Area. As shown in Table IV.P.3-2, existing uses on the Project Site (exclusive of the Office Plan Area) generate approximately 1,037 pounds (lbs) of solid waste per day.

Table IV.P.3-2
Existing Solid Waste Generation

Plan Area/Land Use	Size (square feet)	Solid Waste Generation Rate (lbs)	Total (lbs per day)
North – Vacant Office	11,144	0/sf[a]	0
North – Warehouse/Storage	20,876	1.42/100 sf/day	296.4
East – Warehouse	21,700	1.42/100 sf/day	308.1
South - Office	10,145	0.006/sf/day	60.9
South – Maintenance	8,300	1.42/100 sf/day	117.9
Corner – Office	42,222	0.006/sf/day	253.3
Total	**114,387**		**1,036.6**

[a] Because this building has been vacant for approximately 20 years, no solid waste generation is assumed.

Note: lbs = pounds, sf = square feet

Existing development in the Office Plan Area that generates solid waste is excluded from this table as the Project would not alter this portion of the Project Site.

Source for Generation Rates: https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates.

3. Project Impacts

a) Methodology

To evaluate solid waste impacts associated with construction and operation of the Project, the analysis below compares the solid waste generation (for both construction and operation) of the Project with the capacity of existing landfills that accept waste from the City, including the Project Site. This is considered a conservative scenario in that it assumes there would be no development of new landfills, no expansion of existing facilities, no implementation of other disposal options, including recycling, and no disposal at landfills located outside of the County.

The demand on solid waste services and facilities is assessed by considering the amount of solid waste generated by the Project during construction and operation periods and whether an existing landfill(s) has capacity to serve the Project's solid waste needs. Based on this analysis, a determination is made as to whether the existing solid waste facilities can accommodate the Project's solid waste disposal needs. Similarly, cumulative

impacts are assessed by comparing the amount of solid waste that would be generated by cumulative projects with the remaining capacity at Class III landfills open to the Cities of Alhambra and Monterey Park.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with Appendix G of the State CEQA Guidelines, the Project would have a significant impact related to solid waste if it would:

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; or

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

c) Project Design Features

No specific Project Design Features are proposed with regard to solid waste.

d) Analysis of Project Impacts

Threshold d) Would the Project 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?

(1) Impact Analysis

(a) Construction

Construction waste would be generated during Project-related demolition and construction activities. Based on demolition and construction waste generation rates estimated by the U.S. EPA's *Characterization of Building-Related Construction and Demolition Debris in the United States*, the Project is predicted to generate a total of approximately 9,894 tons of solid waste during demolition and 2,367 tons of solid waste over the construction period (refer to Table IV.P.3-3), for a total of 12,261 tons of solid waste.

The demolition and construction debris associated with the Project would primarily be classified as inert waste and would be recycled at one of the County certified construction and demolition waste processor facilities. As noted above, the facilities serving Los Angeles County and the City of Alhambra have the ability to accept 97,658 tons of solid

waste per day and would therefore have adequate capacity to accept the Project's demolition and construction waste. In order to comply with AB 939, a minimum of 50 percent of demolition and construction debris must be recycled. Through compliance with applicable City regulations and contracting with approved waste haulers, the Project would achieve, at a minimum, the required 50 percent source reduction and recycling rate. Furthermore, recycling facilities (such as American Waste Transfer Station, Compton Recycling and Transfer Station, Carson Transfer Station and Materials Recovery Facility, Waste Resources Recovery, Falcon Refuse Center Inc., and the Southeast Resource Recovery Facility) would be available to receive recyclable construction waste. Additional recycling facilities and inert waste landfills would be utilized, as needed. Therefore, with implementation of existing regulatory standards that require recycling of at least one-half of the solid waste generated by the construction of the Project, short-term construction impacts to landfills and solid waste services would be **less than significant**.

Table IV.P.3-3
Project Solid Waste Generation – Demolition and Construction

Land Use	Size (sf)	Generation Rate (lbs/sf)	Total (lbs)
Demolition			
Non-residential	114,387	173	19,788,951
		Total Demolition Waste	**9,894 tons**
Construction			
Residential	1,080,875	4.38	4,734,233
		Total Construction Waste	**2,367 tons**
		Total Demolition and Construction Waste	**12,261 tons**

Note: sf = square feet

Based on 115 pounds of residential demolition per square foot and 173 pounds of nonresidential demolition per square foot. (Source: U.S. Environmental Protection Agency Report No. EPA530-98-010. Characterization of Building Related Construction and Demolition Debris in the United States, June 1998, Table A-3 and Table A-4, pages A-2 to A-3: http://www.epa.gov/osw/hazard/generation/sqg/cd-rpt.pdf).

U.S. EPA Report No EPA530-98-010, Characterization of Building Related Construction and Demolition Debris in the United States, June 1998. Applied generation rates are averages of empirical waste assessments of residential demolition, non-residential demolition, residential construction, and non-residential construction waste streams in the United States.

Based on 4.02 pounds of nonresidential construction and 4.38 lbs for residential construction per square foot. (Source: U.S. Environmental Protection Agency Report No. EPA530-98-010. Characterization of Building Related Construction and Demolition Debris in the United States, June 1998, Tables A-1 and A-2, page A-1: http://www.epa.gov/osw/hazard/generation/sqg/cd-rpt.pdf).

(b) Operation

As shown in Table IV.P.3-4, it is estimated that the Project would generate a net increase of approximately 3,207 pounds per day (or 1.6 tpd) of solid waste as compared to existing conditions at the Project Site. This is a conservative estimate that does not account for the effectiveness of recycling efforts, which the Project would be required by the City to implement. The Project Site is located in an urban area with established solid waste collection routes. Transport of the Project's solid waste would occur along one of the established routes. Thus, the Project would not result in the need for additional solid waste collection routes.

As shown in Table IV.P.3-1 above, the landfills to which solid waste from the City of Alhambra is currently delivered have the current ability to accept 97,658 tons of solid waste per day and would therefore have adequate capacity to accommodate the Project's solid waste. Further, pursuant to AB 939, each city and county in the state must divert 50 percent of its solid waste from landfill disposal through source reduction, recycling, and composting. The City is currently diverting approximately 65 percent of its solid waste. Thus, the Project's solid waste stream would not create a need for new or expanded landfill capacity. Therefore, Project impacts related to solid waste would be **less than significant**.

Table IV.P.3-4
Estimated Project Solid Waste Generation

Land Use	Size (du)	Solid Waste Generation Rates (lbs)	Total (lbs per day)
Proposed			
Multi-Family Residential	1,061 du	4 lbs/du/day	4,244
Less Existing North/East/South/Corner Plan Area Solid Waste			**1,037**
Total			**3,207**

Notes: du = dwelling unit
Existing development in the Office Plan Area that generates solid waste is excluded from this table as the Project would not alter this portion of the Project Site.

Source for Generation Rates:
https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates.

(2) Mitigation Measures

Impacts related to solid waste disposal would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to solid waste disposal would be **less than significant** without mitigation.

Threshold e) ***Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?***

As discussed in in the Initial Study (see Draft EIR **Appendix A-3**), solid waste management is guided by the California Integrated Waste Management Act (CIWMA) of 1989, which emphasizes resource conservation through reduction, recycling, and reuse of solid waste. The CIWMA requires that localities develop an SRRE. Solid waste generated on-site by the Project would be disposed of in accordance with all applicable federal, state, and local regulations and policies related to solid waste, including (but not limited to) AB 939, Alhambra's SRRE, Section 6.16 of the AMC, the Los Angeles County Department of Public Works' Household Hazardous Waste (HHW) Collection Program, and the City's HHW program. The Project would provide clearly marked, durable, source sorted recycling bins throughout the Project Site to facilitate recycling in accordance with AMC requirements. Thus, the Project would comply with federal, state, and local statutes and regulations related to solid waste. As such, impacts would be **less than significant**. No further analysis is required.

e) Cumulative Impacts

(1) Impact Analysis

Implementation of the Project in conjunction with the cumulative projects identified in **Section III, Environmental Setting** of the Draft EIR would increase demand for solid waste collection and disposal services provided by the City's contractors. Of the nine cumulative projects, six are located within the City of Alhambra. The remaining three cumulative projects, although they are located within the City of Monterey Park, would also contribute solid waste to the same regional landfills as the Project and the Alhambra cumulative projects; thus, they are included in this cumulative analysis.

(a) Construction

As with the Project, each of the cumulative projects would be required to comply with applicable C&D debris recycling requirements. Additionally, as discussed previously, the County's 2016 Annual Report assessed future landfill disposal needs over a 15-year planning horizon based in part on forecasted waste generation and available landfill capacity. The analyses in the report concluded that the County would be able to meet the disposal needs of all jurisdictions through 2031. The cumulative generation of C&D waste

would not require the need for new or expanded landfill capacity. Therefore, cumulative construction impacts related to solid waste would be **less than significant**.

(b) Operation

As shown in Table IV.P.3-5, the cumulative projects, in combination with the Project's net increase in solid waste generation, would generate approximately 9,190 pounds per day (or 4.6 tpd) of solid waste, with the Project accounting for approximately 54 percent of that projected increase in solid waste generation. This estimated solid waste generation does not take into account the net reduction that would occur as a result of eliminating existing land uses at the cumulative project sites and the effectiveness of recycling.

Table IV.P.3-5
Estimated Cumulative Solid Waste Generation

Land Use	Total Size/Unit	Solid Waste Generation Rate	Total (pounds per day)
Single-Family Residential	37 du	12.23 pounds/du/day	452.5
Multi-Family Residential	509 du	4 pounds/du/day	2,036.0
Senior Assisted Living Retirement	177 du	4 pounds/du/day	708.0
Retail/Commercial	215,668 sf	0.006 pounds/sf/day	1,294.0
Restaurant	23,095 sf	0.006 pounds/sf/day	138.6
Hotel	623 rooms	2 pounds/room/day	1,246.0
Office	18,000 sf	0.006 pounds/sf/day	108.0
		Cumulative Projects Subtotal	**5,983.1**
		Project Net Increase	**3,207.0**
		Total (Cumulative Projects + Project)	**9,190.1**

Note: sf = square feet; du = dwelling unit
Source for Generation Rates: https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates.

As shown on Table IV.P.3-1, the combined available landfill throughput capacity of 97,658 tpd would be adequate to accommodate the solid waste generated by cumulative development. As with the Project, the cumulative projects would be required to comply with recycling efforts. Additionally, as discussed previously, the County's 2016 Annual Report assessed future landfill disposal needs over a 15-year planning horizon based in part on forecasted waste generation and available landfill capacity. The analyses in the report concluded that the County would be able to meet the disposal needs of all jurisdictions through 2031. Thus, cumulative development would not create the need for

new or expanded landfills. Therefore, cumulative impacts related to solid waste would be **less than significant**.

(2) Mitigation Measures

No significant cumulative impacts related to solid waste disposal have been identified, and no mitigation measures are required.

(3) Level of Significance after Mitigation

Cumulative impacts related to solid waste disposal would be **less than significant** prior to mitigation.

V. Other CEQA Considerations

1. Summary of Significant Unavoidable Impacts

Section 15126.2(b) of the State CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided. Specifically, Section 15126.2(b) states:

> *Describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.*

Based on the analysis included in **Section IV, Environmental Impact Analysis,** of the Draft EIR, the Project would result in significant unavoidable environmental impacts related to the following issues:

- Air Quality
    - Regional air quality during overlapping construction (Phase II) and operation (Phase I) period under Buildout Scenario 2 only
    - Cumulative regional air quality during overlapping construction (Phase II) and operation (Phase I) period under Buildout Scenario 2 only
- Transportation
    - Intersection Level of Service (LOS) at 4 intersections, including one Congestion Management Plan arterial monitoring intersection
    - Cumulative intersection LOS at 7 intersections under Buildout Scenario 1 and 5 intersections under Buildout Scenario 2, including one Congestion Management Plan arterial monitoring intersection

All other impacts associated with the Project would either be less than significant or reduced to a less-than-significant level with mitigation.

a) Air Quality

(1) Construction Regional Air Quality

(a) Project-Specific Impact

As discussed in **Section IV.C, Air Quality** of the Draft EIR, Project impacts related to cumulative air emissions during Project construction under Buildout Scenario 2 would exceed the SCAQMD's thresholds of significance for NO_x and ROG during the potential construction and operation overlapping period. These emissions are primarily associated with off-road construction equipment. As such, Mitigation Measure AQ-MM-1 would reduce these impacts to the extent feasible; however, the emissions would still exceed the applicable SCAQMD regional thresholds. These exceedances would be temporary and would cease upon the completion of Phase II construction activities. Therefore, without mitigation, the Project's regional air quality impact would be significant during the overlapping Phase I operation and Phase II construction period in Buildout Scenario 2. Construction regional air quality impacts under Buildout Scenario 1 would be less than significant.

The following mitigation measures have been identified to reduce the Project's construction regional air quality impact:

The following mitigation measure has been identified to reduce off-road construction emission impacts:

- **AQ-MM-1**: If the Project Applicant elects to construct the Project under the phased approach identified as Buildout Scenario 2 in the Draft EIR, off-road equipment meeting the EPA's Tier 3 construction equipment emissions standards shall be used. Additionally, only haul trucks with a model year of 2007 or newer shall be used for the on-road transport of materials to and from the Project Site.

Mitigation Measure AQ-MM-1 would reduce these impacts. Table IV.C-12 shows the combined construction and operation emissions that would occur during this overlapping period under Buildout Scenario 2 with the application of Mitigation Measure AQ-MM-1. As is shown, while the ROG and NO_x emissions are reduced by between 3 and 27 percent, total emissions during the overlapping construction and operation activities would still exceed the applicable SCAQMD significance thresholds. These exceedances would be temporary and would cease upon the completion of Phase II construction activities. Long-term operational impacts under either of the two Buildout Scenarios would be less than significant, as discussed above. Nonetheless, regional construction air quality impacts during the overlapping Project construction and operation period under Buildout Scenario 2 would be significant and unavoidable

(regional construction air quality impacts under Buildout Scenario 1 would be less than significant).

(b) Cumulative Impact

Because the Los Angeles County portion of the South Coast Air Basin is currently in non-attainment for O_3, PM_{10}, and $PM_{2.5}$, cumulative development could violate an air quality standard or contribute to an existing or projected air quality violation. This would be considered a significant cumulative impact. According to SCAQMD, individual construction projects that exceed the SCAQMD recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in non-attainment. As previously discussed, emissions associated with the Project under Buildout Scenario 2 would exceed the SCAQMD's thresholds of significance for NO_x and ROG during construction and operation overlapping phases. NO_x and ROG are considered O_3 precursors and the Basin is in non-attainment for O_3. Therefore, the cumulative impact of the Project's construction emissions would be considered significant.

Mitigation Measure AQ-MM-1 would reduce these impacts to the extent feasible; however, the emissions would still exceed the applicable SCAQMD regional thresholds. These exceedances would be temporary and would cease upon the completion of Phase II construction activities. Nonetheless, the Project's contribution to cumulative regional construction air quality impacts during the overlapping Project construction and operation period under Buildout Scenario 2 would be significant and unavoidable (cumulative regional construction air quality impacts under Buildout Scenario 1 would be less than significant).

b) Transportation

(a) Project-Specific Impact

As discussed in **Section IV.N, Transportation**, of the Draft EIR, the analysis of Existing (2018) with Project traffic conditions concluded that without mitigation, the Project would result in significant impacts at 4 of the 27 study intersections. Implementation of the necessary physical improvements to reduce these impacts to a less-than-significant level is not feasible at these 4 intersections due to various physical or jurisdictional constraints as discussed in **Section IV.N, Transportation**. For these reasons, impacts to these 4 intersections (Fremont Avenue/Mission Road, Fremont Avenue/Valley Boulevard, Marengo Avenue/Mission Road, and Valley Boulevard/I-710 S/B On-Ramp) would remain significant and unavoidable during the AM and/or PM peak hours.

(b) Cumulative Impact

As discussed in **Section IV.N, Transportation**, of the Draft EIR, the analysis of Cumulative Future (2028) with Project traffic conditions concluded that without mitigation, the Project would result in significant impacts at 10 of the 27 study intersections under Project Buildout Scenario 1 and at 7 of the 27 study intersections under Project Buildout Scenario 2. With implementation of Mitigation Measures TR-MM-1 through TR-MM-3 (listed below), impacts at 3 of the 10 significantly impacted intersections under Buildout Scenario 1 and at 2 of the 7 significantly impacted intersections under Buildout Scenario 2 would be reduced to a less-than-significant level.

- **TR-MM-1**: If the Project Applicant elects to develop the Project under Buildout Scenario 1, at the intersection of W. Valley Boulevard/Westmont Drive, add one additional westbound through lane (see Figure IV.N-16).

- **TR-MM-2**: If the Project Applicant elects to develop the Project under either Buildout Scenario 1 or Buildout Scenario 2, at the intersection of Date Avenue/Orange Street, install a traffic signal.

- **TR-MM-3**: If the Project Applicant elects to develop the Project under either Buildout Scenario 1 or Buildout Scenario 2, at the intersection of Date Avenue/W. Mission Road, install a traffic signal.

No feasible physical mitigation measures are available at the remaining significantly impacted intersections (under both buildout scenarios) due to either physical or jurisdictional constraints. For these reasons, impacts to the following intersections would remain significant and unavoidable during the AM and/or PM peak hours under Project Buildout Scenario 1:

- S. Fremont Avenue/W. Mission Road
- S. Fremont Avenue/Orange Street
- S. Fremont Avenue/W. Commonwealth Avenue
- S. Fremont Avenue/W. Valley Boulevard
- S. Marengo Avenue/W. Mission Road
- W. Valley Boulevard/I-710 S/B On-Ramp
- S. Fremont Avenue/W. Hellman Avenue

Impacts to the following intersections would remain significant and unavoidable during the AM and/or PM peak hours under Project Buildout Scenario 2:

- S. Fremont Avenue/W. Mission Road
- S. Fremont Avenue/Orange Street
- S. Fremont Avenue/W. Valley Boulevard
- S. Marengo Avenue/W. Mission Road
- W. Valley Boulevard/I-710 S/B On-Ramp

2. Reasons the Project is being Proposed, Notwithstanding Significant Unavoidable Impacts

In addition to identification of a project's significant unavoidable impacts, Section 15126.2(b) of the CEQA Guidelines states that where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.

As discussed in **Section II, Project Description**, of the Draft EIR, the Project would redevelop portions of an underutilized site in the City of Alhambra (City) with a planned urban residential community. The Project Site also contains an office campus that would remain in place and is located proximate to other existing office, commercial retail, and light industrial land uses. The Project Site is located proximate to public transit options as well.

As discussed further in **Section IV.J, Land Use and Planning**, of the Draft EIR, proximity of the Project Site to transit options and to existing office, retail, and restaurant uses would encourage the use of transit by on-site residents and their guests and would potentially reduce vehicle miles traveled (VMT) by offering options for office employees to live within walking distance of their work. The Project's inclusion of a mix of office uses and residential units and bicycle spaces/storage on a site within proximity of transit lines would promote walkability in the vicinity of the Project Site, and encourage the use of bicycles as a mode of transportation. In addition, the Project's residential units would contribute toward meeting the demand for housing in the City.

The Project would support policy directives reflected in both local and regional land use plans. Specifically, as discussed in **Section IV.C, Air Quality**, and **Section IV.N, Transportation**, of the Draft EIR, the Project Site is located in a High-Quality Transit Area (HQTA) as designated by the Southern California Association of Governments (SCAG). Local jurisdictions are encouraged to focus housing and employment growth within HQTAs. The Project would focus growth within a HQTA, concentrating mixed-use, pedestrian-friendly development in an area well-served by public transportation.

As discussed above, the Project would result in significant and unavoidable impacts related to construction air quality and traffic intersection LOS. Four alternatives to the Project were considered in **Section VI, Alternatives**, of the Draft EIR – **Alternative 1 (No Project), Alternative 2 (Reduced Density 1), Alternative 3 (Reduced Density 2),** and **Alternative 4 (Reduced Density 3)**. Other alternatives taken into consideration in an effort to reduce or avoid the Project's significant and unavoidable construction air quality (Project-specific and cumulative impacts) and traffic intersection LOS (Project-specific and cumulative) impacts included several further reduced density alternatives, senior housing, and a non-residential alternative. These alternatives were generally rejected for further review primarily due to the infeasibility of implementing the alternatives.

The **No Project Alternative (Alternative 1)** would avoid all of the Project's significant and unavoidable impacts. However, Alternative 1 would not meet any of the Project Objectives or the Project's underlying purpose of capitalizing on a smart growth opportunity by intensifying a currently underutilized site with a mix of residential uses near office space, commercial land uses, and public transit lines.

The **Reduced Density 1 Alternative (Alternative 2)** would redevelop the Project Site in accordance with the proposed Project site plan and overall design but would construct 222 fewer condominium units. Alternative 2 would eliminate the Project's significant impacts at the W. Valley Boulevard/I-710 S/B On-Ramp intersection in the PM peak period, at the S. Fremont Avenue/W. Hellman Avenue intersection in the PM peak period, and at the Westmont Drive/W. Valley Boulevard intersection in the AM peak period, a reduction of three significant impacts. However, Alternative 2 would not eliminate any of the Project's other significant and unavoidable intersection LOS impacts, nor would it eliminate the Project's construction regional air quality impact during the overlap period of the Buildout Scenario 2 timeline. These impacts would remain significant and unavoidable.

Alternative 2 would not fully achieve the Project objectives to the same extent as the Project. Specifically, Alternative 2 would be 21 percent smaller than the Project and would not contribute housing stock toward the City's Regional Housing Needs Assessment (RHNA) allocation to the same extent as the Project, nor would it contribute to the economic health of the City by developing residential uses that generate local tax revenues, provide new construction jobs, and generate residents who support local businesses to the same extent as the Project.

The **Reduced Density 2 Alternative (Alternative 3)** would redevelop the Project Site in accordance with the proposed Project site plan and overall design but would construct 286 fewer condominium units. Alternative 3 would eliminate the Project's significant impacts at the S. Fremont Avenue/Orange Street intersection in the PM peak

period, at the W. Valley Boulevard/I-710 S/B On-Ramp intersection in the PM peak period, at the S. Fremont Avenue/W. Hellman Avenue intersection in the AM and PM peak periods, and at the Westmont Drive/W. Valley Boulevard intersection in the AM peak period, a reduction of five significant impacts at 4 intersections. However, Alternative 3 would not eliminate the Project's construction regional air quality impact during the overlap period of the Buildout Scenario 2 timeline, nor would it eliminate any of the Project's other significant and unavoidable intersection LOS impacts. These impacts would remain significant and unavoidable.

Alternative 3 would not fully achieve the Project objectives to the same extent as the Project. Specifically, Alternative 3 would be 27 percent smaller than the Project and would not contribute housing stock toward the City's Regional Housing Needs Assessment (RHNA) allocation to the same extent as the Project, nor would it contribute to the economic health of the City by developing residential uses that generate local tax revenues, provide new construction jobs, and generate residents who support local businesses to the same extent as the Project.

Alternative 3 was selected as the Environmentally Superior Alternative to the Project. Alternative 3 would eliminate five of the significant and unavoidable operational intersection impacts of the Project (at 4 intersections) but would not eliminate the Project's remaining significant and unavoidable intersection LOS impacts or the construction air quality impact construction/operation overlap under Buildout Scenario 2. However, Alternative 3 would not meet two of the Project Objectives to the same degree as the Project for the reasons outlined above.

The **Reduced Density 3 Alternative (Alternative 4)** would redevelop the Project Site in accordance with the proposed Project site plan and overall design but would construct 45 fewer apartment units and 226 fewer condominium units. Alternative 4 would eliminate the Project's significant impacts at the W. Valley Boulevard/I-710 S/B On-Ramp intersection in the PM peak period, at the S. Fremont Avenue/W. Hellman Avenue intersection in the AM and PM peak periods, and at the Westmont Drive/W. Valley Boulevard intersection in the AM peak period, a reduction of four significant impacts at 3 intersections.

However, Alternative 4 would not eliminate any of the Project's other significant and unavoidable intersection LOS impacts, nor would it eliminate the Project's construction regional air quality impact during the overlap period of the Buildout Scenario 2 timeline. These impacts would remain significant and unavoidable.

Alternative 4 would not fully achieve the Project objectives to the same extent as the Project. Specifically, Alternative 4 would be 26 percent smaller than the Project and would not contribute housing stock toward the City's Regional Housing Needs

Assessment (RHNA) allocation to the same extent as the Project, nor would it contribute to the economic health of the City by developing residential uses that generate local tax revenues, provide new construction jobs, and generate residents who support local businesses to the same extent as the Project.

The Project, as proposed, satisfies the Project Objectives to a greater degree than any of the proposed alternatives. The Draft EIR also includes mitigation measures that reduce the potential impacts associated with the Project to the maximum extent feasible. Overall, the Project presents several benefits that override the limited adverse effects the Project may have on the environment.

3. Significant Irreversible Environmental Changes

Section 15126.2(c) of the CEQA Guidelines states that the "[u]ses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely." Section 15126.2(c) further states that "[i]rretrievable commitments of resources should be evaluated to assure that such current consumption is justified."

The types and level of development associated with the Project would consume limited, slowly renewable and non-renewable resources. This consumption would occur during construction of the Project and would continue throughout its operational lifetime. The development of the Project would require a commitment of resources that would include: (1) building materials, (2) fuel and operational materials/resources, and (3) the transportation of goods and people to and from the Project Site.

Demolition of the existing buildings on the Project Site and excavation would result in production of waste material. As discussed in **Section IV.P.3, Utilities and Service Systems – Solid Waste**, of the Draft EIR, the Project would recycle and salvage construction soil export and debris including concrete, asphalt, wood, drywall, metals and other miscellaneous and composite materials. Proper separation of demolition debris would assist environmental clean up and allow for the proper disposal of hazardous materials that may be found within existing buildings or in on-site soil materials.

Construction of the Project would require consumption of resources that cannot be replenished or which may renew slowly as to be considered non-renewable. These resources would include certain types of lumber and other forest products, aggregate materials used in concrete and asphalt (e.g., sand, gravel and stone), metals (e.g., steel, copper and lead), petrochemical construction materials (e.g., plastics) and water. Fossil fuels, such as gasoline and oil, would also be consumed in the use of construction vehicles and equipment.

The commitment of resources required for the type and level of proposed development would limit the availability of these resources for future generations for other uses during the operation of the Project. However, this resource consumption would be consistent with growth and anticipated change in the greater Los Angeles region.

The Project would be developed within an existing urbanized area and would provide greater density in proximity to existing transit, thereby helping to reduce VMT, which could also potentially reduce the need for additional infrastructure. In addition, the Project would be consistent with the Alhambra Building Code, which requires that energy efficient, renewable, and water saving features and technologies be utilized in Project design and construction.

Based on the above, Project construction and operation would require the irretrievable commitment of limited, slowly renewable, and non-renewable resources, which would limit the availability of these resources and the Project Site for future generations or for other uses. However, the consumption of such resources would not be considered substantial and would be consistent with regional and local growth forecasts and development goals for the area. Therefore, although irreversible environmental changes would result from the Project, such changes are concluded to be less than significant, and the limited use of nonrenewable resources that would be required by Project construction and operation is justified.

4. Growth Inducing Impacts of the Proposed Project

Section 15126.2(d) of the State CEQA Guidelines requires a discussion of the ways in which a proposed project could be growth-inducing. This would include ways in which the project would foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Section 15126.2(d) of the State CEQA Guidelines states the following:

> *Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may further tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.*

Although the Project would provide new residential uses, it would not necessitate the extension of roads or other infrastructure. The Project would be developed on an infill site within an existing urbanized area and would provide greater density around existing and planned transit. The Project's location could reduce VMT and would potentially reduce the need for additional infrastructure.

As discussed in **Section IV.L, Population and Housing**, of the Draft EIR, residential development on the Project Site would consist of 1,061 apartment and condominium units, which would generate approximately 2,525 new residents. Compared to the anticipated population growth in the City between the 2018 baseline year and 2040, the Project's residential population would represent 78 percent of the forecasted population growth in the City. Although this is a significant portion of the forecasted population growth, it should be noted that there are few sites of the size and relative underutilized character of the Project Site within Alhambra that are likely to be the target of large-scale redevelopment over this planning period.

Finally, the infrastructure (e.g., water facilities, electricity transmission lines, natural gas lines, etc.) associated with the Project would not induce growth because the facilities would only serve the Project. The construction of a potential growth-inducing roadway or other infrastructure extensions would not be required. The Project Site is already developed and connected to all local utility infrastructures, including water, wastewater, electricity, and natural gas. The area surrounding the Project Site is already developed, and the Project would not remove impediments to growth. The Project Site is located within an urban area that is currently served by existing utilities and infrastructure. Although the Project may require minor local infrastructure upgrades to maintain and improve water, sewer, electricity, and natural gas lines on-site and in the immediate vicinity of the Project Site, such improvements would be limited to serving Project-related demand and would not necessitate major local or regional utility infrastructure improvements that have not otherwise been accounted and planned for on a regional level.

Overall, the Project would be consistent with the growth forecast for the City and would be consistent with regional policies to reduce urban sprawl, efficiently utilize existing infrastructure, reduce regional congestion, and improve air quality through the reduction of VMT. In addition, the Project would not require any major roadway improvements nor would the Project open any large undeveloped areas for new use. Any access improvements would be limited to driveways necessary to provide immediate access to the Project Site and to improve safety and walkability. Therefore, direct and indirect growth-inducing impacts would be less than significant.

5. Potential Secondary Effects of Mitigation Measures

Section 15126.4(a)(1)(D) of the CEQA Guidelines states that "if a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the project as proposed." With regard to this section of the CEQA Guidelines, the potential impacts that could result with the implementation of each mitigation measure identified for the Project were reviewed.

All of the mitigation measures identified for the Project are listed in Table I-1 in **Section I, Executive Summary**, of the Draft EIR. The mitigation measures would not generate any additional traffic, pollutant emissions, noise, or demand for public services or utilities. Thus, the mitigation measures identified for the Project would not result in any secondary environmental impacts.

VI. Alternatives

1. Introduction

The identification and analysis of alternatives to a project is a fundamental aspect of the environmental review process under the California Environmental Quality Act (CEQA). Specifically, Public Resources Code (PRC) Section 21002.1(a) establishes the need to address alternatives in an environmental impact report (EIR) by stating that in addition to determining a project's significant environmental impacts and indicating potential means of mitigating or avoiding those impacts, "the purpose of an environmental impact report is…to identify alternatives to the project."

Direction regarding the consideration and discussion of project alternatives in an EIR is provided in CEQA Guidelines Section 15126.6. More specifically, CEQA Guidelines Section 15126.6(a) states the following:

> *An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decisionmaking and public participation. An EIR is not required to consider alternatives which are infeasible.*

In addition, CEQA Guidelines Section 15126.6(b) states the following:

> *Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment, the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of project objectives, or would be more costly.*

The CEQA Guidelines Section 15126.6(c) indicates that the selection of project alternatives "shall include those that could feasibly accomplish most of the basic objectives and could avoid or substantially lessen one or more of the significant effects. The CEQA Guidelines further direct that the range of alternatives be guided by a "rule of reason," such that only those alternatives necessary to permit a reasoned choice are

addressed. In selecting project alternatives for analysis, potential alternatives must be feasible. CEQA Guidelines Section 15126.6(f)(1) states that:

> *Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries […], and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site […]*

Beyond these factors, CEQA Guidelines Section 15126.6(e) requires the analysis of a "no project" alternative and CEQA Guidelines Section 15126.6(f)(2) requires an evaluation of alternative location(s) for the project, if feasible. Based on the alternatives analysis, an environmentally superior alternative is to be designated. If the environmentally superior alternative is the No Project Alternative, then the EIR shall identify an environmentally superior alternative among the other alternatives.

2. Overview of Selected Alternatives to the Project

As indicated above, the intent of the alternatives analysis is to reduce the significant impacts of a project. Based on the analyses provided in **Section IV, Environmental Impact Analysis**, of the Draft EIR, implementation of the Project would result in significant impacts that cannot be feasibly mitigated to a less-than-significant level with respect to transportation and air quality, with the latter being a construction-period impact under Buildout Scenario 2 only.

Accordingly, based on the significant environmental impacts of the Project, the basic objectives established for the Project (refer to **Section II, Project Description**, of the Draft EIR), public input received during the scoping period, the existing zoning designation on the Project Site, and the feasibility of the alternatives considered, the alternatives to the Project listed below were selected for evaluation.

- Alternative 1: No Project Alternative
- Alternative 2: Reduced Density 1 Alternative
- Alternative 3: Reduced Density 2 Alternative
- Alternative 4: Reduced Density 3 Alternative

Table VI-1 below provides a summary and comparison of each alternative analyzed. Each of these alternatives is also described in detail in the sections that follow.

Table VI-1
Summary of Alternatives

Land Use	Project	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Existing Uses to Remain	Office Plan Area	All Plan Areas	Office Plan Area	Office Plan Area	Office Plan Area
Condominium	516 DU	0	294 DU	230 DU	290 DU
Apartment	545 DU	0	545 DU	545 DU	500 DU
DU = dwelling unit					

3. Alternatives Considered and Rejected

As set forth in CEQA Guidelines Section 15126.6(c), an EIR should identify any alternatives that were considered for analysis but rejected as infeasible and briefly explain the reasons for their rejection. According to CEQA Guidelines Section 15126.6(c), among the factors that may be used to eliminate an alternative from detailed consideration are the alternative's failure to meet most of the basic project objectives, the alternative's infeasibility, or the alternative's inability to avoid significant environmental impacts. Alternatives to the Project that have been considered and rejected as infeasible include the following:

- **Development of Additional Office Uses:** Under the existing zoning and land use designation of the Project Site (Professional Office), additional office space could be developed to replace the existing light industrial/warehouse uses and surface parking lots on the portions of the Project Site that are proposed for redevelopment. This alternative was investigated but concluded to be infeasible based on the current vacancy rates for office space and projected demand for such space within the City. Moreover, this alternative would fail to meet several of the basic Project objectives. It would not contribute housing stock toward the City's Regional Housing Needs Assessment (RHNA) allocation. It would not contribute to the economic health of the City by developing residential uses that generate local tax revenues, provide new construction jobs, and generate residents who support local businesses. It would not improve the aesthetic quality of the site by removing older structures and parking lots and developing new, more attractive residential buildings across a lushly landscaped campus. It would not develop an economically feasible project featuring a high level of quality in architectural design and placemaking that can create an urban community that serves as a destination within the City. Therefore, an alternative that includes additional office uses was rejected as infeasible.

- **Additional Reduced Density Alternatives**: In an effort to eliminate the Project's significant and unavoidable intersection Level of Service (LOS) traffic impacts, a sensitivity analysis was conducted to determine what size residential development could be developed at the Project Site without resulting in a significant LOS impact at any of the intersections where the installation of physical mitigation measures has been concluded to be infeasible due to geometric physical or jurisdictional constraints. Several additional reduced density alternatives were reviewed, including some that were partially comprised of senior housing. However, all of the additional reduced density alternatives produced at least 4 significant intersection impacts, including some at the intersections where physical improvements have been concluded to be infeasible. In order to avoid all significant and unavoidable traffic impacts, a maximum of 60 apartments and 60 condominiums could be constructed at the Project Site. This reduced density of development would not be economically justifiable for the Project Applicant.

- **Alternative Project Site:** The Project Applicant already owns the Project Site, and its location is conducive to the development of an urban residential community. The Project Site is also in proximity to transit facilities. The Project Site's location makes it particularly suitable for residential development given its proximity to existing on-site and off-site office land uses that can promote walkability between residences and potential workplaces. Furthermore, the Project Applicant cannot reasonably acquire, control, or access an alternative site in a timely fashion that would result in implementation of a project with similar uses and square footage. If an alternative site in Alhambra that could accommodate the Project could be found, it would likely result in a similar level of traffic and air quality impacts, including at the same intersections that development at the Project Site would impact. Additionally, development of the Project at an alternative site could potentially produce other environmental impacts in areas such as aesthetics, cultural resources, geology/soils, and/or hazards/hazardous materials that would otherwise not occur at the current Project Site and result in greater environmental impacts when compared to the Project. Accordingly, an alternative site location is not considered feasible as the Project Applicant does not own another suitable site that would achieve the underlying purpose and objectives of the Project, and an alternative site could simply shift the Project's significant and unavoidable impacts to a different location. Thus, the alternative location alternative was rejected from further consideration.

4. Analysis Format

In accordance with CEQA Guidelines Section 15126.6(d), each alternative is evaluated in sufficient detail to determine whether the overall environmental impacts would be less,

similar, or greater than the corresponding impacts of the Project. Furthermore, each alternative is evaluated to determine whether the Project's underlying purpose and basic objectives, identified in **Section II, Project Description**, of the Draft EIR, would be substantially attained by the alternative. The evaluation of each of the alternatives follows the process described below:

a. The net environmental impacts of the alternative, after implementation of the same project design features as the Project and mitigation measures are determined for each environmental issue area analyzed in this Draft EIR.

b. Post-mitigation significant and non-significant environmental impacts of the alternative and the Project are compared for each environmental issue area as follows:

   - Less: Where the net impact of the alternative would be less adverse or more beneficial than the impact of the Project, the comparative impact is said to be "less."
   - Greater: Where the net impact of the alternative would be more adverse or less beneficial than the Project, the comparative impact is said to be "greater."
   - Similar: Where the impact of the alternative and Project would be roughly equivalent, the comparative impact is said to be "similar."

c. The comparative analysis of the impacts is followed by a general discussion of whether the underlying purpose and basic Project objectives are feasibly and substantially attained by the alternative.

A summary matrix that compares the impacts associated with the Project with the impacts of each of the analyzed alternatives is provided below in Table VI-2.

Table VI-2
Summary Comparison of Impacts Associated with the Alternatives and Impacts of the Project

Environmental Issue Analyzed	Project Impact	Alt 1: No Project	Alt 2: Reduced Density 1	Alt 3: Reduced Density 2	Alt 4: Reduced Density 3
Aesthetics					
Aesthetics – Construction	LTS	Less (NI)	Similar (LTS)	Similar (LTS)	Similar (LTS)
Aesthetics – Operation	LTS	Less (NI)	Similar (LTS)	Similar (LTS)	Similar (LTS)
Views	LTS	Less (NI)	Similar (LTS)	Similar (LTS)	Similar (LTS)
Light/Glare – Construction	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Light/Glare - Operation	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Air Quality					

Environmental Issue Analyzed	Project Impact	Alt 1: No Project	Alt 2: Reduced Density 1	Alt 3: Reduced Density 2	Alt 4: Reduced Density 3
Construction					
Regional Emissions	**SU**[1]	Less (NI)	Less (**SU**[1])	Less (**SU**[1])	Less (**SU**[1])
Localized Emissions	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Toxic Air Contaminants	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Operation					
Regional Emissions	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Localized Emissions	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Toxic Air Contaminants	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Cultural Resources					
Historical Resources	LTS-M	Less (NI)	Similar (LTS-M)	Similar (LTS-M)	Similar (LTS-M)
Archaeological Resources	LTS-M	Less (NI)	Less (LTS-M)	Less (LTS-M)	Less (LTS-M)
Paleontological Resources	LTS-M	Less (NI)	Less (LTS-M)	Less (LTS-M)	Less (LTS-M)
Energy					
Construction	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Operation	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Geology and Soils	LTS	Less (NI)	Similar (LTS)	Similar (LTS)	Similar (LTS)
Greenhouse Gas Emissions					
Construction	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Operation	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Hazards and Hazardous Materials					
Construction	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Operation	LTS	Less (NI)	Similar (LTS)	Similar (LTS)	Similar (LTS)
Hydrology and Water Quality					
Construction	LTS	Less (NI)	Similar (LTS)	Similar (LTS)	Similar (LTS)
Operation	LTS	Less (NI)	Similar (LTS)	Similar (LTS)	Similar (LTS)
Land Use and Planning	LTS	Less (NI)	Similar (LTS)	Similar (LTS)	Similar (LTS)
Noise					
Construction					
On-Site Noise	LTS-M	Less (NI)	Less (LTS-M)	Less (LTS-M)	Less (LTS-M)
Off-Site Noise	LTS-M	Less (NI)	Less (LTS-M)	Less (LTS-M)	Less (LTS-M)
Vibration	LTS-M	Less (NI)	Similar (LTS-M)	Similar (LTS-M)	Similar (LTS-M)
Operation					
On-Site Noise	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Off-Site Noise	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Vibration	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Population and Housing					
Population	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Housing	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Public Services					
Fire Protection					
Construction	LTS	Less (NI)	Similar (LTS)	Similar (LTS)	Similar (LTS)
Operation	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Police Protection					
Construction	LTS	Less (NI)	Similar (LTS)	Similar (LTS)	Similar (LTS)
Operation	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Schools	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Parks and Recreation	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Libraries	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Transportation					
Construction	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)

Environmental Issue Analyzed	Project Impact	Alt 1: No Project	Alt 2: Reduced Density 1	Alt 3: Reduced Density 2	Alt 4: Reduced Density 3
Operation					
Intersection Levels of Service	**SU**	Less (NI)	Less (**SU**)	Less (**SU**)	Less (**SU**)
CMP Impacts	**SU**	Less (NI)	Similar (**SU**)	Similar (**SU**)	Similar (**SU**)
Access and Circulation	LTS	Less (NI)	Similar (LTS)	Similar (LTS)	Similar (LTS)
Bicycle/Pedestrian/Vehicle Safety	LTS	Less (NI)	Similar (LTS)	Similar (LTS)	Similar (LTS)
Tribal Cultural Resources	LTS-M	Less (NI)	Less (LTS-M)	Less (LTS-M)	Less (LTS-M)
Utilities and Service Systems					
Wastewater					
Construction	LTS	Less (NI)	Similar (LTS)	Similar (LTS)	Similar (LTS)
Operation	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Water					
Construction	LTS	Less (NI)	Similar (LTS)	Similar (LTS)	Similar (LTS)
Operation	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Solid Waste					
Construction	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)
Operation	LTS	Less (NI)	Less (LTS)	Less (LTS)	Less (LTS)

Guide to Abbreviations:

NI = no impact
LTS = less-than-significant impact
LTS-M = less-than-significant impact with implementation of mitigation measures and/or project design features
***SU** = significant and unavoidable impact even with implementation of mitigation measures and/or project design features*

VI. Alternatives

A. Alternative 1: No Project Alternative

1. Description of the Alternative

In accordance with the CEQA Guidelines, the No Project Alternative for a development project on an identifiable property consists of the circumstance under which the project does not proceed. Per Section 15126.6(e)(2) of the CEQA Guidelines, the "no project" analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Per Section 15126.6(e)(3)(B) of the CEQA Guidelines, if the project is other than a land use or regulatory plan, for example a development project on identifiable property, the "no project" alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this "no project" consequence should be discussed. In certain instances, the no project alternative means "no build" wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment.

Per Section 15126.6(e)(3)(C) of the CEQA Guidelines, after defining the no project alternative, the lead agency should proceed to analyze the impacts of the no project alternative by projecting what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

With respect to the Project Site, it is not likely that any other type of redevelopment project would occur in the event the proposed Project or one of the redevelopment alternatives

examined in the Draft EIR were not approved by the City. First, the Project Site has been under stable ownership for a lengthy period of time and contains an existing office campus with multiple long-term tenants. It is unlikely that this ownership would choose to sell the property to a different party with a radically different vision for the Project Site. Second, there is limited market demand for additional office space in this area of Alhambra. This is the most likely alternate land use to be considered for the Project Site due to its consistency with the existing zoning of the property. Other than urban residential, any other land use proposed for the Project Site would require a change of zoning in order to be developed.

Accordingly, for purposes of this analysis, Alternative 1, the No Project Alternative, assumes that the Project would not be approved, no new permanent development would occur within the Project Site and the existing environment would be maintained. Thus, the physical conditions of the Project Site would generally remain as they are today. Under Alternative 1, the Project Site would continue to be occupied with light industrial/warehouse uses, office space, a health club, parking structures, and surface parking lots. No changes would be made to the fully-developed Project Site. Future on-site activities would be limited to the continued operation and maintenance of the existing land uses. The site plan under Alternative 1 would be the same as existing conditions, as illustrated in Figure II-3 in **Section II, Project Description**, of the Draft EIR.

2. Environmental Impact Analysis

a) Aesthetics

1) Visual Character

Alternative 1 would not remove the existing light industrial/warehouse, office, or parking lot uses or construct new buildings on the Project Site. Therefore, Alternative 1 would not change the existing visual character of the Project Site. Thus, no construction or new operational impacts related to visual character would occur under Alternative 1, and impacts would be less than the Project.

2) Views

Because the existing buildings and uses would remain as is, Alternative 1 would not result in an increase in the height or massing of on-site structures, and existing views of and across the Project Site would remain. Therefore, no construction or new operational impacts related to views would occur under Alternative 1, and impacts would be less than the Project.

3) Light and Glare

Alternative 1 would not remove the existing light industrial/warehouse, office, or parking lot uses or construct new buldings on the Project Site. Therefore, Alternative 1 would not introduce any new sources of light or glare to the Project Site. Thus, no construction or new operation impacts related to light and glare would occur under Alternative 1, and impacts would be less than the Project.

b) Air Quality

1) Construction

Alternative 1 would not remove the existing light industrial/warehouse, office, and parking lot uses or construct a new building on the Project Site. Therefore, Alternative 1 would not result in any construction emissions associated with construction worker and construction truck traffic, fugitive dust from demolition and excavation, or the use of heavy duty construction equipment, and construction-related regional and localized air quality impacts would not occur. Similarly, Alternative 1 would not result in diesel particulate emissions during construction that could generate substantial toxic air contaminants (TACs). As such, Alternative 1 would avoid the pollutant concentrations associated with construction activities, no conflict with applicable air quality plans and/or violation of any air quality standards would occur, and there would be no cumulatively considerable net increase in any criteria pollutant. Alternative 1 would avoid the Project's significant and unavoidable construction regional air quality impact under Buildout Scenario 2. Therefore, no construction-related regional and localized air quality impacts or TAC impacts would occur under Alternative 1, and impacts would be less than the Project.

2) Operation

Alternative 1 would not result in increased operations that could generate additional emissions and/or TACs related to vehicular traffic or the consumption of electricity and natural gas on the Project Site. Thus, no new operational air quality impacts associated with regional and localized emissions or TAC contaminants would occur under Alternative 1, and impacts would be less than the Project.

c) Cultural Resources

1) Historical Resources

Alternative 1 would not remove the existing light industrial/warehouse, office, and parking lot uses or construct a new building on the Project Site. No historic buildings on the Project Site would be impacted by Alternative 1. Therefore, no impacts to historical resources

would occur under Alternative 1, and impacts would be less than the Project's mitigated less-than-significant impact.

2) Archaeological Resources

Alternative 1 would not remove the existing light industrial/warehouse, office, and parking lot uses or construct a new building on the Project Site. No grading or earthwork activities would occur under Alternative 1. Therefore, there would be no potential for Alternative 1 to uncover subsurface archaeological resources that may be present beneath the Project Site. No impacts to archaeological resources would occur, and the Project's less-than-significant impact with mitigation associated with the potential discovery of archaeological resources would be avoided, and impacts would be less than the Project.

d) Energy

The Project Site is currently developed with light industrial/warehouse, office, and parking lot uses. Alternative 1 would not alter the existing land uses or operations on the Project Site. In addition, construction activities would not occur under Alternative 1. Therefore, Alternative 1 would not increase the short-term or long-term energy (electricity, natural gas, petroleum-based fuel usage) demand on the Project Site. No construction or new operational impacts related to energy would occur, and impacts would be less than the Project.

e) Geology and Soils

Alternative 1 would not remove the existing light industrial/warehouse, office, and parking lot uses or construct a new building on the Project Site. Since no construction activities would occur, no new construction or operational impacts related to geology and soils would occur, and impacts would be less than the Project.

Alternative 1 would not remove the existing light industrial/warehouse, office, and parking lot uses or construct a new building on the Project Site. No grading or earthwork activities would occur under Alternative 1. Therefore, there would be no potential for Alternative 1 to uncover subsurface paleontological resources that may be present beneath the Project Site. No impacts to paleontological resources would occur and the Project's less-than-significant impact with mitigation associated with the potential discovery of paleontological resources would be avoided and impacts would be less than the Project.

f) Greenhouse Gas Emissions

As there would be no new development or new operations on-site, no new greenhouse gas (GHG) emissions would occur under Alternative 1. Therefore, no impacts associated with global climate change would occur under Alternative 1. As such, no impacts associated with GHG emissions would occur under Alternative 1, and impacts would be less than the Project.

g) Hazards and Hazardous Materials

Alternative 1 would not remove the existing light industrial/warehouse, office, and parking lot uses or construct a new building on the Project Site. Therefore, Alternative 1 would not result in construction-related impacts associated with the transport and use of hazardous materials, interference with an adopted emergency response plan, uncovering of subsurface soil contamination, or disturbance of asbestos or lead based paint on the Project Site, and impacts would be less as compared to the Project's less-than-significant impacts. During operation, Alternative 1 would not increase the transport, use, storage, or disposal of hazardous materials and wastes to/from the Project Site when compared to the Project. Also, Alternative 1 would not interfere with an emergency response plan or evacuation plan as no new development would occur. Accordingly, no significant impacts related to hazards and hazardous materials would occur under Alternative 1, and impacts would be less than the Project.

h) Hydrology and Water Quality

Alternative 1 would not remove the existing light industrial/warehouse, office, and parking lot uses or construct a new building on the Project Site. Therefore, Alternative 1 would not alter existing drainage patterns on the Project Site that could result in flooding, erosion, or sedimentation on- or off-site. Alternative 1 would not create new sources of polluted runoff and would not alter the existing quantity or quality of stormwater runoff leaving the Project Site during either construction or operation. Impacts would be less as compared to the Project's less-than-significant impacts. Accordingly, no significant impacts related to hydrology and water quality would occur under Alternative 1, and impacts would be less than the Project.

i) Land Use and Planning

Under Alternative 1, there would be no changes to the physical or operational characteristics of the existing land uses and buildings on the Project Site. No land use approvals or permits would be required. No impacts associated with consistency with land use regulations and plans would occur. Moreover, because this Alternative would not result in new land uses, the relationship between the existing on-site and off-site land

uses would not change. Unlike the Project, which results in the construction of 1,061 residential units, Alternative 1 would not provide any housing units. Unlike the Project, Alternative 1 would therefore not advance local and regional planning objectives that promote the development of new housing to meet housing demand, infill mixed-use developments in urban centers near public transit, and pedestrian-oriented improvements, inclusive of applicable policies and objectives included in the City's General Plan (see **Section IV.J, Land Use and Planning**, of the Draft EIR). As with the Project, Alternative 1 would result in a less-than-significant impact with respect to land use; however, because Alternative 1 would not alter the existing uses at the Project Site, impacts would be less than the Project's less-than-significant impacts.

j) Noise

No construction activities would occur under Alternative 1. Therefore, no construction-related noise or vibration would be generated on-site or off-site. The Project's less-than-significant impact with mitigation associated with construction noise would be avoided. Similarly, since no development would occur on the Project Site, no increase in traffic would occur, and no new operational noise sources would be introduced. As such, noise levels would remain at existing levels, and Alternative 1 would result in fewer operational noise impacts as compared to the Project's less-than-significant operational noise impacts. In addition, Alternative 1 would not result in any vibration impacts during operation, and, thus, vibration impacts would be less than the Project.

k) Population and Housing

1) Population

Under Alternative 1, the Project Site would not be developed with new land uses. The Project Site is currently developed with light industrial/warehouse, office, and parking uses. No residential uses exist on the Project Site. Alternative 1 would not induce growth through the introduction of new and/or an extension of existing roadways and/or utility infrastructure. Therefore, Alternative 1 would have no impact with respect to population, and population impacts would be less than the Project.

2) Housing

Under Alternative 1, the Project Site would not be developed with new land uses. The Project Site is currently developed with light industrial/warehouse, office, and parking uses. No residential uses exist on the Project Site. Under Alternative 1, no housing units would be added to the Project Site. Therefore, Alternative 1 would have no impact with respect to housing. It should be noted, however, that, as compared to the Project,

Alternative 1 would not contribute needed housing units toward the City's share of the RHNA.

l) Public Services

1) Fire Protection

As Alternative 1 would not require any construction activities, this alternative would not have the potential for construction to expose additional people to the risk of fire or explosion related to the use of hazardous materials or to potentially impact the provision of fire protection and emergency services in the vicinity of the Project Site. Similarly, since no changes to existing land uses or operations on-site would occur, there would be no potential to increase the level of activity on the Project Site or increase the service population for the Alhambra Fire Department (AFD) station that serves the Project Site. Therefore, Alternative 1 would not result in any fire protection impacts due to the continued operation of the existing uses, and impacts would be less than the Project.

2) Police Protection

As Alternative 1 would not require any construction activities, it would not have the potential for construction to create sources of nuisances and hazards or potentially impact police response in the vicinity of the Project Site. Similarly, since no changes to existing land uses or operations on-site would occur, there would be no potential to increase the service population on-site or have the potential to increase calls for police protection services from the Alhambra Police Department (APD). Therefore, Alternative 1 would not result in any police protection impacts due to the continued operation of the existing uses, and impacts would be less than the Project.

3) Schools

As Alternative 1 would not require any construction activities, it would not have the potential for construction employment to result in an increase in the resident population or corresponding demand for schools in the vicinity of the Project Site. Similarly, since no changes to existing land uses or operations on-site would occur, there would be no potential to increase the population of school-aged children in the attendance boundaries of the schools that serve the Project Site. Therefore, Alternative 1 would not increase demand for school services or facilities due to continued operation of the existing uses, and impacts would be less than the Project.

4) Parks and Recreation

As Alternative 1 would not require any construction activities, it would not have the potential for construction employment to result in an increase in the resident population

or corresponding permanent demand for parks and recreational facilities in the vicinity of the Project Site. Similarly, since no changes to existing land uses or operations on-site would occur, there would be no potential to generate additional demand for parks and recreational facilities in the Project vicinity. Therefore, Alternative 1 would not result in any impacts to parks and recreation due to the continued operation of the existing uses, and impacts would be less than the Project.

5) Libraries

As Alternative 1 would not require any construction activities, it would not have the potential for construction employment to result in an increase in the resident population or corresponding demand for libraries in the vicinity of the Project Site. Similarly, since no changes to existing land uses or operations on-site would occur, there would be no potential to generate additional demand for libraries in the Project vicinity. Therefore, Alternative 1 would not result in any library impacts due to the continued operation of the existing uses, and impacts would be less than the Project.

m) Transportation

Since Alternative 1 would not require any construction activities on the Project Site, it would not generate vehicle trips, associated haul trucks or construction worker vehicles. As such, no construction-related traffic impacts would occur under Alternative 1. Further, there would be no potential for access and safety, emergency access, or transit impacts during construction. Alternative 1 would also not generate any additional vehicle trips or alter existing access or circulation around the Project Site during operation. Therefore, no impacts would occur with respect to operational traffic, including intersection levels of service; the regional transportation system; access and circulation; and bicycle, pedestrian, and vehicular safety. Alternative 1 would avoid the Project's significant and unavoidable intersection level of service impacts and would avoid the Project's other less-than-significant operational traffic impacts. Impacts under Alternative 1 would be less than the Project.

n) Tribal Cultural Resources

Grading and other earthwork activities would not occur under Alternative 1. Therefore, there would be no potential for Alternative 1 to uncover subsurface tribal cultural resources. As such, no impacts to tribal cultural resources would occur, and impacts would be less than the Project.

o) Utilities and Service Systems

1) Wastewater

Since Alternative 1 would not require any construction activities, it would not generate wastewater during construction, and construction-related impacts to wastewater conveyance and treatment infrastructure would not occur. In addition, Alternative 1 would not alter the existing land uses or operations on the Project Site. Therefore, Alternative 1 would not increase the operational wastewater flow on the Project Site, and impacts would be less than the Project.

2) Water

Since Alternative 1 would not require any construction activities, it would not generate a short-term or long-term demand for water during construction or operation, and construction and operation-related impacts to water supply and infrastructure would not occur. Alternative 1's impacts would be less than the Project.

3) Solid Waste

The Project Site is currently developed with light industrial/warehouse, office, and parking lot uses. Alternative 1 would not alter the existing land uses or operations on the Project Site. Therefore, Alternative 1 would not increase the construction or operational solid waste production on the Project Site. No construction or operational impacts to solid waste collection or disposal facilities would occur, and impacts would be less than the Project.

3. Comparison of Impacts

Alternative 1 would avoid the Project's significant and unavoidable air quality impact during overlapping construction/operation phases under Buildout Scenario 2 and the Project's significant and unavoidable traffic impacts on intersection level of service during operation. Impacts under Alternative 1 would be less than all of the Project's remaining less-than-significant and less-than-significant with mitigation impacts as no changes to the existing conditions would occur. Alternative 1 would also eliminate all of the Project's less-than-significant impacts with mitigation.

4. Relationship of the Alternative to Project Objectives

No changes to existing land uses or operation would occur under Alternative 1. As such, Alternative 1 would not meet the underlying purpose of the Project or most of the Project's objectives. Specifically, Alternative 1 would not meet the following Project objectives:

- Contribute housing stock toward the City's RHNA allocation.
- Contribute to the economic health of the City by developing residential uses that generate local tax revenues, provide new construction jobs, and generate residents who support local businesses.
- Improve the aesthetic quality of the site by removing older structures and parking lots and developing new, more attractive residential buildings across a lushly landscaped campus.
- Develop an economically feasible project featuring a high level of quality in architectural design and placemaking that can create an urban community that serves as a destination within the City.

Specifically, Alternative 1 would not maximize the density of an existing underutilized site located proximate to office and retail uses as well as transit corridors. The proximity of the Project Site to transit options and to existing office, retail, and restaurant uses would encourage the use of transit by on-site residents and their guests and would potentially reduce vehicle miles traveled (VMT) by offering options for office employees to live within walking distance of their work. The Project's inclusion of a mix of office uses and residential units and bicycle spaces/storage on a site within proximity of transit lines would promote walkability in the vicinity of the Project Site, and encourage the use of bicycles as a mode of transportation. In addition, the Project's residential units would contribute toward meeting the demand for housing in the City. Alternative 1 would accomplish none of these things.

Alternative 1 would not contribute to the economic health of the City by developing residential uses that generate local tax revenues, provide new construction jobs, and generate residents who support local businesses. Overall, Alternative 1 would only meet one of the Project objectives: retention of the existing buildings within the Office Plan Area of the Project Site. Alternative 1 would not achieve the Project's underlying purpose of capitalizing on a smart growth opportunity by intensifying a currently underutilized site with a mix of residential uses near office space, commercial land uses, and public transit lines.

VI. Alternatives

B. Alternative 2: Reduced Density 1 Alternative

1. Description of the Alternative

The Reduced Density 1 Alternative (Alternative 2) would redevelop the Project Site in the same fashion as the proposed Project but would reduce the number of condominiums by 222 dwelling units. This reduction would occur within the North Plan Area. Alternative 2 would develop the same number of apartment units as the Project (545 dwelling units) in the South and Corner Plan Areas and would develop 294 condominium units in the North Plan Area, as shown in Table VI-3. The site plan would be substantially the same as that of the proposed Project, only the building heights would be lower as a result of reducing the number of condominium units. Due to the fewer number of units, less subterranean parking would be required.

Alternative 2 would reduce the overall Project size by 21 percent. As with the Project, public vehicular access would be provided from all four of the adjacent streets. Design and architecture, as well as landscaping, would be similar to that of the proposed Project.

Table VI-3
Summary of Alternative 2 (Reduced Density 1) Uses and Comparison to the Project

Land Use	Alternative 2	Proposed Project	Difference
Apartments	545 DU	545 DU	0 DU
Condominiums	294 DU	516 DU	-222 DU
Totals	**839 DU**	**1,061 DU**	**-222 DU**
DU = dwelling units			

Signage, lighting, vehicular and pedestrian access, setbacks, and sustainability features would be similar to those proposed for the Project.

As with the Project, Alternative 2 would be constructed under one of two buildout scenarios (see **Section II, Project Description**, of the Draft EIR for a description of Buildout Scenarios 1 and 2). However, construction would be expected to require a somewhat shorter overall duration due to the fewer number of condominium units being constructed. As with the Project, a Work Zone Traffic Control Plan, subject to City

approval, would be implemented during construction to minimize potential conflicts between construction activity and traffic in the immediate vicinity of Project Site.

2. Environmental Impact Analysis

a) Aesthetics

1) Visual Character, Scenic Vistas, and Scenic Resources

(a) Construction

As with the Project, the visual appearance of the Project Site would be altered during construction due to the removal of the existing buildings and other improvements to the same extent as the Project. Other construction activities, including site preparation, grading, and excavation, the staging of construction equipment and materials, and the construction of the building foundations and proposed structures, would also alter the visual character and quality of the Project Site and adjacent roadways. Alternative 2's construction activities could be visible to pedestrians and motorists, as well as to viewers within nearby buildings. As with the Project, Alternative 2 would incorporate similar project design features as the Project, including the installation of temporary construction fencing that would screen much of the construction activity from view at street level. Overall, similar to the Project, while Alternative 2 would alter the visual character of the Project area on a short-term basis, construction activities would not substantially alter or degrade the existing visual character of the Project Site for the following reasons: (1) views of construction activities would be limited in duration and location; (2) the site appearance would be typical of construction sites in urban areas; (3) construction would occur within an urban setting with a high level of human activity and development; and (4) impacts would be reduced through standard best management practices (BMPs) implemented during the construction period. Therefore, aesthetic impacts during construction would be similar to the less-than-significant impacts of the Project.

(b) Operation

Under Alternative 2, the building architecture and style would be similar to that of the Project. In addition, the landscaping would be similar to that employed in the Project. Some building heights in the North Plan Area would be reduced due to the fewer number of condominium units. As with the Project, Alternative 2 would feature cohesive signage that would be consistent in shape, size, color, height, and lettering. Also, as with the Project, the landscape design for Alternative 2 would create a pedestrian-friendly environment. Alternative 2 would not substantially affect existing scenic vistas of the distant San Gabriel Mountains. The Project Site and surrounding area are characterized by dense urban development, and the Alternative 2 would not substantially alter existing

views available in the area, similar to the Project. The Project Site does not contain trees with scenic significance or rock outcroppings and is not located within a state scenic highway. Therefore, no impact would occur with respect to scenic resources within a state scenic highway, as with the Project. Therefore, similar to the Project, Alternative 2 would not degrade the existing visual character or quality of the Project Site or its surroundings due to changes in architecture or urban design. Thus, aesthetics impacts would be similar to the Project's less-than-significant impacts.

2) Light and Glare

(a) Construction

The Project Site is located in a highly urbanized area of the City. Land uses in the immediate Project Site area include warehouses, office, retail, commercial, light industrial, and transportation infrastructure, in addition to surface parking lots. Many of these land uses produce nighttime light and daytime glare (e.g., indoor/outdoor lighting, windows, light-colored surfaces, etc.) typical of such uses in an urban area.

The closest light-sensitive uses to the Project Site are the single-family residences along Front Street, across Mission Road and the railroad corridor (approximately 200 feet south of the Project Site's southern boundary). However, as with the Project, construction activities for Alternative 2 would occur in accordance with the provision of AMC Section 18.02, which limits construction hours to between 7:00 AM and 7:00 PM on weekdays and Saturdays with no construction permitted on Sundays or federal holidays. Therefore, Alternative 2 construction would not significantly impact off-site light-sensitive uses, substantially alter the character of off-site areas surrounding the Project Site, adversely impact day or nighttime views in the area, or substantially interfere with the performance of an off-site activity.

In addition, as with the Project, daytime and nighttime glare could potentially occur during construction activities if reflective construction materials were positioned in highly visible locations where the reflection of sunlight or nighttime light sources could occur. However, any glare generated within the Project Site during construction would be highly transitory and short-term given the movement of construction equipment and materials within the construction area and the temporary nature of construction activities. Furthermore, large, flat surfaces that are generally required to generate substantial glare are typically not an element of construction activities. As a result, light and glare associated with the construction of Alternative 2 would not substantially alter the character of off-site areas surrounding the Project Site or adversely impact day or nighttime views in the area and impacts would be less than significant and similar to those of the Project. Therefore, impacts from sources of artificial light and glare during construction of Alternative 2 would be similar to the Project's less-than-significant impacts. Also, light impacts associated

with construction would be less than significant under Alternative 2 and less than the Project due to the shorter construction duration.

(b) Operation

As with the Project during operation, Alternative 2 would increase light and glare levels within the Project Site and surrounding area compared to existing conditions through the introduction of new light and glare sources. Similar to the Project, Alternative 2 would include lighting designed to highlight architectural elements of the structure. Security lighting would be installed to deter criminal activity on the Project Site. The lights associated with Alternative 2 would be directed toward the interior of the Project Site so as not to create impacts to surrounding land uses or motorists traveling on surrounding roadways. All exterior lighting would be designed with internal and/or external glare control and would also be designed, arranged, directed, or shielded to contain direct illumination on-site, thereby preventing exceed illumination and light spillover onto adjacent land uses and/or roadways (see also Project Design Feature AES-PDF-3). Blinking, flashing, or oscillating lights would be prohibited. As such, the potential impact resulting from lighting associated with architectural elements, interior building usage, security, and signage would be less than significant. Impacts would be less than the less-than-significant impact of the Project's due to the fewer number of residences of Alternative 2.

Similar to the Project, the architectural features and facades of Alternative 2 would not be constructed of highly reflective materials. In accordance with Project Design Feature AES-PDF-4, the exterior of the proposed building would be articulated and constructed of materials, such as brick, metal, and glass with low reflectivity, which would not be expected to affect daytime views. The sources of glare that would be introduced into the area would not result in hazardous conditions to motorists or result in substantial glare due to the various features designed to minimize glare-related impacts. Therefore, impacts would be less than significant and less than those of the Project due to the lower heights of portions of Alternative 2.

b) Air Quality

1) Construction

(a) Regional and Localized Air Quality Impacts

Alternative 2 would involve approximately the same amount of demolition and grading as the Project. However, the overall amount of excavation would likely be reduced due to the fewer number of subterranean parking spaces required. Similarly, construction activities would also be reduced due to the reduction in the number of condominium units. As with the Project, construction of this alternative would generate air emissions through

the use of heavy-duty construction equipment and haul truck and construction worker trips. As such, over the entire duration of the construction period, the intensity of air emissions and fugitive dust from demolition, site preparation, grading, and other construction activities would be similar on days with maximum construction activities. However, due to the reduced size of Alternative 2, the number of such days would be fewer than with the Project.

Because maximum daily conditions are used for measuring significance, regional and localized impacts associated with any of the pollutants on these days would be similar to those of the Project and would be less than significant with the exception of during the overlapping Phase I operation and Phase II construction period under Project Buildout Scenario 2, during which NO_x and ROG emissions would represent a significant and unavoidable impact. Additionally, on an overall comparative basis, although impact levels would be the same under maximum activity days, the total amount of pollutants emitted during Project construction would be less under Alternative 2 due to the shorter duration of construction activities. Therefore, regional air quality impacts would be significant and unavoidable and less than those of the Project.

(b) Toxic Air Contaminants

As with the Project, construction of Alternative 2 would result in TAC emissions, which are primarily associated with the combustion of diesel fuels that produce exhaust-related particulate matter. However, because of the relatively short period of time that diesel-fuel construction equipment would operate, and even a shorter period of time under this alternative than the Project, Alternative 2 would not result in a substantial, long-term source of TACs. Therefore, impacts due to TAC emissions and the corresponding individual cancer risk under Alternative 2 would be less than significant and less than those of the Project.

2) Operation

(a) Regional and Localized Air Quality Impacts

Alternative 2 would reduce the total number of residential units on the Project Site. Operation of Alternative 2 would result in regional long-term air quality impacts, primarily from motor vehicle exhaust. However, Alternative 2 would have lower operational emissions than the Project based on the fact that Alternative 2 would generate fewer net daily vehicle trips than the Project (4,920 daily drips for Alternative 2 versus 6,415 for the Project) and smaller buildings to generate area and energy sources of emissions.

Long-term operation of Alternative 2 would generate regional emissions of pollutants that are less than the Project due to the reduction in daily vehicle trips and, as with the Project, would not exceed applicable SCAQMD regional thresholds of significance. Thus, as the

Alternative 2 maximum regional totals would be lower than the Project's maximum regional totals, impacts under Alternative 2 would be less than significant and less than those of the Project.

Long-term operation of Alternative 2 would generate fewer localized emissions of pollutants than the Project because of the reduced number of residential units and smaller building sizes. Thus, as the Alternative 2 maximum localized totals would be lower than the Project's maximum localized totals, the Alternative 2 impact would be less than significant and less than those of the Project.

Accordingly, regional and localized air quality impacts under Alternative 2 would be less than significant and less than those of the Project.

(b) Toxic Air Contaminants

Similar to the Project, Alternative 2 would not include typical sources of acutely and chronically hazardous TACs, such as industrial manufacturing processes. As such, as with the Project, Alternative 2 would not create substantial concentrations of TACs during its normal operation. Due to Alternative 2's reduction in size compared to the Project, Alternative 2 would generate fewer mobile source diesel emissions than those generated by the Project. Therefore, TAC impacts under Alternative 2 would be less than significant and less than those of the Project.

c) Cultural Resources

1) Historical Resources

As with the Project, Alternative 2 would demolish the existing structures and other improvements on the Project Site. The potential relocation of Building A0 could cause a substantial adverse change in that the building could be damaged. As a result, impacts would be potentially significant on an identified historical resource on the Project Site. Alternative 2 would not result in the introduction of a new visual element to the area that would be incompatible in size, scale or design with the CF Braun & Company Historic District. Alternative 2, like the Project, would implement Mitigation Measures CUL-MM-1 through CUL-MM-3, which would reduce the potentially significant impact with respect to Building A0 to a less-than-significant level. Therefore, Alternative 2 would have a less-than-significant impact with respect to historical resources that is the same as the Project's less-than-significant impact.

2) Archaeological Resources

As with the Project, under Alternative 2, the existing Project Site development would be removed, and the Project Site would be redeveloped. Although no archaeological

resources have been previously recorded within the Project Site, it is possible that historic-period archaeological resources could exist below the current ground surface, especially within the surface fill. The potential presence of archaeological materials is limited to the first several feet below the ground surface and the disturbed area footprint would be approximately the same as that of the Project. However, the depth of the required excavation would likely be shallower under Alternative 2 due to the anticipated reduction in subterranean parking. Therefore, there would be a reduced likelihood of encountering buried archaeological materials during excavation work at the Project Site. Accordingly, similar to the Project, the excavation required to develop Alternative 2 has the potential to disturb archaeological resources that could be present beneath the surface of the Project Site. As with the Project, compliance with existing regulations and implementation of Mitigation Measures CUL-MM-4 through CUL-MM-7 would reduce these potential impacts to a less-than-significant level, and impacts would be less than those of the Project.

d) Energy

1) Construction

Alternative 2 would involve the same amount of site clearance/demolition as the Project, but would require less new construction. In addition, Alternative 2 would likely require less excavation and soil export due to the reduced amount of subterranean parking. As with the Project, construction activities associated with Alternative 2 would consume electricity associated with conveyance of water that would be used during construction, powering lights, electronic equipment, or other construction activities necessitating electrical power, and petroleum-based fuels. Total construction trips would be reduced under Alternative 2. Furthermore, Alternative 2 construction would require less electricity consumption and would not be expected to have any adverse impact on available electricity supplies and infrastructure. As with the Project, construction activities typically do not involve use of natural gas; thus, Alternative 2 would not generate demand for natural gas during construction activities. As evaluated in **Section IV.E, Energy**, of the Draft EIR, Project construction activities would result in an energy demand that would not be wasteful, inefficient, or unnecessary and would not be expected to have an adverse impact on available energy supplies or the existing infrastructure. As the consumption of energy resources for construction activities would be reduced under Alternative 2 as compared to the Project, Alternative 2 would similarly not be expected to have an adverse impact on available energy resources. Therefore, impacts on energy resources associated with short-term construction activities under Alternative 2 would be less than significant and less than those of the Project.

2) Operation

Due to the smaller size of Alternative 2 as compared to the Project, operation of Alternative 2 would likely result in a decrease in both electricity and natural gas usage as well as fuel consumption. It is anticipated that the existing distribution facilities in the Project area would have the capability to serve a reduced project under Alternative 2 given the fact that existing service lines in the Project area would have sufficient capacity to serve the Project. Furthermore, Alternative 2 would comply with the same regulations as the Project to reduce energy usage. In terms of petroleum-based fuel usage, the number of daily trips generated by Alternative 2 would be lower in comparison to the Project due to the reduction in residential units. Like the Project, the consumption of electricity, natural gas, and petroleum-based fuels under Alternative 2 would not be wasteful, inefficient, or unnecessary. Therefore, operational impacts to energy resources under Alternative 2 would be less than significant and less than those of the Project.

e) Geology and Soils

Alternative 2 would remove the existing light industrial/warehouse, office, and parking lot uses and construct new buildings on the Project Site. Development of Alternative 2 at the Project Site would require the same amount of Project Site clearing, demolition, and grading as the development of the Project; however, a lesser amount of construction would be necessary due to the reduction in the number of condominium units. Similarly, a lesser amount of excavation is likely to be necessary due to the reduction in subterranean parking. Similar to the Project, Alternative 2 would not exacerbate any existing environmental conditions related to seismic ground shaking, ground failure, landslides, unstable soils, and expansive soils and would have a less-than-significant impact on geology and soils.

As with the Project, under Alternative 2, the existing Project Site development would be removed, and the Project Site would be redeveloped. Although no previously encountered fossil vertebrate localities have been located within the Project Site, the possibility exists that paleontological artifacts that were not recovered during prior construction or other human activity on the Project Site may be present. The disturbed area footprint would be approximately the same under both the Project and Alternative 2. However, the depth of the required excavation would likely be shallower under Alternative 2 due to the anticipated reduction in subterranean parking. Therefore, there would be a reduced likelihood of encountering buried paleontological materials during excavation work at the Project Site. Similar to the Project, the excavation required to develop Alternative 2 has the potential to disturb unknown paleontological resources present beneath the surface of the Project Site. As with the Project, compliance with existing regulations and implementation of Mitigation Measures GEO-MM-1 through GEO-MM-4 would reduce

these potential impacts to a less-than-significant level and impacts would be less than those of the Project.

f) Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions from a development project are determined in large part by the number of daily trips generated and energy consumption from proposed land uses. Under Alternative 2, the development of fewer condominium units would reduce the number of net new daily trips compared to the Project. Alternative 2 would generate approximately 23 percent fewer net new daily trips than the Project. Additionally, with regard to energy uses, the reduced building floor area of Alternative 2 would reduce the amount of electricity, water, and natural gas used in comparison to the Project. Thus, associated GHG emissions would be reduced as compared to the Project.

As with the Project, Alternative 2 would be generally consistent with the AB 32 Scoping Plan's statewide objectives to reduce GHG emissions (see Table IV.G-10 in **Section IV.G, Greenhouse Gas Emissions**, of the Draft EIR), as well as with applicable state, regional, and local regulatory plans and policies to reduce GHG emissions.

Alternative 2 would incorporate the same design features as the Project to reduce GHG emissions, including Project Design Features GHG-PDF-1 through GHG-PDF-7. In addition, Alternative 2 would be designed to comply with the goals of CARB's *Climate Change Scoping Plan* and SCAG's 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and would implement sustainability features that are comparable to the ones proposed for the Project. Alternative 2 would still intensify a complementary mix of uses in an infill location near transit and would therefore be generally consistent with the GHG reduction goals and objectives set forth in state, regional, and local regulatory plans. Impacts related to GHG emissions under Alternative 2 would be less than significant and less than those of the Project.

g) Hazards and Hazardous Materials

1) Construction

Alternative 2 would remove the existing light industrial/warehouse, office, and parking lot uses and would construct new buildings on the Project Site. Similar to the Project, construction of Alternative 2 would involve the temporary transport, use, or disposal of potentially hazardous materials, including paints, adhesives, surface coatings, cleaning agents, fuels, and oils. All of these materials would be used short-term during construction activities. Additionally, all potentially hazardous materials would be used and stored in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations, which would ensure that impacts are less than significant.

Furthermore, any emissions from the use of such materials would be minimal and localized to the Project Site.

As with the Project, redevelopment of portions of the Project Site under Alternative 2 would not 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. Since construction of Alternative 2 would comply with applicable regulations and would not expose persons to substantial risk resulting from the release of hazardous materials, exposure to health hazards in excess of regulatory standards, or exacerbate existing environmental conditions, potential impacts associated with the potential release of hazardous substances during construction of this alternative would be less than significant. Overall, based on the reduced size and duration of construction for Alternative 2, impacts would be less than significant and less than those of the Project.

2) Operation

Operation of Alternative 2 would result in the use, storage, disposal, and transport of similar types of hazardous materials as the Project though to a reduced extent due to the fewer number of residential units. All potentially hazardous material, transported, stored, offered for sale, or used on site for daily upkeep would be contained, stored, used and disposed in accordance with the manufacturers' instructions and handled in compliance with applicable standards and regulations.

Similar to the Project, under Alternative 2, the Project Applicant would be required to establish, implement, and maintain on file an emergency response plan, which would be reviewed by the Alhambra Fire Department (AFD). Thus, operation of Alternative 2 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, operational impacts would be less than significant. Therefore, operation of Alternative 2 would result in impacts that are similar to the Project's less-than-significant impacts.

h) Hydrology and Water Quality

Alternative 2 would remove the existing light industrial/warehouse, office, and parking lot uses and would construct new buildings on the Project Site. Similar to the Project, Alternative 2 would not substantially alter existing drainage patterns on the Project Site that could result in flooding, erosion, or sedimentation on- or off-site. As with the Project, Alternative 2 would comply with applicable requirements of the City's Low-Impact Development code and the requirements associated with the Los Angeles County stormwater discharge permit for municipal storm sewer systems. Alternative 2 construction would also proceed in compliance with the requirements of the State General Construction Activity Stormwater Permit, including the preparation and implementation of

a Stormwater Pollution Prevention Plan and best management practices at the Project Site. As with the Project, the development of Alternative 2 would reduce the existing amount of impervious surface area at the Project Site. Therefore, similar to the Project, Alternative 2 would not create new sources of polluted runoff and would not increase the existing quantity or reduce the quality of stormwater runoff leaving the Project Site. Impacts would be similar to the Project's less-than-significant impacts.

i) Land Use and Planning

Under Alternative 2, the development of a planned urban residential community would be consistent with the existing zoning designation, land use designation, and applicable height limits within the Project Site. Alternative 2 would require discretionary and ministerial approvals similar to the Project. With implementation of the required discretionary approvals and the project design features, Alternative 2 would be generally consistent with the applicable policies and objectives included in the City's General Plan and Zoning Code. Therefore, as with the Project, Alternative 2 would result in a less-than-significant impact with respect to land use. Impacts would be similar to those of the Project.

j) Noise

1) Construction

Alternative 2 would result in an overall reduction in the construction duration when compared to the Project due to its reduced size. However, while the overall duration of the construction period would be reduced compared to the Project, construction activities during the maximum activity days would be similar in scale to the Project. Similar to the Project, Alternative 2 would require demolition of the existing structures and other improvements on-site. Construction activities for the Project and Alternative 2 would be similar in that heavy equipment, hand held equipment, and motor vehicles, all of which generate temporary noise and, in some cases, vibration impacts, would be used during construction.

As with the Project, Alternative 2's construction noise impacts would be temporary, and would proceed in compliance with Project Design Features NOI-PDF-1 through NOI-PDF-6. As with the Project, Alternative 2 would implement Mitigation Measures NOI-MM-1 through NOI-MM-9. As with the Project, construction noise impacts would be less than significant. As with the Project, groundborne vibration impacts of Alternative 2 would be less than significant for the historic structures within the CF Braun & Company Historic District abutting the construction zone to the north.

Thus, implementation of Alternative 2 would result in construction noise and vibration impacts that are similar to the Project's less-than-significant impacts. However, these impacts would occur for a shorter duration under Alternative 2 as compared to the Project due to the shorter construction duration. Therefore, the impacts of Alternative 2 would be less than those of the Project.

2) Operation

As with the Project, operation of Alternative 2 would result in both direct on-site noise impacts associated with residential activities and indirect off-site noise impacts from vehicles traveling on local roads to access the Project Site. Direct on-site noise sources include HVAC systems, intermittent landscape maintenance, residential activities (i.e., voices, music), and auto-related activities. On-site noise sources would not be expected to individually or collectively elevate ambient noise levels substantially at nearby sensitive receptors. The potential noise impacts from these on-site operational sources would be considered less than those of the Project due to the smaller development size. Off-site noise from traffic generated by Alternative 2 would be reduced as compared to the Project due to the 23 percent reduction in the number of net new daily trips.

During operation of Alternative 2, there would be no significant stationary sources of groundborne vibration, such as heavy equipment or industrial operations. Operational groundborne vibration in the Project Site vicinity would be generated by vehicular travel on the local roadways. However, passenger vehicles rarely create enough ground-borne vibration to be perceptible to humans unless road surfaces are poorly maintained and have potholes or bumps, which is not the case in the vicinity of the Project Site. Due to the reduction in the number of daily vehicle trips associated with Alternative 2, operational vibration impacts would be less than those of the Project. The potential on-site and off-site operational noise and vibration impacts generated by Alternative 2 would be less than significant and less than those of the Project.

k) Population and Housing

1) Population

The construction of Alternative 2 would result in increased employment opportunities in the construction field in the vicinity of the Project Site. However, as is the case with the Project, construction workers would not likely relocate their place of residence as a consequence of working on Alternative 2. The construction-related employment for Alternative 2 would not represent a permanent or substantial new employment generator that would cause growth, and there would be no significant housing or population impacts from construction of Alternative 2. Therefore, similar to the Project, no impact related to construction-related indirect population growth would occur.

The proposed residential land uses within Alternative 2 would generate approximately 1,997 permanent residents at the Project Site, a reduction of 528 residents as compared to the Project. As with the Project, the population growth represented by Alternative 2 would be within applicable City population growth forecasts. Thus, Alternative 2 would produce an impact that is less than significant and less than that of the Project with respect to direct population growth at the Project Site.

As with the Project, Alternative 2 would not induce substantial growth that exceeds growth forecasted for the area or introduce unplanned infrastructure or accelerate development in an undeveloped area that would result in an adverse physical change in the environment. The Project Site is currently developed and is located within an urbanized area in the City. Thus, the construction of a potential growth-inducing roadway or other infrastructure extensions would not be required. Similar to the Project, as development of Alternative 2 would not induce substantial indirect population growth and would be supported by the existing infrastructure, such as roadways, impacts would be less than significant.

2) Housing

Alternative 2 would develop 839 residential housing units at the Project Site, a reduction of 222 units as compared to the Project. As with the Project, Alternative 2 would not displace existing housing units or people, necessitating the construction of replacement housing elsewhere. The housing growth represented by Alternative 2 would be within applicable City housing growth forecasts. Therefore, as with the Project, the impact of Alternative 2 on housing would be less than significant and less than that of the Project.

l) Public Services

1) Fire Protection

(a) Construction

As discussed in **Section IV.M.1, Public Services - Fire Protection**, of the Draft EIR, and similar to the Project, construction activities associated with Alternative 2 may temporarily increase demand for fire protection and emergency medical services and may cause the occasional exposure of combustible materials, such as wood, plastics, sawdust, coverings and coatings, to heat sources, including machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions in combustible materials and coatings. However, in compliance with Occupational Safety and Health Administration (OSHA) requirements, construction managers and personnel would be trained in fire prevention and emergency response. Fire suppression equipment specific to construction that meets OSHA standards would be maintained on-site. Additionally,

construction would comply with applicable OSHA requirements related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. Therefore, in light of OSHA regulations that would, in part, require training of personnel in fire prevention and emergency response, maintenance of fire suppression equipment, and implementation of proper procedures for storage and handling of flammable materials on the Project Site, construction impacts on fire protection and emergency medical services would be less than significant and similar to those of the Project.

Construction activities also have the potential to affect fire protection services by adding construction traffic to the street network and by necessitating partial lane closures during street improvements and utility installations. These impacts would be similar to those of the Project and would be considered less than significant because construction activities are temporary in nature and do not create continuing risks. General "good housekeeping" procedures would be employed by the construction contractors and the work crews (e.g., maintaining mechanical equipment, proper storage of flammable materials, cleanup of spills of flammable liquid) would minimize these hazards. In addition, partial lane closures would not significantly affect emergency vehicles, the drivers of which normally have a variety of options for dealing with traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic, pursuant to California Vehicle Code (CVC) Section 21806. Additionally, if there are partial closures to streets surrounding the Project Site, flagmen would be used to facilitate the traffic flow until such temporary street closures are complete under the Work Zone Traffic Control Plan (refer to TR-PDF-2).

Overall, construction is not considered to be a high-risk activity. Construction of Alternative 2 would not be expected to tax fire-fighting and emergency services to the extent that there would be a need for new or expanded fire facilities in order to maintain acceptable service ratios or other performance objectives of the AFD, due to the limited duration of construction activities and compliance with applicable codes. Therefore, impacts associated with construction of Alternative 2 on fire protection services would be less than significant and similar to those of the Project.

(b) Operation

As discussed in **Section IV.M.1, Public Services - Fire Protection**, of the Draft EIR, with respect to fire flows, Alternative 2 would require the installation of system improvements required to supply 6,000 gpm, similar to the Project. As with the Project, the improved Project Fire Water line would be a looped system with three points of connection. The fire system would connect to the existing water lines in Mission Road, Date Avenue, and Orange Street. In order to achieve the anticipated fire flow requirements for the Project, all proposed Fire Water piping (other than fire hydrant laterals) will need to be sized at 12 inches. Fire hydrants (and associated underground fire water supply piping) would be

required at a spacing of approximately 300 feet along the private internal access roads. The magnitude of the system required would lend itself to potentially dedicating the underground supply line as a public main. Should that become the case, this dedicated public main should likely serve all water service needs for Alternative 2. Meters and backflows would likely be located along the internal private roadway system as they would traditionally along the public street frontage. Impacts would be less than significant and the same as the Project.

Based on the reduction of residential units on the Project Site, the number of fire protection service calls is expected to be reduced with implementation of Alternative 2 as compared to the Project due to the fewer number of people present on-site at any given time. Similar to the Project, Alternative 2 would comply with Alhambra Building and Fire Code requirements, which include, but are not limited to, the installation of an automatic fire sprinkler system; the creation and filing of an emergency response plan; and AFD approval of emergency plans, procedures, and evacuation routes and signs. Compliance with applicable regulatory requirements that are enforced through the City's building permitting process would ensure that adequate fire prevention features would be provided to reduce the demand on AFD facilities and equipment, thereby ensuring that Alternative 2 would not create any undue fire hazard, similar to the Project.

As with the Project, emergency vehicles would access the Project Site directly from the surrounding roadways. Emergency access to the Project Site and surrounding uses would be maintained at all times. Alternative 2-related traffic would have the potential to increase emergency vehicle response times to the Project Site and surrounding properties due to travel time delays caused by traffic. However, the area surrounding the Project Site includes an established street system which provides regional, sub-regional, and local access and circulation within the Project's traffic study area. In addition, the drivers of emergency vehicles normally have a variety of options for avoiding traffic, such as using sirens to clear a path of travel or driving in the lanes of opposing traffic, pursuant to CVC Section 21806. Therefore, the increase in traffic generated by Alternative 2 would not significantly impact emergency vehicle response times to the Project Site and surrounding area and impacts would be similar to those of the Project.

Based on the above, operation of Alternative 2 would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility in order to maintain service. Therefore, impacts to fire protection services during operation of Alternative 2 would be less than significant and less than those of the Project.

2) Police Protection

(a) Construction

Similar to the Project, construction of Alternative 2 could result in an increase in demand for police protection services. With regard to emergency vehicle access, as with the Project, although minor traffic delays due to temporary lane closures needed to facilitate specific construction activities could occur, particularly during the construction of utilities and street improvements, impacts to police protection services would be considered less than significant as (1) emergency access to the Project Site would be maintained through marked emergency access points approved by the Alhambra Police Department (APD); (2) construction impacts are temporary in nature; and (3) the ability of emergency vehicles to have a variety of options for avoiding traffic and partial street closures. Accordingly, similar to the Project, construction-related impacts of Alternative 2 would not be expected to affect the APD's ability to respond to emergencies to the extent that there would be a need for any additional new or expanded police facilities, in order to maintain acceptable service ratios, response times, or other performance objectives of the APD. Therefore, similar to the Project, impacts on police protection services during construction of Alternative 2 would be less than significant.

(b) Operation

As compared to the Project, Alternative 2 would introduce approximately 528 fewer residents to the Project Site. The Project would result in an on-site population of approximately 1,997 people, requiring approximately three additional officers to maintain the same officer-to-population ratio. The City has 85 sworn police officers. The addition of three officers to maintain the existing ratio represents an approximately 3.5 percent increase over existing staffing levels. This change would not require the construction of additional police facilities.

Similar to the Project, Alternative 2 would include security features within the parking facilities and exterior building areas, such as appropriate lighting and gated access. In addition, the lighting and landscaping design would ensure high visibility and the Project would provide for on-site security measures and controlled access systems for residents and tenants to minimize the demand for police protection services. The Project would incorporate crime prevention features into the design of the buildings and public spaces, such as lighting of entryways and public areas. Furthermore, although traffic generated by Alternative 2 would have the potential to affect emergency vehicle response to the Project Site and surrounding properties due to additional traffic, emergency vehicles normally have a variety of options for avoiding traffic, such as using sirens and flashing lights to clear a path of travel. As such, operation of Alternative 2, including traffic generated by Alternative 2, would not substantially affect emergency response as a result

of increased traffic congestion. Based on the analysis above, Alternative 2 would not necessitate the provision of new or physically altered facilities in order to maintain the APD's capability to serve the Project Site. Accordingly, Alternative 2 would not result in adverse physical impacts associated with the construction of new or altered facilities. Therefore, Alternative 2's impacts related to police protection services would be less than the less-than-significant impacts of the Project.

3) Schools

(a) Construction

Similar to the Project, Alternative 2 would generate part-time and full-time jobs associated with its construction between the start of construction and full buildout. However, due to the employment patterns of construction workers in southern California and the operation of the market for construction labor, construction workers are not likely to relocate their households as a consequence of construction job opportunities. Therefore, construction employment generated by Alternative 2 would not result in a notable increase in the resident population or a corresponding demand for schools from construction workers in the vicinity of the Project Site. Similar to the Project, impacts on school facilities during construction of Alternative 2 would be less than significant.

(b) Operation

The projected increase in the number of residents (839 housing units, 1,997 residents) from Alternative 2 and the resulting potential need to enroll any school-aged children into AUSD schools would increase the demand for school services. As shown in Table VI-4, based on AUSD demographic analysis, the Project would result in approximately 176 additional AUSD students (126 elementary students and 50 high school students). These calculations do not take into account the possibility that some of the future residents of the Project already reside within the service boundaries of the AUSD and have school-aged children currently enrolled in the AUSD schools near the Project Site. However, to provide for a conservative analysis, it is assumed that all of the students generated as a result of the Project are not currently enrolled in the AUSD schools near the Project Site and would enroll in existing AUSD (as opposed to private or newly built AUSD) schools.

Based on correspondence received from AUSD, the elementary school serving the Project Site is Emery Park Elementary, which has a current enrollment of 440 students and a capacity of 843 students. Alhambra High School would serve the high school residents at the Project Site and has a current enrollment of 2,450 students with a capacity of 3,400 students. Thus, both schools are currently operating under capacity and would continue to do so following the addition of Project-generated students.

Table VI-4
Estimated Alternative 2 Student Generation

Land Use	Project Amount	Student Generation		
		Elementary	High	Total
Multi-Family Dwelling Units	839	126	50	**176**
	Total	**126**	**50**	**176**

Source: Student calculations based on AUSD student generation factors shown in Table IV.M.3-1.

Furthermore, as with the Project, pursuant to the California Government Code, the Project Applicant's payment of the school fees established by the AUSD in accordance with existing rules and regulations regarding the calculation and payment of such fees would, by law, provide full and complete mitigation for this alternative's direct and indirect impacts to schools. Therefore, due to a reduction in the number of students generated under Alternative 2, impacts related to schools under Alternative 2 would be less than significant and less than those of the Project.

4) Parks and Recreation

(a) Construction

Construction of Alternative 2 would result in a temporary increase in the number of construction workers at the Project Site. As described above, due to the employment patterns of construction workers in southern California, and the operation of the market for construction labor, the likelihood that construction workers would relocate their households as a consequence of working on Alternative 2 is negligible. Therefore, the construction workers associated with Alternative 2 would not result in a notable increase in the residential population of the Project vicinity, or a corresponding permanent demand for parks and recreational facilities in the vicinity of the Project Site. As such, similar to the Project, construction of Alternative 2 would not generate a demand for park or recreational facilities that cannot be adequately accommodated by existing or planned facilities and services, increase the use of existing parks such that substantial physical deterioration of the facility would occur, or interfere with existing park usage. Therefore, similar to the Project, impacts on parks and recreational facilities during construction of Alternative 2 would be less than significant.

(b) Operation

Alternative 2 would provide a lesser amount of open space and recreational amenities as compared to the Project due to the reduction in the number of residential units. However, Alternative 2 would still provide, at a minimum, the required amount of open space stipulated in the AMC. Alternative 2 would reduce the number of residents at the Project

by approximately 528 residents compared to the number that would be generated by the Project. Thus, Alternative 2 would reduce the Project Site's demand for parks and recreational facilities in the Project area in comparison to the Project.

Similar to the Project, Alternative 2 would not be expected to cause or accelerate substantial physical deterioration of off-site public parks or recreational facilities given the provision of on-site public and private open space described above. As with the Project, employees generated by Alternative 2 would not utilize parks and recreational facilities beyond a 0.5-mile radius from the Project Site as lunch breaks typically are not long enough for workers to take advantage of such facilities and return to work within the allotted time (e.g., 30 to 60 minutes). Instead, as with the Project, it is anticipated that employees under Alternative 2 would utilize on-site open space as it would be more easily accessible and convenient, resulting in a negligible demand for surrounding parks and recreational facilities. Thus, Alternative 2 would not substantially increase the demand for off-site public parks and recreational facilities. Therefore, impacts on parks and recreational facilities during operation of Alternative 2 would be less than significant and less than those of the Project due to the fewer number of residents.

5) Libraries

(a) Construction

Similar to the Project, construction of Alternative 2 would result in a temporary increase in the number of construction workers on the Project Site. However, due to the employment patterns of construction workers in southern California and the operation of the market for construction labor, construction workers are not likely to relocate their households as a consequence of construction of Alternative 2. Therefore, construction employment generated by Alternative 2 would not result in a notable increase in the resident population or a corresponding demand for library services in the vicinity of the Project Site. As such, similar to the Project, impacts to library facilities during construction of Alternative 2 would be less than significant.

(b) Operation

Alternative 2 would add a fewer number of residents to the Project Site than would the Project. As a result, Alternative 2 would reduce the demand for library services at the Project Site as compared to the Project. Similar to the Project, it is anticipated that new jobs generated by Alternative 2 would typically be filled by persons who already reside in the vicinity of the workplace and already generate a demand for the libraries in the vicinity of the Project Site. Furthermore, as with the Project, residents would have internet access, which results in a reduced demand at physical library locations. Therefore, any indirect or direct new demand for library services generated by residents under Alternative 2 would already be taken into account in library services provisions.

Furthermore, as with the Project, operation of Alternative 2 would not exacerbate existing capacity issues at the Alhambra Public Library. As such, Alternative 2 would not result in the need for new or altered library facilities. Therefore, impacts related to libraries under Alternative 2 would be less than significant and less than those of the Project.

m) Transportation

1) Construction

As with the Project, closures to one travel lane along the Date Avenue Project Site frontage could potentially occur during certain phases of Alternative 2 construction. There are no emergency services located within the immediate vicinity of the affected streets. Since Date Avenue is a local street with low volumes and other alternative routes are available, the temporary construction impacts on the roadway network would be considered less than significant. Per Project Design Feature TR-PDF-2, worksite traffic control plans would be prepared for any temporary vehicle lane or sidewalk closures in accordance with applicable City guidelines.

Similar to the Project, hauling activity is expected to occur over the first three phases of construction: Phase 1 – Demolition & Site Preparation; Phase 2 – Grading; and Phase 3 – Building Framing and Construction. Peak hauling activity is anticipated to occur during Phase 1 when the demolition of existing on-site structures would occur. Hauling hours are anticipated to be 7:00 AM to 3:00 PM, Monday through Friday, and 8:00 AM to 6:00 PM on Saturdays. Trucks would be staged on-site.

Similar to the Project, in addition to haul trucks, Alternative 2 is also expected to generate equipment and delivery trucks during each phase of construction. Additionally, construction equipment would be delivered to the Project Site. No construction activities with heavy equipment would occur beyond the normal weekday construction hours of 7:00 AM to 8:00 PM and Saturday from 9:00 AM to 4:00 PM. Per Project Design Feature TR-PDF-2, materials being delivered to the site during the construction period would be scheduled at times that are not in conflict with peak public use of the roadways so that congestion is limited.

Similar to the Project, the potential impacts of construction traffic on the traffic operations within the study area would be temporary and expected to be periodically ongoing until 2028. The impacts of construction-related trips (trucks and construction employees) on the street system should be considered negligible since these trips can be scheduled and their frequency increased during off-peak (mid-day) hours. A flagman would be available at all times when construction activities are occurring to ensure vehicle and pedestrian safety, and would be used whenever trucks are leaving the Project Site to prevent the impedance of the flow of traffic. The safety of pedestrians would be ensured by installing

a construction fence around the zone of construction activity on the Project Site perimeter. Through the implementation of the Work Zone Traffic Control Plan, Alternative 2 construction traffic impacts would be less than significant and similar to those of the Project.

Alternative 2 construction would not block vehicle or pedestrian access to other parcels fronting the construction area, there would be no temporary loss of access, and, as such, impacts would be less than significant and similar to the Project. Alternative 2 construction would not be anticipated to affect bus stops or bus lines in the area. Construction of Alternative 2 could require the temporary removal of on-street parking spaces along the Date Avenue and Orange Street Project frontages for periods during the overall construction work to accommodate temporary truck staging. As there is other on- and off-street parking available to serve nearby businesses, these temporary impacts would be less than significant and similar to the Project.

The number of construction workers would vary throughout the construction period with the building construction phase necessitating the highest number of workers on-site. Due to the size of the Project Site, it is expected that parking for construction workers will be available on-site and that off-site parking would not be necessary. Impacts would be less than significant and the same as those of the Project.

2) Operation

(a) Intersection Levels of Service

Alternative 2 would reduce traffic generation compared to the Project. Table VI-5 provides the trip generation for Alternative 2 in comparison to the Project. As detailed in Table VI-5, Alternative 2 would generate a total of 4,920 net new daily trips, with 360 net new AM peak hour trips (50 inbound, 310 outbound) and 407 net new PM peak hour trips (266 inbound, 140 outbound).

Table VI-5
Alternative 2 Trip Generation

Alternative	ITE Land Use (DU)		Daily Trips	AM Trips			PM Trips		
	220 - Apartment	230 – Condo		In	Out	Total	In	Out	Total
Proposed Project	545	516	6,415	62	402	464	344	186	531
Alternative 2	545	294	4,920	50	310	360	266	140	407

DU = dwelling units
Source: Kimley-Horn, 2019.

Alternative 2's daily trip generation would be 1,495 trips less than that of the Project with 104 fewer trips during the AM peak hour and 124 fewer trips during the PM peak hour than the Project. As shown in Table VI-6, under the Cumulative Future (2028) With Alternative 2 scenario, Alternative 2's traffic would produce significant impacts at the following signalized intersections:

- S Fremont Avenue/W Mission Road (AM/PM)
- S Fremont Avenue/Orange Street (PM)
- S Fremont Avenue/W Commonwealth Avenue (PM)
- S Fremont Avenue/W Valley Boulevard (AM/PM)
- S Marengo Avenue/W Mission Road (PM)
- W Valley Boulevard/I-710 S/B On-Ramp (AM)
- S Fremont Avenue/W Hellman Avenue (AM)

Alternative 2 would eliminate the Project's significant impacts at the W Valley Boulevard/I-710 S/B On-Ramp intersection in the PM peak period, at the S Fremont Avenue/W Hellman Avenue intersection in the PM peak period, and at the Westmont Drive/W Valley Boulevard intersection in the AM peak period, a reduction of three significant impacts.

However, Alternative 2 would not eliminate any of the Project's other significant and unavoidable intersection LOS impacts, and would result in significant and unavoidable impacts during at least one peak hour period at the same 7 intersections under Buildout Scenario 1 and 5 intersections under Buildout Scenario 2 as the Project would with the implementation of Mitigation Measure TR-MM-1.[1] Therefore, Alternative 2 would result in lesser, but still significant and unavoidable signalized intersection LOS impacts, than the Project. Unsignalized intersection impacts would be the same as the Project and would be reduced to a less-than-significant level via implementation of Mitigation Measures TR-MM-2 and TR-MM-3.

[1] *Project Mitigation Measure TR-MM-1 would no longer be necessary under Alternative 2 as the intersection of Westmont Drive/W Valley Boulevard would no longer be significantly impacted.*

Table VI-6
Alternative 2 Signalized Intersection LOS Impacts

Signalized Intersection		Cumulative (2028) Without Project V/C Ratio		V/C Significant Impact Threshold		Cumulative (2028) With Project V/C Ratio			
						Project		Alternative 2	
		AM	PM	AM	PM	AM	PM	AM	PM
1	S Fremont Ave/W Mission Road	1.297	1.211	1.307	1.221	**1.377**	**1.285**	**1.360**	**1.270**
3	S Fremont Ave/Orange Street	0.633	0.875	N/A	0.895	0.670	**0.907**	0.659	**0.896**
14	S Fremont Ave/W Commonwealth Ave.	0.793	0.964	0.833	0.974	0.794	**0.980**	0.791	**0.976**
15	S Fremont Ave/W Valley Blvd.	1.033	0.980	1.043	0.990	**1.059**	**1.029**	**1.053**	**1.019**
19	S Marengo Ave./W Mission Road	1.036	1.002	1.046	1.012	1.044	**1.024**	1.042	**1.017**
22	W Valley Blvd./I-710 S/B On-Ramp	1.173	0.914	1.183	0.924	**1.197**	**0.925**	**1.192**	0.922
23	S Fremont Avenue/W Hellman Ave.	0.873	0.853	0.893	0.873	**0.900**	**0.878**	**0.894**	0.873[1]
27	Westmont Drive/W Valley Blvd.	0.893	0.701	0.913	0.741	**0.914**	0.720	0.909	0.715

*Significant impacts are shown in **bold**.*
[1]Actual V/C ratio would be 0.872.7, which is below the significant impact threshold for this intersection/peak period.
Source: Kimley-Horn, 2019.

(b) CMP Impacts

As with the Project, it has been concluded that it is infeasible for Alternative 2 to mitigate its significant impact at the CMP arterial monitoring intersection of S. Fremont Avenue/W. Valley Boulevard. This impact would remain significant. Alternative 2 would have a less-

than-significant impact at all CMP freeway monitoring locations and, thus, no mitigation would be required. CMP impacts would be similar to those of the Project.

(c) Access and Circulation

Similar to the Project, Alternative 2 would provide 8 driveways for access to the development. All driveways proposed under Alternative 2 would be the same as those proposed for the Project and designed in accordance with City standards. Therefore, Alternative 2 would not result in inadequate access.

In addition, as with the Project, Alternative 2 does not include any sharp curves, dangerous intersections, or incompatible uses. With implementation of Project Design Feature TR-PDF-3, all Alternative 2 driveways would operate at acceptable levels, similar to the Project. Therefore, similar to the Project, Alternative 2's impacts related to hazardous roadway features would be less than significant.

(d) Bicycle, Pedestrian, and Vehicular Safety

Bicycle, pedestrian, and vehicular access to the Project Site under Alternative 2 would be the same as the Project and designed in accordance with City and other applicable standards to provide adequate sight distance, sidewalks, and/or pedestrian movement controls that would meet the City's requirements to protect pedestrian safety. As with the Project, Alternative 2 would not disrupt bicycle flow along local streets. Similar to the Project, visitors, residents, and employees arriving by bicycle would have the same access options as pedestrian visitors, and to facilitate bicycle use, bicycle parking spaces and amenities would be provided within the Project Site under Alternative 2. Therefore, as with the Project, Alternative 2 would not substantially increase hazards to bicyclists, pedestrians, or vehicles. Similar to the Project, impacts related to bicycle, pedestrian and vehicular safety under Alternative 2 would be less than significant.

n) Tribal Cultural Resources

As discussed in **Section IV.O, Tribal Cultural Resources**, of the Draft EIR, no previously recorded tribal cultural resources have been identified for the Project Site. As with the Project, in the event that tribal cultural resources are inadvertently encountered, Alternative 2 would implement Mitigation Measures CUL-MM-4 through CUL-MM-7. Impacts would be reduced to a less-than-significant level that is less than that of the Project due to the lesser amount of excavation needed to develop the smaller number of subterranean parking spaces.

o) Utilities and Service Systems

1) Wastewater

(a) Construction

Similar to the Project, during construction of Alternative 2, a negligible amount of wastewater would be generated by construction workers. Temporary on-site sanitation facilities (e.g., portable toilets and hand wash areas) would be provided by a private company, and the wastewater would be properly disposed of off-site.

No new connections to the public sewer system would be required during the construction period. As such, wastewater generated during Project construction activities would not enter the local conveyance system and, thus, would not affect sewer line capacities in the area. In addition, with the implementation of the Work Zone Traffic Control Plan (discussed in **Section IV.N, Transportation**, of the Draft EIR), Alternative 2 would not significantly impact traffic or emergency access in the surrounding area during the installation of new utilities infrastructure. Similar to the Project, construction-related impacts to the existing wastewater infrastructure and facilities would be less than significant.

(b) Operation

Due to the reduction in the number of residential units, Alternative 2 would generate approximately 21 percent less wastewater than the Project and would also result in less-than-significant impacts to wastewater treatment capacity. Similar to the Project, Alternative 2 would be subject to standard regulatory measures. Given the excess capacity at the three wastewater treatment plants that serve Alhambra, impacts would be less than significant. Overall, impacts associated with Alternative 2 would be less than those of the Project.

2) Water

(a) Construction

Similar to the Project, water consumption would be required to accommodate construction activities, such as soil watering (i.e. for fugitive dust control), clean up, masonry, painting, and other related activities. As with the Project, construction activities requiring water would occur intermittently and would be temporary in nature. Further, the activities requiring water would not create substantial water demand. Typically, fugitive dust watering is provided by private purveyors and not provided by on-site water sources. Reclaimed water can be used for dust control. Overall, similar to the Project, construction activities under Alternative 2 would require minimal water consumption and would not be

expected to have an adverse impact on available water supplies or existing water distribution systems**.**

Prior to the issuance of grading/building permits, the City would determine if the existing water supply infrastructure maintains sufficient capacity to accommodate the projected water demands. If a deficiency or service problem is discovered during the permitting process, the Project Applicant shall fund the required upgrades to adequately serve the uses proposed under Alternative 2. Water main and related infrastructure upgrades would not be expected to create a significant impact to the physical environment because: (1) any disruption of service would be of a short-term nature; (2) replacement of the water mains would be within public and private rights-of-way; and (3) the existing infrastructure would be replaced with new infrastructure in areas that have already been significantly disturbed.

While the potential replacement or expansion of the existing infrastructure could result in temporary partial public street closures, a Work Zone Traffic Control Plan would be implemented (see **Section IV.N, Transportation**, of the Draft EIR) to direct traffic flow during construction activities, including during the potential water upgrade activities near the Project Site. Similar to the Project, impacts under Alternative 2 would be less than significant.

(b) Operation

Alternative 2 would result in a net decrease in water demand of approximately 21 percent as compared to the Project. Thus, operation of Alternative 2 would consume less water than the Project and would also result in less-than-significant impacts with respect to long-term water supplies. Similar to the Project, Alternative 2 would be subject to standard regulatory measures to ensure that impacts to the water conveyance system would be less than significant. Overall, the impacts of Alternative 2 would be less than significant and less than those of the Project.

3) Solid Waste

(a) Construction

Construction and debris (C&D) waste generated by demolition of the existing uses would be the same for Alternative 2 and the Project. Construction waste generated during the construction of Alternative 2 would be reduced as compared to the Project due to the fewer number of units being constructed. Landfills that serve Alhambra have adequate capacity to accommodate Alternative 2's C&D waste, as with the Project. Thus, as the construction waste generated by Alternative 2 would be reduced from that generated by the Project and existing landfills and waste facilities have sufficient capacity to handle the

projected amount of construction waste, the construction-related solid waste impacts of Alternative 2 would be less than significant and less than those of the Project.

(b) Operation

Alternative 2 would generate less solid waste (approximately 21 percent less) than the Project due to the reduced number of residential units. Thus, Alternative 2 would result in less-than-significant impacts to solid waste landfill capacity via compliance with existing regulations. Overall, the impacts of Alternative 2 would be less significant and less than those of the Project.

3. Comparison of Impacts

As evaluated above, Alternative 2 would reduce the duration of the Project's significant and unavoidable construction-period air quality impact under Buildout Scenario 2; however the impact would remain significant and unavoidable. Alternative 2 would also, with respect to traffic and circulation impacts, eliminate three of the Project's significant intersection LOS impacts but would still result in significant and unavoidable impacts at the same 7 intersections (under Buildout Scenario 1) and 5 intersections (under Buildout Scenario 2) as the Project following the implementation of mitigation. All other impacts would be similar or less under Alternative 2 when compared to the Project.

4. Relationship of the Alternative to Project Objectives

Overall, Alternative 2 represents a reduced scope of development containing the same residential uses as the Project. However, this alternative would not achieve the Project objectives to the same extent as the Project. Alternative 2 would meet the following Project objectives to generally the same extent as the Project:

- Retain the existing office buildings within the Office Plan Area portion of the site.
- Improve the aesthetic quality of the site by removing older structures and parking lots and developing new, more attractive residential buildings across a lushly landscaped campus.
- Develop an economically feasible project featuring a high level of quality in architectural design and placemaking that can create an urban community that serves as a destination within the City.

However, Alternative 2 would either partially meet or only meet the following Project objectives to a lesser extent than the Project:

- Contribute housing stock toward the City's RHNA allocation.
- Contribute to the economic health of the City by developing residential uses that generate local tax revenues, provide new construction jobs, and generate residents who support local businesses.

Specifically, Alternative 2 would be 21 percent smaller and would not contribute housing stock toward the City's RHNA allocation to the same extent as the Project and would provide fewer opportunities for new home ownership. This would result in less density in proximity to transit and employment nodes for employees and residents. Alternative 2 would contribute to the City's economic health by developing residential uses that generate local tax revenues, provide new construction jobs, and generate residents who support local businesses but it would do so to a lesser degree than the Project as it would create fewer residential units. Overall, Alternative 2 would be partially consistent with two of the five Project objectives.

VI. Alternatives

C. Alternative 3: Reduced Density 2 Alternative

1. Description of the Alternative

The Reduced Density 2 Alternative (Alternative 3) would redevelop the Project Site in the same fashion as the proposed Project but would reduce the number of condominiums by 286 dwelling units. This reduction would occur within the North Plan Area. Alternative 3 would develop the same number of apartment units as the Project (545 dwelling units) in the South and Corner Plan Areas and would develop 230 condominium units in the North Plan Area as shown in Table VI-7. The site plan would be substantially the same as that of the proposed Project, only the building heights would be lower as a result of reducing the number of condominium units. Due to the fewer number of units, less subterranean parking would be required.

Alternative 3 would reduce the overall Project size by 27 percent. As with the Project, public vehicular access would be provided from all four of the adjacent streets. Design and architecture, as well as landscaping, would be similar to that of the proposed Project.

Table VI-7
Summary of Alternative 3 (Reduced Density 2) Uses and Comparison to the Project

Land Use	Alternative 3	Proposed Project	Difference
Apartments	545 DU	545 DU	0 DU
Condominiums	230 DU	516 DU	-286 DU
Totals	**775 DU**	**1,061 DU**	**-286 DU**
DU = dwelling units			

Signage, lighting, vehicular and pedestrian access, setbacks, and sustainability features would be similar to those proposed for the Project.

As with the Project, Alternative 3 would be constructed under one of two buildout scenarios (see **Section II, Project Description**, of the Draft EIR for a description of Buildout Scenarios 1 and 2). However, construction would be expected to require a somewhat shorter overall duration due to the fewer number of condominium units being constructed. As with the Project, a Work Zone Traffic Control Plan, subject to City

approval, would be implemented during construction to minimize potential conflicts between construction activity and traffic in the immediate vicinity of Project Site.

2. Environmental Impact Analysis

a) Aesthetics

1) Visual Character, Scenic Vistas, and Scenic Resources

(a) Construction

As with the Project, the visual appearance of the Project Site would be altered during construction due to the removal of the existing buildings and other improvements to the same extent as the Project. Other construction activities, including site preparation, grading, and excavation, the staging of construction equipment and materials, and the construction of the building foundations and proposed structures, would also alter the visual character and quality of the Project Site and adjacent roadways. Alternative 3's construction activities could be visible to pedestrians and motorists, as well as to viewers within nearby buildings. As with the Project, Alternative 3 would incorporate similar project design features as the Project, including the installation of temporary construction fencing that would screen much of the construction activity from view at street level. Overall, similar to the Project, while Alternative 3 would alter the visual character of the Project area on a short-term basis, construction activities would not substantially alter or degrade the existing visual character of the Project Site for the following reasons: (1) views of construction activities would be limited in duration and location; (2) the site appearance would be typical of construction sites in urban areas; (3) construction would occur within an urban setting with a high level of human activity and development; and (4) impacts would be reduced through standard best management practices (BMPs) implemented during the construction period. Therefore, aesthetic impacts during construction would be similar to the less-than-significant impacts of the Project.

(b) Operation

Under Alternative 3, the building architecture and style would be similar to that of the Project. In addition, the landscaping would be similar to that employed in the Project. Some building heights in the North Plan Area would be reduced due to the fewer number of condominium units. As with the Project, Alternative 3 would feature cohesive signage that would be consistent in shape, size, color, height, and lettering. Also, as with the Project, the landscape design for Alternative 3 would create a pedestrian-friendly environment. Alternative 3 would not substantially affect existing scenic vistas of the distant San Gabriel Mountains. The Project Site and surrounding area are characterized by dense urban development, and the Alternative 3 would not substantially alter existing

views available in the area, similar to the Project. The Project Site does not contain trees with scenic significance or rock outcroppings and is not located within a state scenic highway. Therefore, no impact would occur with respect to scenic resources within a state scenic highway, as with the Project. Therefore, similar to the Project, Alternative 3 would not degrade the existing visual character or quality of the Project Site or its surroundings due to changes in architecture or urban design. Thus, aesthetics impacts would be similar to the Project's less-than-significant impacts.

2) Light and Glare

(a) Construction

The Project Site is located in a highly urbanized area of the City. Land uses in the immediate Project Site area include warehouses, office, retail, commercial, light industrial, and transportation infrastructure, in addition to surface parking lots. Many of these land uses produce nighttime light and daytime glare (e.g., indoor/outdoor lighting, windows, light-colored surfaces, etc.) typical of such uses in an urban area.

The closest light-sensitive uses to the Project Site are the single-family residences along Front Street, across Mission Road and the railroad corridor (approximately 200 feet south of the Project Site's southern boundary). However, as with the Project, construction activities for Alternative 3 would occur in accordance with the provision of AMC Section 18.02, which limits construction hours to between 7:00 AM and 7:00 PM on weekdays and Saturdays with no construction permitted on Sundays or federal holidays. Therefore, Alternative 3 construction would not significantly impact off-site light-sensitive uses, substantially alter the character of off-site areas surrounding the Project Site, adversely impact day or nighttime views in the area, or substantially interfere with the performance of an off-site activity.

In addition, as with the Project, daytime and nighttime glare could potentially occur during construction activities if reflective construction materials were positioned in highly visible locations where the reflection of sunlight or nighttime light sources could occur. However, any glare generated within the Project Site during construction would be highly transitory and short-term given the movement of construction equipment and materials within the construction area and the temporary nature of construction activities. Furthermore, large, flat surfaces that are generally required to generate substantial glare are typically not an element of construction activities. As a result, light and glare associated with the construction of Alternative 3 would not substantially alter the character of off-site areas surrounding the Project Site or adversely impact day or nighttime views in the area and impacts would be less than significant and similar to those of the Project. Therefore, impacts from sources of artificial light and glare during construction of Alternative 3 would be similar to the Project's less-than-significant impacts. Also, light impacts associated

with construction would be less than significant under Alternative 3 and less than the Project due to the shorter construction duration.

(b) Operation

As with the Project during operation, Alternative 3 would increase light and glare levels within the Project Site and surrounding area compared to existing conditions through the introduction of new light and glare sources. Similar to the Project, Alternative 3 would include lighting designed to highlight architectural elements of the structure. Security lighting would be installed to deter criminal activity on the Project Site. The lights associated with Alternative 3 would be directed toward the interior of the Project Site so as not to create impacts to surrounding land uses or motorists traveling on surrounding roadways. All exterior lighting would be designed with internal and/or external glare control and would also be designed, arranged, directed, or shielded to contain direct illumination on-site, thereby preventing exceed illumination and light spillover onto adjacent land uses and/or roadways (see also Project Design Feature AES-PDF-3). Blinking, flashing, or oscillating lights would be prohibited. As such, the potential impact resulting from lighting associated with architectural elements, interior building usage, security, and signage would be less than significant. Impacts would be less than the less-than-significant impact of the Project's due to the fewer number of residences of Alternative 3.

Similar to the Project, the architectural features and facades of Alternative 3 would not be constructed of highly reflective materials. In accordance with Project Design Feature AES-PDF-4, the exterior of the proposed building would be articulated and constructed of materials, such as brick, metal, and glass with low reflectivity, which would not be expected to affect daytime views. The sources of glare that would be introduced into the area would not result in hazardous conditions to motorists or result in substantial glare due to the various features designed to minimize glare-related impacts. Therefore, impacts would be less than significant and less than those of the Project due to the lower heights of portions of Alternative 3.

b) Air Quality

1) Construction

(a) Regional and Localized Air Quality Impacts

Alternative 3 would involve approximately the same amount of demolition and grading as the Project. However, the overall amount of excavation would likely be reduced due to the fewer number of subterranean parking spaces required. Similarly, construction activities would also be reduced due to the reduction in the number of condominium units. As with the Project, construction of this alternative would generate air emissions through

the use of heavy-duty construction equipment and haul truck and construction worker trips. As such, over the entire duration of the construction period, the intensity of air emissions and fugitive dust from demolition, site preparation, grading, and other construction activities would be similar on days with maximum construction activities. However, due to the reduced size of Alternative 3, the number of such days would be fewer than with the Project.

Because maximum daily conditions are used for measuring significance, regional and localized impacts associated with any of the pollutants on these days would be similar to those of the Project and would be less than significant with the exception of during the overlapping Phase I operation and Phase II construction period under Project Buildout Scenario 2, during which NO_x and ROG emissions would represent a significant and unavoidable impact. Additionally, on an overall comparative basis, although impact levels would be the same under maximum activity days, the total amount of pollutants emitted during Project construction would be less under Alternative 3 due to the shorter duration of construction activities. Therefore, regional air quality impacts would be significant and unavoidable and less than those of the Project.

(b) Toxic Air Contaminants

As with the Project, construction of Alternative 3 would result in TAC emissions, which are primarily associated with the combustion of diesel fuels that produce exhaust-related particulate matter. However, because of the relatively short period of time that diesel-fuel construction equipment would operate, and even a shorter period of time under this alternative than the Project, Alternative 3 would not result in a substantial, long-term source of TACs. Therefore, impacts due to TAC emissions and the corresponding individual cancer risk under Alternative 3 would be less than significant and less than those of the Project.

2) Operation

(a) Regional and Localized Air Quality Impacts

Alternative 3 would reduce the total number of residential units on the Project Site. Operation of Alternative 3 would result in regional long-term air quality impacts, primarily from motor vehicle exhaust. However, Alternative 3 would have lower operational emissions than the Project based on the fact that Alternative 3 would generate fewer net daily vehicle trips than the Project (4,489 daily drips for Alternative 3 versus 6,415 for the Project) and smaller buildings to generate area and energy sources of emissions.

Long-term operation of Alternative 3 would generate regional emissions of pollutants that are less than the Project due to the reduction in daily vehicle trips and, as with the Project, would not exceed applicable SCAQMD regional thresholds of significance. Thus, as the

Alternative 3 maximum regional totals would be lower than the Project's maximum regional totals, impacts under Alternative 3 would be less than significant and less than those of the Project.

Long-term operation of Alternative 3 would generate fewer localized emissions of pollutants than the Project because of the reduced number of residential units and smaller building sizes. Thus, as the Alternative 3 maximum localized totals would be lower than the Project's maximum localized totals, the Alternative 3 impact would be less than significant and less than those of the Project.

Accordingly, regional and localized air quality impacts under Alternative 3 would be less than significant and less than those of the Project.

(b) Toxic Air Contaminants

Similar to the Project, Alternative 3 would not include typical sources of acutely and chronically hazardous TACs, such as industrial manufacturing processes. As such, as with the Project, Alternative 3 would not create substantial concentrations of TACs during its normal operation. Due to Alternative 3's reduction in size compared to the Project, Alternative 3 would generate fewer mobile source diesel emissions than those generated by the Project. Therefore, TAC impacts under Alternative 3 would be less than significant and less than those of the Project.

c) Cultural Resources

1) Historical Resources

As with the Project, Alternative 3 would demolish the existing structures and other improvements on the Project Site. The potential relocation of Building A0 could cause a substantial adverse change in that the building could be damaged. As a result, impacts would be potentially significant on an identified historical resource on the Project Site. Alternative 3 would not result in the introduction of a new visual element to the area that would be incompatible in size, scale or design with the CF Braun & Company Historic District. Alternative 3, like the Project, would implement Mitigation Measures CUL-MM-1 through CUL-MM-3, which would reduce the potentially significant impact with respect to Building A0 to a less-than-significant level. Therefore, Alternative 3 would have a less-than-significant impact with respect to historical resources that is the same as the Project's less-than-significant impact.

2) Archaeological Resources

As with the Project, under Alternative 3, the existing Project Site development would be removed, and the Project Site would be redeveloped. Although no archaeological

resources have been previously recorded within the Project Site, it is possible that historic-period archaeological resources could exist below the current ground surface, especially within the surface fill. The potential presence of archaeological materials is limited to the first several feet below the ground surface and the disturbed area footprint would be approximately the same as that of the Project. However, the depth of the required excavation would likely be shallower under Alternative 3 due to the anticipated reduction in subterranean parking. Therefore, there would be a reduced likelihood of encountering buried archaeological materials during excavation work at the Project Site. Accordingly, similar to the Project, the excavation required to develop Alternative 3 has the potential to disturb archaeological resources that could be present beneath the surface of the Project Site. As with the Project, compliance with existing regulations and implementation of Mitigation Measures CUL-MM-4 through CUL-MM-7 would reduce these potential impacts to a less-than-significant level, and impacts would be less than those of the Project.

d) Energy

1) Construction

Alternative 3 would involve the same amount of site clearance/demolition as the Project, but would require less new construction. In addition, Alternative 3 would likely require less excavation and soil export due to the reduced amount of subterranean parking. As with the Project, construction activities associated with Alternative 3 would consume electricity associated with conveyance of water that would be used during construction, powering lights, electronic equipment, or other construction activities necessitating electrical power, and petroleum-based fuels. Total construction trips would be reduced under Alternative 3. Furthermore, Alternative 3 construction would require less electricity consumption and would not be expected to have any adverse impact on available electricity supplies and infrastructure. As with the Project, construction activities typically do not involve use of natural gas; thus, Alternative 3 would not generate demand for natural gas during construction activities. As evaluated in **Section IV.E, Energy**, of the Draft EIR, Project construction activities would result in an energy demand that would not be wasteful, inefficient, or unnecessary and would not be expected to have an adverse impact on available energy supplies or the existing infrastructure. As the consumption of energy resources for construction activities would be reduced under Alternative 3 as compared to the Project, Alternative 3 would similarly not be expected to have an adverse impact on available energy resources. Therefore, impacts on energy resources associated with short-term construction activities under Alternative 3 would be less than significant and less than those of the Project.

2) Operation

Due to the smaller size of Alternative 3 as compared to the Project, operation of Alternative 3 would likely result in a decrease in both electricity and natural gas usage as well as fuel consumption. It is anticipated that the existing distribution facilities in the Project area would have the capability to serve a reduced project under Alternative 3 given the fact that existing service lines in the Project area would have sufficient capacity to serve the Project. Furthermore, Alternative 3 would comply with the same regulations as the Project to reduce energy usage. In terms of petroleum-based fuel usage, the number of daily trips generated by Alternative 3 would be lower in comparison to the Project due to the reduction in residential units. Like the Project, the consumption of electricity, natural gas, and petroleum-based fuels under Alternative 3 would not be wasteful, inefficient, or unnecessary. Therefore, operational impacts to energy resources under Alternative 3 would be less than significant and less than those of the Project.

e) Geology and Soils

Alternative 3 would remove the existing light industrial/warehouse, office, and parking lot uses and construct new buildings on the Project Site. Development of Alternative 3 at the Project Site would require the same amount of Project Site clearing, demolition, and grading as the development of the Project; however, a lesser amount of construction would be necessary due to the reduction in the number of condominium units. Similarly, a lesser amount of excavation is likely to be necessary due to the reduction in subterranean parking. Similar to the Project, Alternative 3 would not exacerbate any existing environmental conditions related to seismic ground shaking, ground failure, landslides, unstable soils, and expansive soils and would have a less-than-significant impact on geology and soils.

As with the Project, under Alternative 3, the existing Project Site development would be removed, and the Project Site would be redeveloped. Although no previously encountered fossil vertebrate localities have been located within the Project Site, the possibility exists that paleontological artifacts that were not recovered during prior construction or other human activity on the Project Site may be present. The disturbed area footprint would be approximately the same under both the Project and Alternative 3. However, the depth of the required excavation would likely be shallower under Alternative 3 due to the anticipated reduction in subterranean parking. Therefore, there would be a reduced likelihood of encountering buried paleontological materials during excavation work at the Project Site. Similar to the Project, the excavation required to develop Alternative 3 has the potential to disturb unknown paleontological resources present beneath the surface of the Project Site. As with the Project, compliance with existing regulations and implementation of Mitigation Measures GEO-MM-1 through GEO-MM-4 would reduce

these potential impacts to a less-than-significant level and impacts would be less than those of the Project.

f) Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions from a development project are determined in large part by the number of daily trips generated and energy consumption from proposed land uses. Under Alternative 3, the development of fewer condominium units would reduce the number of net new daily trips compared to the Project. Alternative 3 would generate approximately 30 percent fewer net new daily trips than the Project. Additionally, with regard to energy uses, the reduced building floor area of Alternative 3 would reduce the amount of electricity, water, and natural gas used in comparison to the Project. Thus, associated GHG emissions would be reduced as compared to the Project.

As with the Project, Alternative 3 would be generally consistent with the AB 32 Scoping Plan's statewide objectives to reduce GHG emissions (see Table IV.G-10 in **Section IV.G, Greenhouse Gas Emissions**, of the Draft EIR), as well as with applicable state, regional, and local regulatory plans and policies to reduce GHG emissions.

Alternative 3 would incorporate the same design features as the Project to reduce GHG emissions, including Project Design Features GHG-PDF-1 through GHG-PDF-7. In addition, Alternative 3 would be designed to comply with the goals of CARB's *Climate Change Scoping Plan* and SCAG's 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and would implement sustainability features that are comparable to the ones proposed for the Project. Alternative 3 would still intensify a complementary mix of uses in an infill location near transit and would therefore be generally consistent with the GHG reduction goals and objectives set forth in state, regional, and local regulatory plans. Impacts related to GHG emissions under Alternative 3 would be less than significant and less than those of the Project.

g) Hazards and Hazardous Materials

1) Construction

Alternative 3 would remove the existing light industrial/warehouse, office, and parking lot uses and would construct new buildings on the Project Site. Similar to the Project, construction of Alternative 3 would involve the temporary transport, use, or disposal of potentially hazardous materials, including paints, adhesives, surface coatings, cleaning agents, fuels, and oils. All of these materials would be used short-term during construction activities. Additionally, all potentially hazardous materials would be used and stored in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations, which would ensure that impacts are less than significant.

Furthermore, any emissions from the use of such materials would be minimal and localized to the Project Site.

As with the Project, redevelopment of portions of the Project Site under Alternative 3 would not 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. Since construction of Alternative 3 would comply with applicable regulations and would not expose persons to substantial risk resulting from the release of hazardous materials, exposure to health hazards in excess of regulatory standards, or exacerbate existing environmental conditions, potential impacts associated with the potential release of hazardous substances during construction of this alternative would be less than significant. Overall, based on the reduced size and duration of construction for Alternative 3, impacts would be less than significant and less than those of the Project.

2) Operation

Operation of Alternative 3 would result in the use, storage, disposal, and transport of similar types of hazardous materials as the Project though to a reduced extent due to the fewer number of residential units. All potentially hazardous material, transported, stored, offered for sale, or used on site for daily upkeep would be contained, stored, used and disposed in accordance with the manufacturers' instructions and handled in compliance with applicable standards and regulations.

Similar to the Project, under Alternative 3, the Project Applicant would be required to establish, implement, and maintain on file an emergency response plan, which would be reviewed by the Alhambra Fire Department (AFD). Thus, operation of Alternative 3 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, operational impacts would be less than significant. Therefore, operation of Alternative 3 would result in impacts that are similar to the Project's less-than-significant impacts.

h) Hydrology and Water Quality

Alternative 3 would remove the existing light industrial/warehouse, office, and parking lot uses and would construct new buildings on the Project Site. Similar to the Project, Alternative 3 would not substantially alter existing drainage patterns on the Project Site that could result in flooding, erosion, or sedimentation on- or off-site. As with the Project, Alternative 3 would comply with applicable requirements of the City's Low-Impact Development code and the requirements associated with the Los Angeles County stormwater discharge permit for municipal storm sewer systems. Alternative 3 construction would also proceed in compliance with the requirements of the State General Construction Activity Stormwater Permit, including the preparation and implementation of

a Stormwater Pollution Prevention Plan and best management practices at the Project Site. As with the Project, the development of Alternative 3 would reduce the existing amount of impervious surface area at the Project Site. Therefore, similar to the Project, Alternative 3 would not create new sources of polluted runoff and would not increase the existing quantity or reduce the quality of stormwater runoff leaving the Project Site. Impacts would be similar to the Project's less-than-significant impacts.

i) Land Use and Planning

Under Alternative 3, the development of a planned urban residential community would be consistent with the existing zoning designation, land use designation, and applicable height limits within the Project Site. Alternative 3 would require discretionary and ministerial approvals similar to the Project. With implementation of the required discretionary approvals and the project design features, Alternative 3 would be generally consistent with the applicable policies and objectives included in the City's General Plan and Zoning Code. Therefore, as with the Project, Alternative 3 would result in a less-than-significant impact with respect to land use. Impacts would be similar to those of the Project.

j) Noise

1) Construction

Alternative 3 would result in an overall reduction in the construction duration when compared to the Project due to its reduced size. However, while the overall duration of the construction period would be reduced compared to the Project, construction activities during the maximum activity days would be similar in scale to the Project. Similar to the Project, Alternative 3 would require demolition of the existing structures and other improvements on-site. Construction activities for the Project and Alternative 3 would be similar in that heavy equipment, hand held equipment, and motor vehicles, all of which generate temporary noise and, in some cases, vibration impacts, would be used during construction.

As with the Project, Alternative 3's construction noise impacts would be temporary, and would proceed in compliance with Project Design Features NOI-PDF-1 through NOI-PDF-6. As with the Project, Alternative 3 would implement Mitigation Measures NOI-MM-1 through NOI-MM-9. As with the Project, construction noise impacts would be less than significant. As with the Project, groundborne vibration impacts of Alternative 3 would be less than significant for the historic structures within the CF Braun & Company Historic District abutting the construction zone to the north.

Thus, implementation of Alternative 3 would result in construction noise and vibration impacts that are similar to the Project's less-than-significant impacts. However, these impacts would occur for a shorter duration under Alternative 3 as compared to the Project due to the shorter construction duration. Therefore, the impacts of Alternative 3 would be less than those of the Project.

2) Operation

As with the Project, operation of Alternative 3 would result in both direct on-site noise impacts associated with residential activities and indirect off-site noise impacts from vehicles traveling on local roads to access the Project Site. Direct on-site noise sources include HVAC systems, intermittent landscape maintenance, residential activities (i.e., voices, music), and auto-related activities. On-site noise sources would not be expected to individually or collectively elevate ambient noise levels substantially at nearby sensitive receptors. The potential noise impacts from these on-site operational sources would be considered less than those of the Project due to the smaller development size. Off-site noise from traffic generated by Alternative 3 would be reduced as compared to the Project due to the 30 percent reduction in the number of net new daily trips.

During operation of Alternative 3, there would be no significant stationary sources of groundborne vibration, such as heavy equipment or industrial operations. Operational groundborne vibration in the Project Site vicinity would be generated by vehicular travel on the local roadways. However, passenger vehicles rarely create enough groundborne vibration to be perceptible to humans unless road surfaces are poorly maintained and have potholes or bumps, which is not the case in the vicinity of the Project Site. Due to the reduction in the number of daily vehicle trips associated with Alternative 3, operational vibration impacts would be less than those of the Project. The potential on-site and off-site operational noise and vibration impacts generated by Alternative 3 would be less than significant and less than those of the Project.

k) Population and Housing

1) Population

The construction of Alternative 3 would result in increased employment opportunities in the construction field in the vicinity of the Project Site. However, as is the case with the Project, construction workers would not likely relocate their place of residence as a consequence of working on Alternative 3. The construction-related employment for Alternative 3 would not represent a permanent or substantial new employment generator that would cause growth, and there would be no significant housing or population impacts from construction of Alternative 3. Therefore, similar to the Project, no impact related to construction-related indirect population growth would occur.

The proposed residential land uses within Alternative 3 would generate approximately 1,845 permanent residents at the Project Site, a reduction of 680 residents as compared to the Project. As with the Project, the population growth represented by Alternative 3 would be within applicable City population growth forecasts. Thus, Alternative 3 would produce an impact that is less than significant and less than that of the Project with respect to direct population growth at the Project Site.

As with the Project, Alternative 3 would not induce substantial growth that exceeds growth forecasted for the area or introduce unplanned infrastructure or accelerate development in an undeveloped area that would result in an adverse physical change in the environment. The Project Site is currently developed and is located within an urbanized area in the City. Thus, the construction of a potential growth-inducing roadway or other infrastructure extensions would not be required. Similar to the Project, as development of Alternative 3 would not induce substantial indirect population growth and would be supported by the existing infrastructure, such as roadways, impacts would be less than significant.

2) Housing

Alternative 3 would develop 775 residential housing units at the Project Site, a reduction of 286 units as compared to the Project. As with the Project, Alternative 3 would not displace existing housing units or people, necessitating the construction of replacement housing elsewhere. The housing growth represented by Alternative 3 would be within applicable City housing growth forecasts. Therefore, as with the Project, the impact of Alternative 3 on housing would be less than significant and less than that of the Project.

l) Public Services

1) Fire Protection

(a) Construction

As discussed in **Section IV.M.1, Public Services - Fire Protection**, of the Draft EIR, and similar to the Project, construction activities associated with Alternative 3 may temporarily increase demand for fire protection and emergency medical services and may cause the occasional exposure of combustible materials, such as wood, plastics, sawdust, coverings and coatings, to heat sources, including machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions in combustible materials and coatings. However, in compliance with Occupational Safety and Health Administration (OSHA) requirements, construction managers and personnel would be trained in fire prevention and emergency response. Fire suppression equipment specific to construction that meets OSHA standards would be maintained on-site. Additionally,

construction would comply with applicable OSHA requirements related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. Therefore, in light of OSHA regulations that would, in part, require training of personnel in fire prevention and emergency response, maintenance of fire suppression equipment, and implementation of proper procedures for storage and handling of flammable materials on the Project Site, construction impacts on fire protection and emergency medical services would be less than significant and similar to those of the Project.

Construction activities also have the potential to affect fire protection services by adding construction traffic to the street network and by necessitating partial lane closures during street improvements and utility installations. These impacts would be similar to those of the Project and would be considered less than significant because construction activities are temporary in nature and do not create continuing risks. General "good housekeeping" procedures would be employed by the construction contractors and the work crews (e.g., maintaining mechanical equipment, proper storage of flammable materials, cleanup of spills of flammable liquid) would minimize these hazards. In addition, partial lane closures would not significantly affect emergency vehicles, the drivers of which normally have a variety of options for dealing with traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic, pursuant to California Vehicle Code (CVC) Section 21806. Additionally, if there are partial closures to streets surrounding the Project Site, flagmen would be used to facilitate the traffic flow until such temporary street closures are complete under the Work Zone Traffic Control Plan (refer to TR-PDF-2).

Overall, construction is not considered to be a high-risk activity. Construction of Alternative 3 would not be expected to tax fire-fighting and emergency services to the extent that there would be a need for new or expanded fire facilities in order to maintain acceptable service ratios or other performance objectives of the AFD, due to the limited duration of construction activities and compliance with applicable codes. Therefore, impacts associated with construction of Alternative 3 on fire protection services would be less than significant and similar to those of the Project.

(b) Operation

As discussed in **Section IV.M.1, Public Services - Fire Protection**, of the Draft EIR, with respect to fire flows, Alternative 3 would require the installation of system improvements required to supply 6,000 gpm, similar to the Project. As with the Project, the improved Project Fire Water line would be a looped system with three points of connection. The fire system would connect to the existing water lines in Mission Road, Date Avenue, and Orange Street. In order to achieve the anticipated fire flow requirements for the Project, all proposed Fire Water piping (other than fire hydrant laterals) will need to be sized at 12 inches. Fire hydrants (and associated underground fire water supply piping) would be

required at a spacing of approximately 300 feet along the private internal access roads. The magnitude of the system required would lend itself to potentially dedicating the underground supply line as a public main. Should that become the case, this dedicated public main should likely serve all water service needs for Alternative 3. Meters and backflows would likely be located along the internal private roadway system as they would traditionally along the public street frontage. Impacts would be less than significant and the same as the Project.

Based on the reduction of residential units on the Project Site, the number of fire protection service calls is expected to be reduced with implementation of Alternative 3 as compared to the Project due to the fewer number of people present on-site at any given time. Similar to the Project, Alternative 3 would comply with Alhambra Building and Fire Code requirements, which include, but are not limited to, the installation of an automatic fire sprinkler system; the creation and filing of an emergency response plan; and AFD approval of emergency plans, procedures, and evacuation routes and signs. Compliance with applicable regulatory requirements that are enforced through the City's building permitting process would ensure that adequate fire prevention features would be provided to reduce the demand on AFD facilities and equipment, thereby ensuring that Alternative 3 would not create any undue fire hazard, similar to the Project.

As with the Project, emergency vehicles would access the Project Site directly from the surrounding roadways. Emergency access to the Project Site and surrounding uses would be maintained at all times. Alternative 3-related traffic would have the potential to increase emergency vehicle response times to the Project Site and surrounding properties due to travel time delays caused by traffic. However, the area surrounding the Project Site includes an established street system which provides regional, sub-regional, and local access and circulation within the Project's traffic study area. In addition, the drivers of emergency vehicles normally have a variety of options for avoiding traffic, such as using sirens to clear a path of travel or driving in the lanes of opposing traffic, pursuant to CVC Section 21806. Therefore, the increase in traffic generated by Alternative 3 would not significantly impact emergency vehicle response times to the Project Site and surrounding area and impacts would be similar to those of the Project.

Based on the above, operation of Alternative 3 would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility in order to maintain service. Therefore, impacts to fire protection services during operation of Alternative 3 would be less than significant and less than those of the Project.

2) Police Protection

(a) Construction

Similar to the Project, construction of Alternative 3 could result in an increase in demand for police protection services. With regard to emergency vehicle access, as with the Project, although minor traffic delays due to temporary lane closures needed to facilitate specific construction activities could occur, particularly during the construction of utilities and street improvements, impacts to police protection services would be considered less than significant as (1) emergency access to the Project Site would be maintained through marked emergency access points approved by the Alhambra Police Department (APD); (2) construction impacts are temporary in nature; and (3) the ability of emergency vehicles to have a variety of options for avoiding traffic and partial street closures. Accordingly, similar to the Project, construction-related impacts of Alternative 3 would not be expected to affect the APD's ability to respond to emergencies to the extent that there would be a need for any additional new or expanded police facilities, in order to maintain acceptable service ratios, response times, or other performance objectives of the APD. Therefore, similar to the Project, impacts on police protection services during construction of Alternative 3 would be less than significant.

(b) Operation

As compared to the Project, Alternative 3 would introduce approximately 680 fewer residents to the Project Site. The Project would result in an on-site population of approximately 1,845 people, requiring approximately three additional officers to maintain the same officer-to-population ratio. The City has 85 sworn police officers. The addition of three officers to maintain the existing ratio represents an approximately 3.5 percent increase over existing staffing levels. This change would not require the construction of additional police facilities.

Similar to the Project, Alternative 3 would include security features within the parking facilities and exterior building areas, such as appropriate lighting and gated access. In addition, the lighting and landscaping design would ensure high visibility and the Project would provide for on-site security measures and controlled access systems for residents and tenants to minimize the demand for police protection services. The Project would incorporate crime prevention features into the design of the buildings and public spaces, such as lighting of entryways and public areas. Furthermore, although traffic generated by Alternative 3 would have the potential to affect emergency vehicle response to the Project Site and surrounding properties due to additional traffic, emergency vehicles normally have a variety of options for avoiding traffic, such as using sirens and flashing lights to clear a path of travel. As such, operation of Alternative 3, including traffic generated by Alternative 3, would not substantially affect emergency response as a result

of increased traffic congestion. Based on the analysis above, Alternative 3 would not necessitate the provision of new or physically altered facilities in order to maintain the APD's capability to serve the Project Site. Accordingly, Alternative 3 would not result in adverse physical impacts associated with the construction of new or altered facilities. Therefore, Alternative 3's impacts related to police protection services would be less than the less-than-significant impacts of the Project.

3) Schools

(a) Construction

Similar to the Project, Alternative 3 would generate part-time and full-time jobs associated with its construction between the start of construction and full buildout. However, due to the employment patterns of construction workers in southern California and the operation of the market for construction labor, construction workers are not likely to relocate their households as a consequence of construction job opportunities. Therefore, construction employment generated by Alternative 3 would not result in a notable increase in the resident population or a corresponding demand for schools from construction workers in the vicinity of the Project Site. Similar to the Project, impacts on school facilities during construction of Alternative 3 would be less than significant.

(b) Operation

The projected increase in the number of residents (775 housing units, 1,845 residents) from Alternative 3 and the resulting potential need to enroll any school-aged children into AUSD schools would increase the demand for school services. As shown in Table VI-8, based on AUSD demographic analysis, the Project would result in approximately 163 additional AUSD students (116 elementary students and 47 high school students). These calculations do not take into account the possibility that some of the future residents of the Project already reside within the service boundaries of the AUSD and have school-aged children currently enrolled in the AUSD schools near the Project Site. However, to provide for a conservative analysis, it is assumed that all of the students generated as a result of the Project are not currently enrolled in the AUSD schools near the Project Site and would enroll in existing AUSD (as opposed to private or newly built AUSD) schools.

Based on correspondence received from AUSD, the elementary school serving the Project Site is Emery Park Elementary, which has a current enrollment of 440 students and a capacity of 843 students. Alhambra High School would serve the high school residents at the Project Site and has a current enrollment of 2,450 students with a capacity of 3,400 students. Thus, both schools are currently operating under capacity and would continue to do so following the addition of Project-generated students.

Table VI-8
Estimated Alternative 3 Student Generation

Land Use	Project Amount	Student Generation		
		Elementary	High	Total
Multi-Family Dwelling Units	775	116	47	**163**
	Total	**116**	**47**	**163**

Source: Student calculations based on AUSD student generation factors shown in Table IV.M.3-1.

Furthermore, as with the Project, pursuant to the California Government Code, the Project Applicant's payment of the school fees established by the AUSD in accordance with existing rules and regulations regarding the calculation and payment of such fees would, by law, provide full and complete mitigation for this alternative's direct and indirect impacts to schools. Therefore, due to a reduction in the number of students generated under Alternative 3, impacts related to schools under Alternative 3 would be less than significant and less than those of the Project.

4) Parks and Recreation

(a) Construction

Construction of Alternative 3 would result in a temporary increase in the number of construction workers at the Project Site. As described above, due to the employment patterns of construction workers in southern California, and the operation of the market for construction labor, the likelihood that construction workers would relocate their households as a consequence of working on Alternative 3 is negligible. Therefore, the construction workers associated with Alternative 3 would not result in a notable increase in the residential population of the Project vicinity, or a corresponding permanent demand for parks and recreational facilities in the vicinity of the Project Site. As such, similar to the Project, construction of Alternative 3 would not generate a demand for park or recreational facilities that cannot be adequately accommodated by existing or planned facilities and services, increase the use of existing parks such that substantial physical deterioration of the facility would occur, or interfere with existing park usage. Therefore, similar to the Project, impacts on parks and recreational facilities during construction of Alternative 3 would be less than significant.

(b) Operation

Alternative 3 would provide a lesser amount of open space and recreational amenities as compared to the Project due to the reduction in the number of residential units. However, Alternative 3 would still provide, at a minimum, the required amount of open space stipulated in the AMC. Alternative 3 would reduce the number of residents at the Project

by approximately 680 residents compared to the number that would be generated by the Project. Thus, Alternative 3 would reduce the Project Site's demand for parks and recreational facilities in the Project area in comparison to the Project.

Similar to the Project, Alternative 3 would not be expected to cause or accelerate substantial physical deterioration of off-site public parks or recreational facilities given the provision of on-site public and private open space described above. As with the Project, employees generated by Alternative 3 would not utilize parks and recreational facilities beyond a 0.5-mile radius from the Project Site as lunch breaks typically are not long enough for workers to take advantage of such facilities and return to work within the allotted time (e.g., 30 to 60 minutes). Instead, as with the Project, it is anticipated that employees under Alternative 3 would utilize on-site open space as it would be more easily accessible and convenient, resulting in a negligible demand for surrounding parks and recreational facilities. Thus, Alternative 3 would not substantially increase the demand for off-site public parks and recreational facilities. Therefore, impacts on parks and recreational facilities during operation of Alternative 3 would be less than significant and less than those of the Project due to the fewer number of residents.

5) Libraries

(a) Construction

Similar to the Project, construction of Alternative 3 would result in a temporary increase in the number of construction workers on the Project Site. However, due to the employment patterns of construction workers in southern California and the operation of the market for construction labor, construction workers are not likely to relocate their households as a consequence of construction of Alternative 3. Therefore, construction employment generated by Alternative 3 would not result in a notable increase in the resident population or a corresponding demand for library services in the vicinity of the Project Site. As such, similar to the Project, impacts to library facilities during construction of Alternative 3 would be less than significant.

(b) Operation

Alternative 3 would add a fewer number of residents to the Project Site than would the Project. As a result, Alternative 3 would reduce the demand for library services at the Project Site as compared to the Project. Similar to the Project, it is anticipated that new jobs generated by Alternative 3 would typically be filled by persons who already reside in the vicinity of the workplace and already generate a demand for the libraries in the vicinity of the Project Site. Furthermore, as with the Project, residents would have internet access, which results in a reduced demand at physical library locations. Therefore, any indirect or direct new demand for library services generated by residents under Alternative 3 would already be taken into account in library services provisions.

Furthermore, as with the Project, operation of Alternative 3 would not exacerbate existing capacity issues at the Alhambra Public Library. As such, Alternative 3 would not result in the need for new or altered library facilities. Therefore, impacts related to libraries under Alternative 3 would be less than significant and less than those of the Project.

m) Transportation

1) Construction

As with the Project, closures to one travel lane along the Date Avenue Project Site frontage could potentially occur during certain phases of Alternative 3 construction. There are no emergency services located within the immediate vicinity of the affected streets. Since Date Avenue is a local street with low volumes and other alternative routes are available, the temporary construction impacts on the roadway network would be considered less than significant. Per Project Design Feature TR-PDF-2, worksite traffic control plans would be prepared for any temporary vehicle lane or sidewalk closures in accordance with applicable City guidelines.

Similar to the Project, hauling activity is expected to occur over the first three phases of construction: Phase 1 – Demolition & Site Preparation; Phase 2 – Grading; and Phase 3 – Building Framing and Construction. Peak hauling activity is anticipated to occur during Phase 1 when the demolition of existing on-site structures would occur. Hauling hours are anticipated to be 7:00 AM to 3:00 PM, Monday through Friday, and 8:00 AM to 6:00 PM on Saturdays. Trucks would be staged on-site.

Similar to the Project, in addition to haul trucks, Alternative 3 is also expected to generate equipment and delivery trucks during each phase of construction. Additionally, construction equipment would be delivered to the Project Site. No construction activities with heavy equipment would occur beyond the normal weekday construction hours of 7:00 AM to 8:00 PM and Saturday from 9:00 AM to 4:00 PM. Per Project Design Feature TR-PDF-2, materials being delivered to the site during the construction period would be scheduled at times that are not in conflict with peak public use of the roadways so that congestion is limited.

Similar to the Project, the potential impacts of construction traffic on the traffic operations within the study area would be temporary and expected to be periodically ongoing until 2028. The impacts of construction-related trips (trucks and construction employees) on the street system should be considered negligible since these trips can be scheduled and their frequency increased during off-peak (mid-day) hours. A flagman would be available at all times when construction activities are occurring to ensure vehicle and pedestrian safety, and would be used whenever trucks are leaving the Project Site to prevent the impedance of the flow of traffic. The safety of pedestrians would be ensured by installing

a construction fence around the zone of construction activity on the Project Site perimeter. Through the implementation of the Work Zone Traffic Control Plan, Alternative 3 construction traffic impacts would be less than significant and similar to those of the Project.

Alternative 3 construction would not block vehicle or pedestrian access to other parcels fronting the construction area, there would be no temporary loss of access, and, as such, impacts would be less than significant and similar to the Project. Alternative 3 construction would not be anticipated to affect bus stops or bus lines in the area. Construction of Alternative 3 could require the temporary removal of on-street parking spaces along the Date Avenue and Orange Street Project frontages for periods during the overall construction work to accommodate temporary truck staging. As there is other on- and off-street parking available to serve nearby businesses, these temporary impacts would be less than significant and similar to the Project.

The number of construction workers would vary throughout the construction period with the building construction phase necessitating the highest number of workers on-site. Due to the size of the Project Site, it is expected that parking for construction workers will be available on-site and that off-site parking would not be necessary. Impacts would be less than significant and the same as those of the Project.

2) Operation

(a) Intersection Levels of Service

Alternative 3 would reduce traffic generation compared to the Project. Table VI-9 provides the trip generation for Alternative 3 in comparison to the Project. As detailed in Table VI-9, Alternative 3 would generate a total of 4,489 net new daily trips, with 331 net new AM peak hour trips (47 inbound, 284 outbound) and 371 net new PM peak hour trips (243 inbound, 128 outbound).

Table VI-9
Alternative 3 Trip Generation

Alternative	ITE Land Use (DU)		Daily Trips	AM Trips			PM Trips		
	220 - Apartment	230 – Condo		In	Out	Total	In	Out	Total
Proposed Project	545	516	6,415	62	402	464	344	186	531
Alternative 3	545	230	4,489	47	284	331	243	128	371

DU = dwelling units
Source: Kimley-Horn, 2019.

Alternative 3's daily trip generation would be 1,926 trips less than that of the Project with 133 fewer trips during the AM peak hour and 160 fewer trips during the PM peak hour than the Project. As shown in Table VI-10, under the Cumulative Future (2028) With Alternative 3 scenario, Alternative 3's traffic would produce significant impacts at the following signalized intersections:

- S Fremont Avenue/W Mission Road (AM/PM)
- S Fremont Avenue/W Commonwealth Avenue (PM)
- S Fremont Avenue/W Valley Boulevard (AM/PM)
- S Marengo Avenue/W Mission Road (PM)
- W Valley Boulevard/I-710 S/B On-Ramp (AM)

Alternative 3 would eliminate the Project's significant impacts at the S Fremont Avenue/Orange Street intersection in the PM peak period, at the W Valley Boulevard/I-710 S/B On-Ramp intersection in the PM peak period, at the S Fremont Avenue/W Hellman Avenue intersection in the AM and PM peak periods, and at the Westmont Drive/W Valley Boulevard intersection in the AM peak period, a reduction of five significant impacts at four intersections.

However, Alternative 3 would not eliminate any of the Project's other significant and unavoidable intersection LOS impacts, and would result in significant and unavoidable impacts during at least one peak hour period at 5 intersections under Buildout Scenario 1 and 4 intersections under Buildout Scenario 2.[2] Therefore, Alternative 3 would result in lesser, but still significant and unavoidable signalized intersection LOS impacts, than the Project. Unsignalized intersection impacts would be the same as the Project and would be reduced to a less-than-significant level via implementation of Mitigation Measures TR-MM-2 and TR-MM-3.

[2] *Project Mitigation Measure TR-MM-1 would no longer be necessary under Alternative 3 as the intersection of Westmont Drive/W Valley Boulevard would no longer be significantly impacted.*

Table VI-10
Alternative 3 Signalized Intersection LOS Impacts

Signalized Intersection		Cumulative (2028) Without Project V/C Ratio		V/C Significant Impact Threshold		Cumulative (2028) With Project V/C Ratio			
						Project		Alternative 3	
		AM	PM	AM	PM	AM	PM	AM	PM
1	S Fremont Ave/W Mission Road	1.297	1.211	1.307	1.221	**1.377**	**1.285**	**1.355**	**1.266**
3	S Fremont Ave/Orange Street	0.633	0.875	N/A	0.895	0.670	**0.907**	0.656	0.893
14	S Fremont Ave/W Commonwealth Ave.	0.793	0.964	0.833	0.974	0.794	**0.980**	0.795	**0.975**
15	S Fremont Ave/W Valley Blvd.	1.033	0.980	1.043	0.990	**1.059**	**1.029**	**1.051**	**1.016**
19	S Marengo Ave./W Mission Road	1.036	1.002	1.046	1.012	1.044	**1.024**	1.042	**1.016**
22	W Valley Blvd./I-710 S/B On-Ramp	1.173	0.914	1.183	0.924	**1.197**	**0.925**	**1.190**	0.922
23	S Fremont Avenue/W Hellman Ave.	0.873	0.853	0.893	0.873	**0.900**	**0.878**	0.892	0.871
27	Westmont Drive/W Valley Blvd.	0.893	0.701	0.913	0.741	**0.914**	0.720	0.908	0.714

*Significant impacts are shown in **bold**.*
Source: Kimley-Horn, 2019.

(b) CMP Impacts

As with the Project, it has been concluded that it is infeasible for Alternative 3 to mitigate its significant impact at the CMP arterial monitoring intersection of S. Fremont Avenue/W. Valley Boulevard. This impact would remain significant. Alternative 3 would have a less-than-significant impact at all CMP freeway monitoring locations and, thus, no mitigation would be required. CMP impacts would be similar to those of the Project.

(c) Access and Circulation

Similar to the Project, Alternative 3 would provide 8 driveways for access to the development. All driveways proposed under Alternative 3 would be the same as those proposed for the Project and designed in accordance with City standards. Therefore, Alternative 3 would not result in inadequate access.

In addition, as with the Project, Alternative 3 does not include any sharp curves, dangerous intersections, or incompatible uses. With implementation of Project Design Feature TR-PDF-3, all Alternative 3 driveways would operate at acceptable levels, similar to the Project. Therefore, similar to the Project, Alternative 3's impacts related to hazardous roadway features would be less than significant.

(d) Bicycle, Pedestrian, and Vehicular Safety

Bicycle, pedestrian, and vehicular access to the Project Site under Alternative 3 would be the same as the Project and designed in accordance with City and other applicable standards to provide adequate sight distance, sidewalks, and/or pedestrian movement controls that would meet the City's requirements to protect pedestrian safety. As with the Project, Alternative 3 would not disrupt bicycle flow along local streets. Similar to the Project, visitors, residents, and employees arriving by bicycle would have the same access options as pedestrian visitors, and to facilitate bicycle use, bicycle parking spaces and amenities would be provided within the Project Site under Alternative 3. Therefore, as with the Project, Alternative 3 would not substantially increase hazards to bicyclists, pedestrians, or vehicles. Similar to the Project, impacts related to bicycle, pedestrian and vehicular safety under Alternative 3 would be less than significant.

n) Tribal Cultural Resources

As discussed in **Section IV.O, Tribal Cultural Resources**, of the Draft EIR, no previously recorded tribal cultural resources have been identified for the Project Site. As with the Project, in the event that tribal cultural resources are inadvertently encountered, Alternative 3 would implement Mitigation Measures CUL-MM-4 through CUL-MM-7. Impacts would be reduced to a less-than-significant level that is less than that of the Project due to the lesser amount of excavation needed to develop the smaller number of subterranean parking spaces.

o) Utilities and Service Systems

1) Wastewater

(a) Construction

Similar to the Project, during construction of Alternative 3, a negligible amount of wastewater would be generated by construction workers. Temporary on-site sanitation facilities (e.g., portable toilets and hand wash areas) would be provided by a private company, and the wastewater would be properly disposed of off-site.

No new connections to the public sewer system would be required during the construction period. As such, wastewater generated during Project construction activities would not enter the local conveyance system and, thus, would not affect sewer line capacities in the area. In addition, with the implementation of the Work Zone Traffic Control Plan (discussed in **Section IV.N, Transportation**, of the Draft EIR), Alternative 3 would not significantly impact traffic or emergency access in the surrounding area during the installation of new utilities infrastructure. Similar to the Project, construction-related impacts to the existing wastewater infrastructure and facilities would be less than significant.

(b) Operation

Due to the reduction in the number of residential units, Alternative 3 would generate approximately 27 percent less wastewater than the Project and would also result in less-than-significant impacts to wastewater treatment capacity. Similar to the Project, Alternative 3 would be subject to standard regulatory measures. Given the excess capacity at the three wastewater treatment plants that serve Alhambra, impacts would be less than significant. Overall, impacts associated with Alternative 3 would be less than those of the Project.

2) Water

(a) Construction

Similar to the Project, water consumption would be required to accommodate construction activities, such as soil watering (i.e. for fugitive dust control), clean up, masonry, painting, and other related activities. As with the Project, construction activities requiring water would occur intermittently and would be temporary in nature. Further, the activities requiring water would not create substantial water demand. Typically, fugitive dust watering is provided by private purveyors and not provided by on-site water sources. Reclaimed water can be used for dust control. Overall, similar to the Project, construction activities under Alternative 3 would require minimal water consumption and would not be expected to have an adverse impact on available water supplies or existing water distribution systems**.**

Prior to the issuance of grading/building permits, the City would determine if the existing water supply infrastructure maintains sufficient capacity to accommodate the projected water demands. If a deficiency or service problem is discovered during the permitting

process, the Project Applicant shall fund the required upgrades to adequately serve the uses proposed under Alternative 3. Water main and related infrastructure upgrades would not be expected to create a significant impact to the physical environment because: (1) any disruption of service would be of a short-term nature; (2) replacement of the water mains would be within public and private rights-of-way; and (3) the existing infrastructure would be replaced with new infrastructure in areas that have already been significantly disturbed.

While the potential replacement or expansion of the existing infrastructure could result in temporary partial public street closures, a Work Zone Traffic Control Plan would be implemented (see **Section IV.N, Transportation**, of the Draft EIR) to direct traffic flow during construction activities, including during the potential water upgrade activities near the Project Site. Similar to the Project, impacts under Alternative 3 would be less than significant.

(b) Operation

Alternative 3 would result in a net decrease in water demand of approximately 27 percent as compared to the Project. Thus, operation of Alternative 3 would consume less water than the Project and would also result in less-than-significant impacts with respect to long-term water supplies. Similar to the Project, Alternative 3 would be subject to standard regulatory measures to ensure that impacts to the water conveyance system would be less than significant. Overall, the impacts of Alternative 3 would be less than significant and less than those of the Project.

3) Solid Waste

(a) Construction

C&D waste generated by demolition of the existing uses would be the same for Alternative 3 and the Project. Construction waste generated during the construction of Alternative 3 would be reduced as compared to the Project due to the fewer number of units being constructed. Landfills that serve Alhambra have adequate capacity to accommodate Alternative 3's C&D waste, as with the Project. Thus, as the construction waste generated by Alternative 3 would be reduced from that generated by the Project and existing landfills and waste facilities have sufficient capacity to handle the projected amount of construction waste, the construction-related solid waste impacts of Alternative 3 would be less than significant and less than those of the Project.

(b) Operation

Alternative 3 would generate less solid waste (approximately 27 percent less) than the Project due to the reduced number of residential units. Thus, Alternative 3 would result in

less-than-significant impacts to solid waste landfill capacity via compliance with existing regulations. Overall, the impacts of Alternative 3 would be less significant and less than those of the Project.

3. Comparison of Impacts

As evaluated above, Alternative 3 would reduce the duration of the Project's significant and unavoidable construction-period air quality impact under Buildout Scenario 2; however the impact would remain significant and unavoidable. Alternative 3 would also, with respect to traffic and circulation impacts, eliminate five of the Project's significant intersection impacts (at four different intersections) but would still result in significant and unavoidable impacts at 5 of the same 7 intersections (under Buildout Scenario 1) and 4 of the same 5 intersections (under Buildout Scenario 2) as the Project. All other impacts would be similar or less under Alternative 3 when compared to the Project.

4. Relationship of the Alternative to Project Objectives

Overall, Alternative 3 represents a reduced scope of development containing the same residential uses as the Project. However, this alternative would not achieve the Project objectives to the same extent as the Project. Alternative 3 would meet the following Project objectives to generally the same extent as the Project:

- Retain the existing office buildings within the Office Plan Area portion of the site.
- Improve the aesthetic quality of the site by removing older structures and parking lots and developing new, more attractive residential buildings across a lushly landscaped campus.
- Develop an economically feasible project featuring a high level of quality in architectural design and placemaking that can create an urban community that serves as a destination within the City.

However, Alternative 3 would either partially meet or only meet the following Project objectives to a lesser extent than the Project:

- Contribute housing stock toward the City's RHNA allocation.
- Contribute to the economic health of the City by developing residential uses that generate local tax revenues, provide new construction jobs, and generate residents who support local businesses.

Specifically, Alternative 3 would be 27 percent smaller and would not contribute housing stock toward the City's RHNA allocation to the same extent as the Project and would provide fewer opportunities for new home ownership. This would result in less density in proximity to transit and employment nodes for employees and residents. Alternative 3 would contribute to the City's economic health by developing residential uses that generate local tax revenues, provide new construction jobs, and generate residents who support local businesses but it would do so to a lesser degree than the Project as it would create fewer residential units. Overall, Alternative 3 would be partially consistent with two of the five Project objectives.

VI. Alternatives

D. Alternative 4: Reduced Density 3 Alternative

1. Description of the Alternative

The Reduced Density 3 Alternative (Alternative 4) would redevelop the Project Site in the same fashion as the proposed Project but would reduce the number of apartments by 45 dwelling units in the South and/or Corner Plan Areas and the number of condominiums by 226 dwelling units in the North Plan Area. Alternative 4 would develop 500 apartment units in the South and Corner Plan Areas and would develop 290 condominium units in the North Plan Area, as shown in Table VI-11. The site plan would be substantially the same as that of the proposed Project, only the building heights would be lower as a result of reducing the number of apartment and condominium units. Due to the fewer number of units, less subterranean parking would be required.

Alternative 4 would reduce the overall Project size by 26 percent. As with the Project, public vehicular access would be provided from all four of the adjacent streets. Design and architecture, as well as landscaping, would be similar to that of the proposed Project.

Table VI-11
Summary of Alternative 4 (Reduced Density 3) Uses and Comparison to the Project

Land Use	Alternative 4	Proposed Project	Difference
Apartments	500 DU	545 DU	-45 DU
Condominiums	290 DU	516 DU	-226 DU
Totals	**790 DU**	**1,061 DU**	**-271 DU**
DU = dwelling units			

Signage, lighting, vehicular and pedestrian access, setbacks, and sustainability features would be similar to those proposed for the Project.

As with the Project, Alternative 4 would be constructed under one of two buildout scenarios (see **Section II, Project Description**, of the Draft EIR for a description of Buildout Scenarios 1 and 2). However, construction would be expected to require a somewhat shorter overall duration due to the fewer number of condominium units being constructed. As with the Project, a Work Zone Traffic Control Plan, subject to City

approval, would be implemented during construction to minimize potential conflicts between construction activity and traffic in the immediate vicinity of Project Site.

2. Environmental Impact Analysis

a) Aesthetics

1) Visual Character, Scenic Vistas, and Scenic Resources

(a) Construction

As with the Project, the visual appearance of the Project Site would be altered during construction due to the removal of the existing buildings and other improvements to the same extent as the Project. Other construction activities, including site preparation, grading, and excavation, the staging of construction equipment and materials, and the construction of the building foundations and proposed structures, would also alter the visual character and quality of the Project Site and adjacent roadways. Alternative 4's construction activities could be visible to pedestrians and motorists, as well as to viewers within nearby buildings. As with the Project, Alternative 4 would incorporate similar project design features as the Project, including the installation of temporary construction fencing that would screen much of the construction activity from view at street level. Overall, similar to the Project, while Alternative 4 would alter the visual character of the Project area on a short-term basis, construction activities would not substantially alter or degrade the existing visual character of the Project Site for the following reasons: (1) views of construction activities would be limited in duration and location; (2) the site appearance would be typical of construction sites in urban areas; (3) construction would occur within an urban setting with a high level of human activity and development; and (4) impacts would be reduced through standard best management practices (BMPs) implemented during the construction period. Therefore, aesthetic impacts during construction would be similar to the less-than-significant impacts of the Project.

(b) Operation

Under Alternative 4, the building architecture and style would be similar to that of the Project. In addition, the landscaping would be similar to that employed in the Project. Some building heights in the North, South, and Corner Plan Areas would be reduced due to the fewer number of condominium units. As with the Project, Alternative 4 would feature cohesive signage that would be consistent in shape, size, color, height, and lettering. Also, as with the Project, the landscape design for Alternative 4 would create a pedestrian-friendly environment. Alternative 4 would not substantially affect existing scenic vistas of the distant San Gabriel Mountains. The Project Site and surrounding area are characterized by dense urban development, and the Alternative 4 would not

substantially alter existing views available in the area, similar to the Project. The Project Site does not contain trees with scenic significance or rock outcroppings and is not located within a state scenic highway. Therefore, no impact would occur with respect to scenic resources within a state scenic highway, as with the Project. Therefore, similar to the Project, Alternative 4 would not degrade the existing visual character or quality of the Project Site or its surroundings due to changes in architecture or urban design. Thus, aesthetics impacts would be similar to the Project's less-than-significant impacts.

2) Light and Glare

(a) Construction

The Project Site is located in a highly urbanized area of the City. Land uses in the immediate Project Site area include warehouses, office, retail, commercial, light industrial, and transportation infrastructure, in addition to surface parking lots. Many of these land uses produce nighttime light and daytime glare (e.g., indoor/outdoor lighting, windows, light-colored surfaces, etc.) typical of such uses in an urban area.

The closest light-sensitive uses to the Project Site are the single-family residences along Front Street, across Mission Road and the railroad corridor (approximately 200 feet south of the Project Site's southern boundary). However, as with the Project, construction activities for Alternative 4 would occur in accordance with the provision of AMC Section 18.02, which limits construction hours to between 7:00 AM and 7:00 PM on weekdays and Saturdays with no construction permitted on Sundays or federal holidays. Therefore, Alternative 4 construction would not significantly impact off-site light-sensitive uses, substantially alter the character of off-site areas surrounding the Project Site, adversely impact day or nighttime views in the area, or substantially interfere with the performance of an off-site activity.

In addition, as with the Project, daytime and nighttime glare could potentially occur during construction activities if reflective construction materials were positioned in highly visible locations where the reflection of sunlight or nighttime light sources could occur. However, any glare generated within the Project Site during construction would be highly transitory and short-term given the movement of construction equipment and materials within the construction area and the temporary nature of construction activities. Furthermore, large, flat surfaces that are generally required to generate substantial glare are typically not an element of construction activities. As a result, light and glare associated with the construction of Alternative 4 would not substantially alter the character of off-site areas surrounding the Project Site or adversely impact day or nighttime views in the area and impacts would be less than significant and similar to those of the Project. Therefore, impacts from sources of artificial light and glare during construction of Alternative 4 would be similar to the Project's less-than-significant impacts. Also, light impacts associated

with construction would be less than significant under Alternative 4 and less than the Project due to the shorter construction duration.

(b) Operation

As with the Project during operation, Alternative 4 would increase light and glare levels within the Project Site and surrounding area compared to existing conditions through the introduction of new light and glare sources. Similar to the Project, Alternative 4 would include lighting designed to highlight architectural elements of the structure. Security lighting would be installed to deter criminal activity on the Project Site. The lights associated with Alternative 4 would be directed toward the interior of the Project Site so as not to create impacts to surrounding land uses or motorists traveling on surrounding roadways. All exterior lighting would be designed with internal and/or external glare control and would also be designed, arranged, directed, or shielded to contain direct illumination on-site, thereby preventing exceed illumination and light spillover onto adjacent land uses and/or roadways (see also Project Design Feature AES-PDF-3). Blinking, flashing, or oscillating lights would be prohibited. As such, the potential impact resulting from lighting associated with architectural elements, interior building usage, security, and signage would be less than significant. Impacts would be less than the less-than-significant impact of the Project's due to the fewer number of residences of Alternative 4.

Similar to the Project, the architectural features and facades of Alternative 4 would not be constructed of highly reflective materials. In accordance with Project Design Feature AES-PDF-4, the exterior of the proposed building would be articulated and constructed of materials, such as brick, metal, and glass with low reflectivity, which would not be expected to affect daytime views. The sources of glare that would be introduced into the area would not result in hazardous conditions to motorists or result in substantial glare due to the various features designed to minimize glare-related impacts. Therefore, impacts would be less than significant and less than those of the Project due to the lower heights of portions of Alternative 4.

b) Air Quality

1) Construction

(a) Regional and Localized Air Quality Impacts

Alternative 4 would involve approximately the same amount of demolition and grading as the Project. However, the overall amount of excavation would likely be reduced due to the fewer number of subterranean parking spaces required. Similarly, construction activities would also be reduced due to the reduction in the number of apartment and condominium units. As with the Project, construction of this alternative would generate air

emissions through the use of heavy-duty construction equipment and haul truck and construction worker trips. As such, over the entire duration of the construction period, the intensity of air emissions and fugitive dust from demolition, site preparation, grading, and other construction activities would be similar on days with maximum construction activities. However, due to the reduced size of Alternative 4, the number of such days would be fewer than with the Project.

Because maximum daily conditions are used for measuring significance, regional and localized impacts associated with any of the pollutants on these days would be similar to those of the Project and would be less than significant with the exception of during the overlapping Phase I operation and Phase II construction period under Project Buildout Scenario 2, during which NO_x and ROG emissions would represent a significant and unavoidable impact. Additionally, on an overall comparative basis, although impact levels would be the same under maximum activity days, the total amount of pollutants emitted during Project construction would be less under Alternative 4 due to the shorter duration of construction activities. Therefore, regional air quality impacts would be significant and unavoidable and less than those of the Project.

(b) Toxic Air Contaminants

As with the Project, construction of Alternative 4 would result in TAC emissions, which are primarily associated with the combustion of diesel fuels that produce exhaust-related particulate matter. However, because of the relatively short period of time that diesel-fuel construction equipment would operate, and even a shorter period of time under this alternative than the Project, Alternative 4 would not result in a substantial, long-term source of TACs. Therefore, impacts due to TAC emissions and the corresponding individual cancer risk under Alternative 4 would be less than significant and less than those of the Project.

2) Operation

(a) Regional and Localized Air Quality Impacts

Alternative 4 would reduce the total number of residential units on the Project Site. Operation of Alternative 4 would result in regional long-term air quality impacts, primarily from motor vehicle exhaust. However, Alternative 4 would have lower operational emissions than the Project based on the fact that Alternative 4 would generate fewer net daily vehicle trips than the Project (4,641 daily drips for Alternative 4 versus 6,415 for the Project) and smaller buildings to generate area and energy sources of emissions.

Long-term operation of Alternative 4 would generate regional emissions of pollutants that are less than the Project due to the reduction in daily vehicle trips and, as with the Project, would not exceed applicable SCAQMD regional thresholds of significance. Thus, as the

Alternative 4 maximum regional totals would be lower than the Project's maximum regional totals, impacts under Alternative 4 would be less than significant and less than those of the Project.

Long-term operation of Alternative 4 would generate fewer localized emissions of pollutants than the Project because of the reduced number of residential units and smaller building sizes. Thus, as the Alternative 4 maximum localized totals would be lower than the Project's maximum localized totals, the Alternative 4 impact would be less than significant and less than those of the Project.

Accordingly, regional and localized air quality impacts under Alternative 4 would be less than significant and less than those of the Project.

(b) Toxic Air Contaminants

Similar to the Project, Alternative 4 would not include typical sources of acutely and chronically hazardous TACs, such as industrial manufacturing processes. As such, as with the Project, Alternative 4 would not create substantial concentrations of TACs during its normal operation. Due to Alternative 4's reduction in size compared to the Project, Alternative 4 would generate fewer mobile source diesel emissions than those generated by the Project. Therefore, TAC impacts under Alternative 4 would be less than significant and less than those of the Project.

c) Cultural Resources

1) Historical Resources

As with the Project, Alternative 4 would demolish the existing structures and other improvements on the Project Site. The potential relocation of Building A0 could cause a substantial adverse change in that the building could be damaged. As a result, impacts would be potentially significant on an identified historical resource on the Project Site. Alternative 4 would not result in the introduction of a new visual element to the area that would be incompatible in size, scale or design with the CF Braun & Company Historic District. Alternative 4, like the Project, would implement Mitigation Measures CUL-MM-1 through CUL-MM-3, which would reduce the potentially significant impact with respect to Building A0 to a less-than-significant level. Therefore, Alternative 4 would have a less-than-significant impact with respect to historical resources that is the same as the Project's less-than-significant impact.

2) Archaeological Resources

As with the Project, under Alternative 4, the existing Project Site development would be removed, and the Project Site would be redeveloped. Although no archaeological

resources have been previously recorded within the Project Site, it is possible that historic-period archaeological resources could exist below the current ground surface, especially within the surface fill. The potential presence of archaeological materials is limited to the first several feet below the ground surface and the disturbed area footprint would be approximately the same as that of the Project. However, the depth of the required excavation would likely be shallower under Alternative 4 due to the anticipated reduction in subterranean parking. Therefore, there would be a reduced likelihood of encountering buried archaeological materials during excavation work at the Project Site. Accordingly, similar to the Project, the excavation required to develop Alternative 4 has the potential to disturb archaeological resources that could be present beneath the surface of the Project Site. As with the Project, compliance with existing regulations and implementation of Mitigation Measures CUL-MM-4 through CUL-MM-7 would reduce these potential impacts to a less-than-significant level, and impacts would be less than those of the Project.

d) Energy

1) Construction

Alternative 4 would involve the same amount of site clearance/demolition as the Project, but would require less new construction. In addition, Alternative 4 would likely require less excavation and soil export due to the reduced amount of subterranean parking. As with the Project, construction activities associated with Alternative 4 would consume electricity associated with conveyance of water that would be used during construction, powering lights, electronic equipment, or other construction activities necessitating electrical power, and petroleum-based fuels. Total construction trips would be reduced under Alternative 4. Furthermore, Alternative 4 construction would require less electricity consumption and would not be expected to have any adverse impact on available electricity supplies and infrastructure. As with the Project, construction activities typically do not involve use of natural gas; thus, Alternative 4 would not generate demand for natural gas during construction activities. As evaluated in **Section IV.E, Energy**, of the Draft EIR, Project construction activities would result in an energy demand that would not be wasteful, inefficient, or unnecessary and would not be expected to have an adverse impact on available energy supplies or the existing infrastructure. As the consumption of energy resources for construction activities would be reduced under Alternative 4 as compared to the Project, Alternative 4 would similarly not be expected to have an adverse impact on available energy resources. Therefore, impacts on energy resources associated with short-term construction activities under Alternative 4 would be less than significant and less than those of the Project.

2) Operation

Due to the smaller size of Alternative 4 as compared to the Project, operation of Alternative 4 would likely result in a decrease in both electricity and natural gas usage as well as fuel consumption. It is anticipated that the existing distribution facilities in the Project area would have the capability to serve a reduced project under Alternative 4 given the fact that existing service lines in the Project area would have sufficient capacity to serve the Project. Furthermore, Alternative 4 would comply with the same regulations as the Project to reduce energy usage. In terms of petroleum-based fuel usage, the number of daily trips generated by Alternative 4 would be lower in comparison to the Project due to the reduction in residential units. Like the Project, the consumption of electricity, natural gas, and petroleum-based fuels under Alternative 4 would not be wasteful, inefficient, or unnecessary. Therefore, operational impacts to energy resources under Alternative 4 would be less than significant and less than those of the Project.

e) Geology and Soils

Alternative 4 would remove the existing light industrial/warehouse, office, and parking lot uses and construct new buildings on the Project Site. Development of Alternative 4 at the Project Site would require the same amount of Project Site clearing, demolition, and grading as the development of the Project; however, a lesser amount of construction would be necessary due to the reduction in the number of apartment and condominium units. Similarly, a lesser amount of excavation is likely to be necessary due to the reduction in subterranean parking. Similar to the Project, Alternative 4 would not exacerbate any existing environmental conditions related to seismic ground shaking, ground failure, landslides, unstable soils, and expansive soils and would have a less-than-significant impact on geology and soils.

As with the Project, under Alternative 4, the existing Project Site development would be removed, and the Project Site would be redeveloped. Although no previously encountered fossil vertebrate localities have been located within the Project Site, the possibility exists that paleontological artifacts that were not recovered during prior construction or other human activity on the Project Site may be present. The disturbed area footprint would be approximately the same under both the Project and Alternative 4. However, the depth of the required excavation would likely be shallower under Alternative 4 due to the anticipated reduction in subterranean parking. Therefore, there would be a reduced likelihood of encountering buried paleontological materials during excavation work at the Project Site. Similar to the Project, the excavation required to develop Alternative 4 has the potential to disturb unknown paleontological resources present beneath the surface of the Project Site. As with the Project, compliance with existing regulations and implementation of Mitigation Measures GEO-MM-1 through GEO-MM-4 would reduce

these potential impacts to a less-than-significant level and impacts would be less than those of the Project.

f) Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions from a development project are determined in large part by the number of daily trips generated and energy consumption from proposed land uses. Under Alternative 4, the development of fewer condominium units would reduce the number of net new daily trips compared to the Project. Alternative 4 would generate approximately 28 percent fewer net new daily trips than the Project. Additionally, with regard to energy uses, the reduced building floor area of Alternative 4 would reduce the amount of electricity, water, and natural gas used in comparison to the Project. Thus, associated GHG emissions would be reduced as compared to the Project.

As with the Project, Alternative 4 would be generally consistent with the AB 32 Scoping Plan's statewide objectives to reduce GHG emissions (see Table IV.G-10 in **Section IV.G, Greenhouse Gas Emissions**, of the Draft EIR), as well as with applicable state, regional, and local regulatory plans and policies to reduce GHG emissions.

Alternative 4 would incorporate the same design features as the Project to reduce GHG emissions, including Project Design Features GHG-PDF-1 through GHG-PDF-7. In addition, Alternative 4 would be designed to comply with the goals of CARB's *Climate Change Scoping Plan* and SCAG's 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and would implement sustainability features that are comparable to the ones proposed for the Project. Alternative 4 would still intensify a complementary mix of uses in an infill location near transit and would therefore be generally consistent with the GHG reduction goals and objectives set forth in state, regional, and local regulatory plans. Impacts related to GHG emissions under Alternative 4 would be less than significant and less than those of the Project.

g) Hazards and Hazardous Materials

1) Construction

Alternative 4 would remove the existing light industrial/warehouse, office, and parking lot uses and would construct new buildings on the Project Site. Similar to the Project, construction of Alternative 4 would involve the temporary transport, use, or disposal of potentially hazardous materials, including paints, adhesives, surface coatings, cleaning agents, fuels, and oils. All of these materials would be used short-term during construction activities. Additionally, all potentially hazardous materials would be used and stored in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations, which would ensure that impacts are less than significant.

Furthermore, any emissions from the use of such materials would be minimal and localized to the Project Site.

As with the Project, redevelopment of portions of the Project Site under Alternative 4 would not 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. Since construction of Alternative 4 would comply with applicable regulations and would not expose persons to substantial risk resulting from the release of hazardous materials, exposure to health hazards in excess of regulatory standards, or exacerbate existing environmental conditions, potential impacts associated with the potential release of hazardous substances during construction of this alternative would be less than significant. Overall, based on the reduced size and duration of construction for Alternative 4, impacts would be less than significant and less than those of the Project.

2) Operation

Operation of Alternative 4 would result in the use, storage, disposal, and transport of similar types of hazardous materials as the Project though to a reduced extent due to the fewer number of residential units. All potentially hazardous material, transported, stored, offered for sale, or used on site for daily upkeep would be contained, stored, used and disposed in accordance with the manufacturers' instructions and handled in compliance with applicable standards and regulations.

Similar to the Project, under Alternative 4, the Project Applicant would be required to establish, implement, and maintain on file an emergency response plan, which would be reviewed by the Alhambra Fire Department (AFD). Thus, operation of Alternative 4 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, operational impacts would be less than significant. Therefore, operation of Alternative 4 would result in impacts that are similar to the Project's less-than-significant impacts.

h) Hydrology and Water Quality

Alternative 4 would remove the existing light industrial/warehouse, office, and parking lot uses and would construct new buildings on the Project Site. Similar to the Project, Alternative 4 would not substantially alter existing drainage patterns on the Project Site that could result in flooding, erosion, or sedimentation on- or off-site. As with the Project, Alternative 4 would comply with applicable requirements of the City's Low-Impact Development code and the requirements associated with the Los Angeles County stormwater discharge permit for municipal storm sewer systems. Alternative 4 construction would also proceed in compliance with the requirements of the State General Construction Activity Stormwater Permit, including the preparation and implementation of

a Stormwater Pollution Prevention Plan and best management practices at the Project Site. As with the Project, the development of Alternative 4 would reduce the existing amount of impervious surface area at the Project Site. Therefore, similar to the Project, Alternative 4 would not create new sources of polluted runoff and would not increase the existing quantity or reduce the quality of stormwater runoff leaving the Project Site. Impacts would be similar to the Project's less-than-significant impacts.

i) Land Use and Planning

Under Alternative 4, the development of a planned urban residential community would be consistent with the existing zoning designation, land use designation, and applicable height limits within the Project Site. Alternative 4 would require discretionary and ministerial approvals similar to the Project. With implementation of the required discretionary approvals and the project design features, Alternative 4 would be generally consistent with the applicable policies and objectives included in the City's General Plan and Zoning Code. Therefore, as with the Project, Alternative 4 would result in a less-than-significant impact with respect to land use. Impacts would be similar to those of the Project.

j) Noise

1) Construction

Alternative 4 would result in an overall reduction in the construction duration when compared to the Project due to its reduced size. However, while the overall duration of the construction period would be reduced compared to the Project, construction activities during the maximum activity days would be similar in scale to the Project. Similar to the Project, Alternative 4 would require demolition of the existing structures and other improvements on-site. Construction activities for the Project and Alternative 4 would be similar in that heavy equipment, hand held equipment, and motor vehicles, all of which generate temporary noise and, in some cases, vibration impacts, would be used during construction.

As with the Project, Alternative 4's construction noise impacts would be temporary, and would proceed in compliance with Project Design Features NOI-PDF-1 through NOI-PDF-6. As with the Project, Alternative 4 would implement Mitigation Measures NOI-MM-1 through NOI-MM-9. As with the Project, construction noise impacts would be less than significant. As with the Project, groundborne vibration impacts of Alternative 4 would be less than significant for the historic structures within the CF Braun & Company Historic District abutting the construction zone to the north.

Thus, implementation of Alternative 4 would result in construction noise and vibration impacts that are similar to the Project's less-than-significant impacts. However, these impacts would occur for a shorter duration under Alternative 4 as compared to the Project due to the shorter construction duration. Therefore, the impacts of Alternative 4 would be less than those of the Project.

2) Operation

As with the Project, operation of Alternative 4 would result in both direct on-site noise impacts associated with residential activities and indirect off-site noise impacts from vehicles traveling on local roads to access the Project Site. Direct on-site noise sources include HVAC systems, intermittent landscape maintenance, residential activities (i.e., voices, music), and auto-related activities. On-site noise sources would not be expected to individually or collectively elevate ambient noise levels substantially at nearby sensitive receptors. The potential noise impacts from these on-site operational sources would be considered less than those of the Project due to the smaller development size. Off-site noise from traffic generated by Alternative 4 would be reduced as compared to the Project due to the 28 percent reduction in the number of net new daily trips.

During operation of Alternative 4, there would be no significant stationary sources of ground-borne vibration, such as heavy equipment or industrial operations. Operational ground-borne vibration in the Project Site vicinity would be generated by vehicular travel on the local roadways. However, passenger vehicles rarely create enough ground-borne vibration to be perceptible to humans unless road surfaces are poorly maintained and have potholes or bumps, which is not the case in the vicinity of the Project Site. Due to the reduction in the number of daily vehicle trips associated with Alternative 4, operational vibration impacts would be less than those of the Project. The potential on-site and off-site operational noise and vibration impacts generated by Alternative 4 would be less than significant and less than those of the Project.

k) Population and Housing

1) Population

The construction of Alternative 4 would result in increased employment opportunities in the construction field in the vicinity of the Project Site. However, as is the case with the Project, construction workers would not likely relocate their place of residence as a consequence of working on Alternative 4. The construction-related employment for Alternative 4 would not represent a permanent or substantial new employment generator that would cause growth, and there would be no significant housing or population impacts from construction of Alternative 4. Therefore, similar to the Project, no impact related to construction-related indirect population growth would occur.

The proposed residential land uses within Alternative 4 would generate approximately 1,880 permanent residents at the Project Site, a reduction of 645 residents as compared to the Project. As with the Project, the population growth represented by Alternative 4 would be within applicable City population growth forecasts. Thus, Alternative 4 would produce an impact that is less than significant and less than that of the Project with respect to direct population growth at the Project Site.

As with the Project, Alternative 4 would not induce substantial growth that exceeds growth forecasted for the area or introduce unplanned infrastructure or accelerate development in an undeveloped area that would result in an adverse physical change in the environment. The Project Site is currently developed and is located within an urbanized area in the City. Thus, the construction of a potential growth-inducing roadway or other infrastructure extensions would not be required. Similar to the Project, as development of Alternative 4 would not induce substantial indirect population growth and would be supported by the existing infrastructure, such as roadways, impacts would be less than significant.

2) Housing

Alternative 4 would develop 790 residential housing units at the Project Site, a reduction of 271 units as compared to the Project. As with the Project, Alternative 4 would not displace existing housing units or people, necessitating the construction of replacement housing elsewhere. The housing growth represented by Alternative 4 would be within applicable City housing growth forecasts. Therefore, as with the Project, the impact of Alternative 4 on housing would be less than significant and less than that of the Project.

l) Public Services

1) Fire Protection

(a) Construction

As discussed in **Section IV.M.1, Public Services - Fire Protection**, of the Draft EIR, and similar to the Project, construction activities associated with Alternative 4 may temporarily increase demand for fire protection and emergency medical services and may cause the occasional exposure of combustible materials, such as wood, plastics, sawdust, coverings and coatings, to heat sources, including machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions in combustible materials and coatings. However, in compliance with Occupational Safety and Health Administration (OSHA) requirements, construction managers and personnel would be trained in fire prevention and emergency response. Fire suppression equipment specific to construction that meets OSHA standards would be maintained on-site. Additionally,

construction would comply with applicable OSHA requirements related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. Therefore, in light of OSHA regulations that would, in part, require training of personnel in fire prevention and emergency response, maintenance of fire suppression equipment, and implementation of proper procedures for storage and handling of flammable materials on the Project Site, construction impacts on fire protection and emergency medical services would be less than significant and similar to those of the Project.

Construction activities also have the potential to affect fire protection services by adding construction traffic to the street network and by necessitating partial lane closures during street improvements and utility installations. These impacts would be similar to those of the Project and would be considered less than significant because construction activities are temporary in nature and do not create continuing risks. General "good housekeeping" procedures would be employed by the construction contractors and the work crews (e.g., maintaining mechanical equipment, proper storage of flammable materials, cleanup of spills of flammable liquid) would minimize these hazards. In addition, partial lane closures would not significantly affect emergency vehicles, the drivers of which normally have a variety of options for dealing with traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic, pursuant to California Vehicle Code (CVC) Section 21806. Additionally, if there are partial closures to streets surrounding the Project Site, flagmen would be used to facilitate the traffic flow until such temporary street closures are complete under the Work Zone Traffic Control Plan (refer to TR-PDF-2).

Overall, construction is not considered to be a high-risk activity. Construction of Alternative 4 would not be expected to tax fire-fighting and emergency services to the extent that there would be a need for new or expanded fire facilities in order to maintain acceptable service ratios or other performance objectives of the AFD, due to the limited duration of construction activities and compliance with applicable codes. Therefore, impacts associated with construction of Alternative 4 on fire protection services would be less than significant and similar to those of the Project.

(b) Operation

As discussed in **Section IV.M.1, Public Services - Fire Protection**, of the Draft EIR, with respect to fire flows, Alternative 4 would require the installation of system improvements required to supply 6,000 gpm, similar to the Project. As with the Project, the improved Project Fire Water line would be a looped system with three points of connection. The fire system would connect to the existing water lines in Mission Road, Date Avenue, and Orange Street. In order to achieve the anticipated fire flow requirements for the Project, all proposed Fire Water piping (other than fire hydrant laterals) will need to be sized at 12 inches. Fire hydrants (and associated underground fire water supply piping) would be

required at a spacing of approximately 300 feet along the private internal access roads. The magnitude of the system required would lend itself to potentially dedicating the underground supply line as a public main. Should that become the case, this dedicated public main should likely serve all water service needs for Alternative 4. Meters and backflows would likely be located along the internal private roadway system as they would traditionally along the public street frontage. Impacts would be less than significant and the same as the Project.

Based on the reduction of residential units on the Project Site, the number of fire protection service calls is expected to be reduced with implementation of Alternative 4 as compared to the Project due to the fewer number of people present on-site at any given time. Similar to the Project, Alternative 4 would comply with Alhambra Building and Fire Code requirements, which include, but are not limited to, the installation of an automatic fire sprinkler system; the creation and filing of an emergency response plan; and AFD approval of emergency plans, procedures, and evacuation routes and signs. Compliance with applicable regulatory requirements that are enforced through the City's building permitting process would ensure that adequate fire prevention features would be provided to reduce the demand on AFD facilities and equipment, thereby ensuring that Alternative 4 would not create any undue fire hazard, similar to the Project.

As with the Project, emergency vehicles would access the Project Site directly from the surrounding roadways. Emergency access to the Project Site and surrounding uses would be maintained at all times. Alternative 4-related traffic would have the potential to increase emergency vehicle response times to the Project Site and surrounding properties due to travel time delays caused by traffic. However, the area surrounding the Project Site includes an established street system which provides regional, sub-regional, and local access and circulation within the Project's traffic study area. In addition, the drivers of emergency vehicles normally have a variety of options for avoiding traffic, such as using sirens to clear a path of travel or driving in the lanes of opposing traffic, pursuant to CVC Section 21806. Therefore, the increase in traffic generated by Alternative 4 would not significantly impact emergency vehicle response times to the Project Site and surrounding area and impacts would be similar to those of the Project.

Based on the above, operation of Alternative 4 would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility in order to maintain service. Therefore, impacts to fire protection services during operation of Alternative 4 would be less than significant and less than those of the Project.

2) Police Protection

(a) Construction

Similar to the Project, construction of Alternative 4 could result in an increase in demand for police protection services. With regard to emergency vehicle access, as with the Project, although minor traffic delays due to temporary lane closures needed to facilitate specific construction activities could occur, particularly during the construction of utilities and street improvements, impacts to police protection services would be considered less than significant as (1) emergency access to the Project Site would be maintained through marked emergency access points approved by the Alhambra Police Department (APD); (2) construction impacts are temporary in nature; and (3) the ability of emergency vehicles to have a variety of options for avoiding traffic and partial street closures. Accordingly, similar to the Project, construction-related impacts of Alternative 4 would not be expected to affect the APD's ability to respond to emergencies to the extent that there would be a need for any additional new or expanded police facilities, in order to maintain acceptable service ratios, response times, or other performance objectives of the APD. Therefore, similar to the Project, impacts on police protection services during construction of Alternative 4 would be less than significant.

(b) Operation

As compared to the Project, Alternative 4 would introduce approximately 645 fewer residents to the Project Site. The Project would result in an on-site population of approximately 1,880 people, requiring approximately three additional officers to maintain the same officer-to-population ratio. The City has 85 sworn police officers. The addition of three officers to maintain the existing ratio represents an approximately 3.5 percent increase over existing staffing levels. This change would not require the construction of additional police facilities.

Similar to the Project, Alternative 4 would include security features within the parking facilities and exterior building areas, such as appropriate lighting and gated access. In addition, the lighting and landscaping design would ensure high visibility and the Project would provide for on-site security measures and controlled access systems for residents and tenants to minimize the demand for police protection services. The Project would incorporate crime prevention features into the design of the buildings and public spaces, such as lighting of entryways and public areas. Furthermore, although traffic generated by Alternative 4 would have the potential to affect emergency vehicle response to the Project Site and surrounding properties due to additional traffic, emergency vehicles normally have a variety of options for avoiding traffic, such as using sirens and flashing lights to clear a path of travel. As such, operation of Alternative 4, including traffic generated by Alternative 4, would not substantially affect emergency response as a result

of increased traffic congestion. Based on the analysis above, Alternative 4 would not necessitate the provision of new or physically altered facilities in order to maintain the APD's capability to serve the Project Site. Accordingly, Alternative 4 would not result in adverse physical impacts associated with the construction of new or altered facilities. Therefore, Alternative 4's impacts related to police protection services would be less than the less-than-significant impacts of the Project.

3) Schools

(a) Construction

Similar to the Project, Alternative 4 would generate part-time and full-time jobs associated with its construction between the start of construction and full buildout. However, due to the employment patterns of construction workers in southern California and the operation of the market for construction labor, construction workers are not likely to relocate their households as a consequence of construction job opportunities. Therefore, construction employment generated by Alternative 4 would not result in a notable increase in the resident population or a corresponding demand for schools from construction workers in the vicinity of the Project Site. Similar to the Project, impacts on school facilities during construction of Alternative 4 would be less than significant.

(b) Operation

The projected increase in the number of residents (790 housing units, 1,880 residents) from Alternative 4 and the resulting potential need to enroll any school-aged children into AUSD schools would increase the demand for school services. As shown in Table VI-12, based on AUSD demographic analysis, the Project would result in approximately 166 additional AUSD students (119 elementary students and 47 high school students). These calculations do not take into account the possibility that some of the future residents of the Project already reside within the service boundaries of the AUSD and have school-aged children currently enrolled in the AUSD schools near the Project Site. However, to provide for a conservative analysis, it is assumed that all of the students generated as a result of the Project are not currently enrolled in the AUSD schools near the Project Site and would enroll in existing AUSD (as opposed to private or newly built AUSD) schools.

Based on correspondence received from AUSD, the elementary school serving the Project Site is Emery Park Elementary, which has a current enrollment of 440 students and a capacity of 843 students. Alhambra High School would serve the high school residents at the Project Site and has a current enrollment of 2,450 students with a capacity of 3,400 students. Thus, both schools are currently operating under capacity and would continue to do so following the addition of Project-generated students.

Table VI-12
Estimated Alternative 4 Student Generation

Land Use	Project Amount	Student Generation		
		Elementary	High	Total
Multi-Family Dwelling Units	790	119	47	**166**
	Total	**119**	**47**	**166**

Source: Student calculations based on AUSD student generation factors shown in Table IV.M.3-1.

Furthermore, as with the Project, pursuant to the California Government Code, the Project Applicant's payment of the school fees established by the AUSD in accordance with existing rules and regulations regarding the calculation and payment of such fees would, by law, provide full and complete mitigation for this alternative's direct and indirect impacts to schools. Therefore, due to a reduction in the number of students generated under Alternative 4, impacts related to schools under Alternative 4 would be less than significant and less than those of the Project.

4) Parks and Recreation

(a) Construction

Construction of Alternative 4 would result in a temporary increase in the number of construction workers at the Project Site. As described above, due to the employment patterns of construction workers in southern California, and the operation of the market for construction labor, the likelihood that construction workers would relocate their households as a consequence of working on Alternative 4 is negligible. Therefore, the construction workers associated with Alternative 4 would not result in a notable increase in the residential population of the Project vicinity, or a corresponding permanent demand for parks and recreational facilities in the vicinity of the Project Site. As such, similar to the Project, construction of Alternative 4 would not generate a demand for park or recreational facilities that cannot be adequately accommodated by existing or planned facilities and services, increase the use of existing parks such that substantial physical deterioration of the facility would occur, or interfere with existing park usage. Therefore, similar to the Project, impacts on parks and recreational facilities during construction of Alternative 4 would be less than significant.

(b) Operation

Alternative 4 would provide a lesser amount of open space and recreational amenities as compared to the Project due to the reduction in the number of residential units. However, Alternative 4 would still provide, at a minimum, the required amount of open space stipulated in the AMC. Alternative 4 would reduce the number of residents at the Project

by approximately 645 residents compared to the number that would be generated by the Project. Thus, Alternative 4 would reduce the Project Site's demand for parks and recreational facilities in the Project area in comparison to the Project.

Similar to the Project, Alternative 4 would not be expected to cause or accelerate substantial physical deterioration of off-site public parks or recreational facilities given the provision of on-site public and private open space described above. As with the Project, employees generated by Alternative 4 would not utilize parks and recreational facilities beyond a 0.5-mile radius from the Project Site as lunch breaks typically are not long enough for workers to take advantage of such facilities and return to work within the allotted time (e.g., 30 to 60 minutes). Instead, as with the Project, it is anticipated that employees under Alternative 4 would utilize on-site open space as it would be more easily accessible and convenient, resulting in a negligible demand for surrounding parks and recreational facilities. Thus, Alternative 4 would not substantially increase the demand for off-site public parks and recreational facilities. Therefore, impacts on parks and recreational facilities during operation of Alternative 4 would be less than significant and less than those of the Project due to the fewer number of residents.

5) Libraries

(a) Construction

Similar to the Project, construction of Alternative 4 would result in a temporary increase in the number of construction workers on the Project Site. However, due to the employment patterns of construction workers in southern California and the operation of the market for construction labor, construction workers are not likely to relocate their households as a consequence of construction of Alternative 4. Therefore, construction employment generated by Alternative 4 would not result in a notable increase in the resident population or a corresponding demand for library services in the vicinity of the Project Site. As such, similar to the Project, impacts to library facilities during construction of Alternative 4 would be less than significant.

(b) Operation

Alternative 4 would add a fewer number of residents to the Project Site than would the Project. As a result, Alternative 4 would reduce the demand for library services at the Project Site as compared to the Project. Similar to the Project, it is anticipated that new jobs generated by Alternative 4 would typically be filled by persons who already reside in the vicinity of the workplace and already generate a demand for the libraries in the vicinity of the Project Site. Furthermore, as with the Project, residents would have internet access, which results in a reduced demand at physical library locations. Therefore, any indirect or direct new demand for library services generated by residents under Alternative 4 would already be taken into account in library services provisions.

Furthermore, as with the Project, operation of Alternative 4 would not exacerbate existing capacity issues at the Alhambra Public Library. As such, Alternative 4 would not result in the need for new or altered library facilities. Therefore, impacts related to libraries under Alternative 4 would be less than significant and less than those of the Project.

m) Transportation

1) Construction

As with the Project, closures to one travel lane along the Date Avenue Project Site frontage could potentially occur during certain phases of Alternative 4 construction. There are no emergency services located within the immediate vicinity of the affected streets. Since Date Avenue is a local street with low volumes and other alternative routes are available, the temporary construction impacts on the roadway network would be considered less than significant. Per Project Design Feature TR-PDF-2, worksite traffic control plans would be prepared for any temporary vehicle lane or sidewalk closures in accordance with applicable City guidelines.

Similar to the Project, hauling activity is expected to occur over the first three phases of construction: Phase 1 – Demolition & Site Preparation; Phase 2 – Grading; and Phase 3 – Building Framing and Construction. Peak hauling activity is anticipated to occur during Phase 1 when the demolition of existing on-site structures would occur. Hauling hours are anticipated to be 7:00 AM to 3:00 PM, Monday through Friday, and 8:00 AM to 6:00 PM on Saturdays. Trucks would be staged on-site.

Similar to the Project, in addition to haul trucks, Alternative 4 is also expected to generate equipment and delivery trucks during each phase of construction. Additionally, construction equipment would be delivered to the Project Site. No construction activities with heavy equipment would occur beyond the normal weekday construction hours of 7:00 AM to 8:00 PM and Saturday from 9:00 AM to 4:00 PM. Per Project Design Feature TR-PDF-2, materials being delivered to the site during the construction period would be scheduled at times that are not in conflict with peak public use of the roadways so that congestion is limited.

Similar to the Project, the potential impacts of construction traffic on the traffic operations within the study area would be temporary and expected to be periodically ongoing until 2028. The impacts of construction-related trips (trucks and construction employees) on the street system should be considered negligible since these trips can be scheduled and their frequency increased during off-peak (mid-day) hours. A flagman would be available at all times when construction activities are occurring to ensure vehicle and pedestrian safety, and would be used whenever trucks are leaving the Project Site to prevent the impedance of the flow of traffic. The safety of pedestrians would be ensured by installing

a construction fence around the zone of construction activity on the Project Site perimeter. Through the implementation of the Work Zone Traffic Control Plan, Alternative 4 construction traffic impacts would be less than significant and similar to those of the Project.

Alternative 4 construction would not block vehicle or pedestrian access to other parcels fronting the construction area, there would be no temporary loss of access, and, as such, impacts would be less than significant and similar to the Project. Alternative 4 construction would not be anticipated to affect bus stops or bus lines in the area. Construction of Alternative 4 could require the temporary removal of on-street parking spaces along the Date Avenue and Orange Street Project frontages for periods during the overall construction work to accommodate temporary truck staging. As there is other on- and off-street parking available to serve nearby businesses, these temporary impacts would be less than significant and similar to the Project.

The number of construction workers would vary throughout the construction period with the building construction phase necessitating the highest number of workers on-site. Due to the size of the Project Site, it is expected that parking for construction workers will be available on-site and that off-site parking would not be necessary. Impacts would be less than significant and the same as those of the Project.

2) Operation

(a) Intersection Levels of Service

Alternative 4 would reduce traffic generation compared to the Project. Table VI-13 provides the trip generation for Alternative 4 in comparison to the Project. As detailed in Table VI-13, Alternative 4 would generate a total of 4,641 net new daily trips, with 339 net new AM peak hour trips (45 inbound, 293 outbound) and 383 net new PM peak hour trips (251 inbound, 132 outbound).

Table VI-13
Alternative 4 Trip Generation

Alternative	ITE Land Use (DU)		Daily Trips	AM Trips			PM Trips		
	220 - Apartment	230 – Condo		In	Out	Total	In	Out	Total
Proposed Project	545	516	6,415	62	402	464	344	186	531
Alternative 4	500	290	4,641	45	293	339	251	132	383

DU = dwelling units
Source: Kimley-Horn, 2019.

Alternative 4's daily trip generation would be 1,774 trips less than that of the Project with 125 fewer trips during the AM peak hour and 148 fewer trips during the PM peak hour than the Project. As shown in Table VI-14, under the Cumulative Future (2028) With Alternative 4 scenario, Alternative 4's traffic would produce significant impacts at the following signalized intersections:

- S Fremont Avenue/W Mission Road (AM/PM)
- S Fremont Avenue/Orange Street (PM)
- S Fremont Avenue/W Commonwealth Avenue (PM)
- S Fremont Avenue/W Valley Boulevard (AM/PM)
- S Marengo Avenue/W Mission Road (PM)
- W Valley Boulevard/I-710 S/B On-Ramp (AM)

Alternative 4 would eliminate the Project's significant impacts at the W Valley Boulevard/I-710 S/B On-Ramp intersection in the PM peak period, at the S Fremont Avenue/W Hellman Avenue intersection in the AM and PM peak periods, and at the Westmont Drive/W Valley Boulevard intersection in the AM peak period, a reduction of four significant impacts at three intersections.

However, Alternative 4 would not eliminate any of the Project's other significant and unavoidable intersection LOS impacts, and would result in significant and unavoidable impacts during at least one peak hour period at 6 of the same 7 intersections under Buildout Scenario 1 (Alternative 4 would avoid the Project's significant and unavoidable impacts at the S Fremont Avenue/W Hellman Avenue intersection) and at the same 5 intersections under Buildout Scenario 2 as the Project would with the implementation of Mitigation Measure TR-MM-1.[3] Therefore, Alternative 4 would result in lesser, but still significant and unavoidable signalized intersection LOS impacts, than the Project. Unsignalized intersection impacts would be the same as the Project and would be reduced to a less-than-significant level via implementation of Mitigation Measures TR-MM-2 and TR-MM-3.

[3] *Project Mitigation Measure TR-MM-1 would no longer be necessary under Alternative 4 as the intersection of Westmont Drive/W Valley Boulevard would no longer be significantly impacted.*

Table VI-14
Alternative 4 Signalized Intersection LOS Impacts

Signalized Intersection		Cumulative (2028) Without Project V/C Ratio		V/C Significant Impact Threshold		Cumulative (2028) With Project V/C Ratio			
						Project		Alternative 4	
		AM	PM	AM	PM	AM	PM	AM	PM
1	S Fremont Ave/W Mission Road	1.297	1.211	1.307	1.221	**1.377**	**1.285**	**1.357**	**1.266**
3	S Fremont Ave/Orange Street	0.633	0.875	N/A	0.895	0.670	**0.907**	0.658	**0.895**[1]
14	S Fremont Ave/W Commonwealth Ave.	0.793	0.964	0.833	0.974	0.794	**0.980**	0.795	**0.976**
15	S Fremont Ave/W Valley Blvd.	1.033	0.980	1.043	0.990	**1.059**	**1.029**	**1.052**	**1.016**
19	S Marengo Ave./W Mission Road	1.036	1.002	1.046	1.012	1.044	**1.024**	1.042	**1.017**
22	W Valley Blvd./I-710 S/B On-Ramp	1.173	0.914	1.183	0.924	**1.197**	**0.925**	**1.191**	0.922
23	S Fremont Avenue/W Hellman Ave.	0.873	0.853	0.893	0.873	**0.900**	**0.878**	0.893[2]	0.871
27	Westmont Drive/W Valley Blvd.	0.893	0.701	0.913	0.741	**0.914**	0.720	0.908	0.715

*Significant impacts are shown in **bold**.*
[1]Actual V/C ratio would be 0.895.3, which is above the significant impact threshold for this intersection/peak period.
[2] Actual V/C ratio would be 0.892.9, which is below the significant impact threshold for this intersection/peak period.
Source: Kimley-Horn, 2019.

(b) CMP Impacts

As with the Project, it has been concluded that it is infeasible for Alternative 4 to mitigate its significant impact at the CMP arterial monitoring intersection of S. Fremont Avenue/W. Valley Boulevard. This impact would remain significant. Alternative 4 would have a less-than-significant impact at all CMP freeway monitoring locations and, thus, no mitigation would be required. CMP impacts would be similar to those of the Project.

(c) Access and Circulation

Similar to the Project, Alternative 4 would provide 8 driveways for access to the development. All driveways proposed under Alternative 4 would be the same as those proposed for the Project and designed in accordance with City standards. Therefore, Alternative 4 would not result in inadequate access.

In addition, as with the Project, Alternative 4 does not include any sharp curves, dangerous intersections, or incompatible uses. With implementation of Project Design Feature TR-PDF-3, all Alternative 4 driveways would operate at acceptable levels, similar to the Project. Therefore, similar to the Project, Alternative 4's impacts related to hazardous roadway features would be less than significant.

(d) Bicycle, Pedestrian, and Vehicular Safety

Bicycle, pedestrian, and vehicular access to the Project Site under Alternative 4 would be the same as the Project and designed in accordance with City and other applicable standards to provide adequate sight distance, sidewalks, and/or pedestrian movement controls that would meet the City's requirements to protect pedestrian safety. As with the Project, Alternative 4 would not disrupt bicycle flow along local streets. Similar to the Project, visitors, residents, and employees arriving by bicycle would have the same access options as pedestrian visitors, and to facilitate bicycle use, bicycle parking spaces and amenities would be provided within the Project Site under Alternative 4. Therefore, as with the Project, Alternative 4 would not substantially increase hazards to bicyclists, pedestrians, or vehicles. Similar to the Project, impacts related to bicycle, pedestrian and vehicular safety under Alternative 4 would be less than significant.

n) Tribal Cultural Resources

As discussed in **Section IV.O, Tribal Cultural Resources**, of the Draft EIR, no previously recorded tribal cultural resources have been identified for the Project Site. As with the Project, in the event that tribal cultural resources are inadvertently encountered, Alternative 4 would implement Mitigation Measures CUL-MM-4 through CUL-MM-7. Impacts would be reduced to a less-than-significant level that is less than that of the Project due to the lesser amount of excavation needed to develop the smaller number of subterranean parking spaces.

o) Utilities and Service Systems

1) Wastewater

(a) Construction

Similar to the Project, during construction of Alternative 4, a negligible amount of wastewater would be generated by construction workers. Temporary on-site sanitation facilities (e.g., portable toilets and hand wash areas) would be provided by a private company, and the wastewater would be properly disposed of off-site.

No new connections to the public sewer system would be required during the construction period. As such, wastewater generated during Project construction activities would not enter the local conveyance system and, thus, would not affect sewer line capacities in the area. In addition, with the implementation of the Work Zone Traffic Control Plan (discussed in **Section IV.N, Transportation**, of the Draft EIR), Alternative 4 would not significantly impact traffic or emergency access in the surrounding area during the installation of new utilities infrastructure. Similar to the Project, construction-related impacts to the existing wastewater infrastructure and facilities would be less than significant.

(b) Operation

Due to the reduction in the number of residential units, Alternative 4 would generate approximately 26 percent less wastewater than the Project and would also result in less-than-significant impacts to wastewater treatment capacity. Similar to the Project, Alternative 4 would be subject to standard regulatory measures. Given the excess capacity at the three wastewater treatment plants that serve Alhambra, impacts would be less than significant. Overall, impacts associated with Alternative 4 would be less than those of the Project.

2) Water

(a) Construction

Similar to the Project, water consumption would be required to accommodate construction activities, such as soil watering (i.e. for fugitive dust control), clean up, masonry, painting, and other related activities. As with the Project, construction activities requiring water would occur intermittently and would be temporary in nature. Further, the activities requiring water would not create substantial water demand. Typically, fugitive dust watering is provided by private purveyors and not provided by on-site water sources. Reclaimed water can be used for dust control. Overall, similar to the Project, construction activities under Alternative 4 would require minimal water consumption and would not be expected to have an adverse impact on available water supplies or existing water distribution systems**.**

Prior to the issuance of grading/building permits, the City would determine if the existing water supply infrastructure maintains sufficient capacity to accommodate the projected water demands. If a deficiency or service problem is discovered during the permitting

process, the Project Applicant shall fund the required upgrades to adequately serve the uses proposed under Alternative 4. Water main and related infrastructure upgrades would not be expected to create a significant impact to the physical environment because: (1) any disruption of service would be of a short-term nature; (2) replacement of the water mains would be within public and private rights-of-way; and (3) the existing infrastructure would be replaced with new infrastructure in areas that have already been significantly disturbed.

While the potential replacement or expansion of the existing infrastructure could result in temporary partial public street closures, a Work Zone Traffic Control Plan would be implemented (see **Section IV.N, Transportation**, of the Draft EIR) to direct traffic flow during construction activities, including during the potential water upgrade activities near the Project Site. Similar to the Project, impacts under Alternative 4 would be less than significant.

(b) Operation

Alternative 4 would result in a net decrease in water demand of approximately 26 percent as compared to the Project. Thus, operation of Alternative 4 would consume less water than the Project and would also result in less-than-significant impacts with respect to long-term water supplies. Similar to the Project, Alternative 4 would be subject to standard regulatory measures to ensure that impacts to the water conveyance system would be less than significant. Overall, the impacts of Alternative 4 would be less than significant and less than those of the Project.

3) Solid Waste

(a) Construction

C&D waste generated by demolition of the existing uses would be the same for Alternative 4 and the Project. Construction waste generated during the construction of Alternative 4 would be reduced as compared to the Project due to the fewer number of units being constructed. Landfills that serve Alhambra have adequate capacity to accommodate Alternative 4's C&D waste, as with the Project. Thus, as the construction waste generated by Alternative 4 would be reduced from that generated by the Project and existing landfills and waste facilities have sufficient capacity to handle the projected amount of construction waste, the construction-related solid waste impacts of Alternative 4 would be less than significant and less than those of the Project.

(b) Operation

Alternative 4 would generate less solid waste (approximately 26 percent less) than the Project due to the reduced number of residential units. Thus, Alternative 4 would result in

less-than-significant impacts to solid waste landfill capacity via compliance with existing regulations. Overall, the impacts of Alternative 4 would be less significant and less than those of the Project.

3. Comparison of Impacts

As evaluated above, Alternative 4 would reduce the duration of the Project's significant and unavoidable construction-period air quality impact under Buildout Scenario 2; however the impact would remain significant and unavoidable. Alternative 4 would also, with respect to traffic and circulation impacts, eliminate four of the Project's significant intersection impacts but would still result in significant and unavoidable impacts at 6 of the same 7 intersections (under Buildout Scenario 1) and the same 5 intersections (under Buildout Scenario 2) as the Project following the implementation of mitigation. All other impacts would be similar or less under Alternative 4 when compared to the Project.

4. Relationship of the Alternative to Project Objectives

Overall, Alternative 4 represents a reduced scope of development containing the same residential uses as the Project. However, this alternative would not achieve the Project's basic objectives to the same extent as the Project. Alternative 4 would meet the following Project objectives to generally the same extent as the Project:

- Retain the existing office buildings within the Office Plan Area portion of the site.
- Improve the aesthetic quality of the site by removing older structures and parking lots and developing new, more attractive residential buildings across a lushly landscaped campus.
- Develop an economically feasible project featuring a high level of quality in architectural design and placemaking that can create an urban community that serves as a destination within the City.

However, Alternative 4 would either partially meet or only meet the following Project objectives to a lesser extent than the Project:

- Contribute housing stock toward the City's RHNA allocation.
- Contribute to the economic health of the City by developing residential uses that generate local tax revenues, provide new construction jobs, and generate residents who support local businesses.

Specifically, Alternative 4 would be 26 percent smaller and would not contribute housing stock toward the City's RHNA allocation to the same extent as the Project and would provide fewer opportunities for new home ownership. This would result in less density in proximity to transit and employment nodes for employees and residents. Alternative 4 would contribute to the City's economic health by developing residential uses that generate local tax revenues, provide new construction jobs, and generate residents who support local businesses but it would do so to a lesser degree than the Project as it would create fewer residential units. Overall, Alternative 4 would be partially consistent with two of the five Project objectives.

VI. Alternatives

E. Environmentally Superior Alternative

Section 15126.6(e)(2) of the CEQA Guidelines indicates that an analysis of alternatives to a project shall identify an Environmentally Superior Alternative among the alternatives evaluated in an EIR. The CEQA Guidelines also state that should the No Project Alternative be the Environmentally Superior Alternative, the EIR shall identify another Environmentally Superior Alternative among the remaining alternatives.

To demonstrate the differences between alternatives, Table VI-2 shows the conclusions of the impact categories for each alternative. A more detailed description of the potential impacts associated with each alternative is provided above. Pursuant to Section 15126.6(c) of the CEQA Guidelines, the analysis below addresses the ability of the alternatives to "avoid or substantially lessen one or more of the significant effects" of the Project.

Alternative 1, the No Project Alternative, would avoid all of the Project's significant environmental impacts, including those related to construction air quality under Buildout Scenario 2, and traffic (intersection level of service) during operation. Alternative 1 would eliminate all of the Project's remaining less-than-significant and less-than-significant with mitigation impacts as no changes to the existing conditions would occur. However, Alternative 1 would not meet any of the Project's basic objectives or the Project's underlying purpose of capitalizing on a smart growth opportunity by intensifying a currently underutilized site with a mix of residential uses near office space, commercial land uses, and public transit lines.

As stated above, the CEQA Guidelines require the identification of an Environmentally Superior Alternative other than the No Project Alternative. Accordingly, in accordance with the CEQA Guidelines, a comparative evaluation of the remaining alternatives indicates that Alternative 3 (Reduced Density 2), is the Environmentally Superior Alternative. Alternative 3 represents a reduced density development that is in accordance with the existing zoning designation, land use designation, and height limitations allowed within the Project Site. Alternative 3 would eliminate the Project's significant impacts at the S Fremont Avenue/Orange Street intersection in the PM peak period, at the W Valley Boulevard/I-710 S/B On-Ramp intersection in the PM peak period, at the S Fremont Avenue/W Hellman Avenue intersection in the AM and PM peak periods, and at the Westmont Drive/W Valley Boulevard intersection in the AM peak period, a reduction of five significant impacts at four intersections as compared to the Project. However, Alternative 3 would not eliminate any of the Project's other significant and unavoidable

intersection LOS impacts, and would result in significant and unavoidable impacts during at least one peak hour period at 5 intersections under Buildout Scenario 1 and 4 intersections under Buildout Scenario 2. This would represent a reduction of 2 significant and unavoidable intersection impacts under Buildout Scenario 1 and 1 significant and unavoidable intersection impact under Buildout Scenario 2 as compared with the Project. Additionally, Alternative 3 would not eliminate the significant and unavoidable air quality impact during Project construction under Buildout Scenario 2. Alternative 3, however, would not meet most of the Project Objectives to the same degree as the Project because it would not contribute housing stock toward the City's RHNA allocation to the same extent as the Project or contribute to the City's economic health by developing residential uses that generate local tax revenues, provide new construction jobs, and generate residents who support local businesses to the same extent as the Project.

VII. Acronyms

AB	Assembly Bill
ABC	Alhambra Building Code
ACC	Advanced Clean Car Standards
ACM	asbestos-containing materials
ACT	Alhambra Community Transit
ADA	Americans with Disabilities Act
ADT	average daily trip
AF	acre-feet
AFC	Alhambra Fire Code
AFD	Alhambra Fire Department
AFY	acre-feet per year
AHERA	Asbestos Hazard Emergency Response Act
AMC	Alhambra Municipal Code
AMI	Advanced Metering Infrastructure
AP	Alquist-Priolo
APD	Alhambra Police Department
APH	Alhambra Pumping Hole
APN	Assessor Parcel Number
APRD	Alhambra Parks and Recreation Department
AQMP	Air Quality Management Plan
ARMMP	Archaeological Resources Monitoring and Mitigation Plan
ARMR	Archaeological Resource Management Reports
AR4	Fourth Assessment Report
ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers

AST	Above-ground storage tanks
ASTM	American Society for Testing and Materials
AUSD	Alhambra Unified School District
BAAQMD	Bay Area Air Quality Management District
BACM	Best Available Control Measures
BACT	Best Available Control Technology
BAU	Business As Usual
BCDC	Basic Car District Coordinator
Bcf	billions of cubic feet
bgs	below ground surface
BLS	Basic Life Support
BMP	best management practices
BRT	bus rapid transit
BTEX	benzene, toluene, ethylbenzene, and xylenes
CAA	Clean Air Act (Federal)
CAAQS	California ambient air quality standards
CalEEMod	California Emissions Estimator Model
Cal/EPA	California Environmental Protection Agency
CalGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CA MUTCD	California Manual on Uniform Traffic Control Devices
Cal/OSHA	California Occupational Safety and Health Administration
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAC	Certified Asbestos Consultant

CAD	Computer Aided Dispatch
CAFÉ	Corporate Average Fuel Economy
CAO	Cleanup and Abatement Orders
CAPCOA	California Air Pollution Control Officers Association
CAT	Climate Action Team
CBC	California Building Code
CBIA	California Building Industry Association
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CDHS	California Department of Health Services
CDMG	California Division of Mines and Geology
CDPH	California Department of Public Health
CDO	Cease and Desist Orders
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESQG	conditional exempt small quantity generators
CEUS	Commercial End-Use Survey
cf	cubic feet
CFC	California Fire Code
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH	Stiff Clay
CH_4	methane
CHP	combined heating and power

CHRIS	California Historical Resources Information System
CHSC	California Health and Safety Code
CI	Central Industrial Unit
CII	commercial/industrial/institutional
City	City of Alhambra
CIWMB	California Integrated Waste Management Board, or CalRecycle
CIWMP	California Integrated Waste Management Plan
CL	Sandy Clay
CMA	Critical Movement Analysis
CMP	Congestion Management Plan
C&D	construction and demolition
CAP	Climate Action Plan
CGS	California Geological Survey
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CO_2/MWh	CO2 per MW-hour
COG	council of governments
CPD	Commercial Planned Development zone
CPSC	Consumer Product Safety Commission
CPUC	California Public Utilities Commission
CRA	Colorado River Aqueduct
CRHR	California Register of Historic Resources

CSSA	Collection System Settlement Agreement
CSST	California Certified Site Surveillance Technician
CTCs	county transportation commissions
CTP	Context/Theme/Property
CVC	California Vehicle Code
CWA	Clean Water Act
CWEA	Cooperative Water Exchange Agreement
Cy	Cubic yard
DA	Development Agreement
dB	decibel
dBA	A-weighted decibel
DOGGR	Division of Oil, Gas, and Geothermal Resources
DOSH	California Department of Safety and Health
DPM	Diesel Exhaust Particulate Matter
DRS	Disposal Reporting System
DRT	demand responsive transit
DSM	demand side management
DTSC	Department of Toxic Substances Control
du	dwelling unit
DWR	Department of Water Resources
EDR	Environmental Data Resources, Inc
EE	Energy efficiency
EFZ	Earthquake Fault Zone
EG	Electric generation
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act

EMS	Emergency Medical Service
EOB	Emergency Operations Board
EOO	Emergency Operations Organization
EOR	Enhanced Oil Recovery
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
ESL	Environmental Setting Levels
ESOC	Emergency Security Operations Center
ETAF	Evapotranspiration Adjustment Factor
ETWU	Estimated Total Water Use
EV	Electric Vehicles
FAR	floor-area-ratio
FED	Functional Equivalent Document
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FHWA	Federal Highway Administration
FID	Facility Inventory
FIND	Facility Information Detail
FIS	Flood Insurance Studies
FiT	Feed-in Tariff
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIRMs	Flood Insurance Rate Maps
FPPP	Fire Protection and Prevention Plan
ft.	feet
FTA	Federal Transit Administration
FYE	Fiscal Year Ending

GCASP	General Construction Activity Storm Water Permit
GDP	General Construction-Related Dewatering Discharges Permit
GFRC	glass fiber reinforced concrete
GHG	greenhouse gas
gpcd	gallons per capita per day
gpd	gallons per day
gpm	gallons per minute
GSP	Groundwater Sustainability Plan
GW	Well Graded Gravel
gw-h	gigawatt-hours
GWP	global warming potential
HAER	Historic American Engineering Record
HAZNET	Facility and Manifest Data
HCD	California Department of Housing and Community Development
HCM	Highway Capacity Method
HFCs	hydrofluorocarbons
HHRA	human health risk assessment
HHW	Household Hazardous Waste
HMD	Hazardous Materials Division
HOT	high-occupancy toll
HOV	high-occupancy vehicle
HP	Horse Power
HPSR	Historic Property Survey Report
HQTA	High Quality Transit Area
HRI	Historical Resources Inventory
HSWA	Hazardous and Solid Waste Act

HUD	Housing and Urban Development
HVAC	heating ventilation air conditioning
HWCL	Hazardous Waste Control Law
in.	inches
IBC	International Building Code
ICU	Intersection Capacity Utilization
IE	Irrigation Efficiency
IGR	Intergovernmental Review
IIPP	Injury and Illness Prevention Program
IPCC	Intergovernmental Panel on Climate Change
IPD	Industrial Planned Development zone
IPP	Intermountain Power Project
IRP	Integrated Water Resources Plan
IS	Initial Study
ITE	Institute of Transportation Engineers
ITS	Intelligent Transportation Systems
JOS	Joint Outfall System
JWPCP	Joint Water Pollution Control Plant
kw-h	kilowatt-hours
LAC	Los Angeles County
LACDPW	Los Angeles County Department of Public Works
LACFD	Los Angeles County Fire Department
LACM	Los Angeles County Museum of Natural History
LADPW	Los Angeles County Department of Public Works
LARWQCB	Los Angeles Regional Water Quality Control Board
LBP	Lead-based paint

lbs/day	pounds per day
LCFS	Low Carbon Fuel Standard
LCWRP	Los Coyotes Water Reclamation Plant
L_{dn}	day/night average sound level
Leq	equivalent sound level
LED	Light-Emitting Diode
LEED	Leadership in Energy and Environmental Design
LEV	Low-Emission Vehicle
LID	Low Impact Development
LQG	large quantity generators
LOS	Level of Service
LRTP	Long Range Transportation Plan
LSI	Limited Site Investigation
LST	Localized Significance Thresholds
Lv	velocity level
M&RP	Monitoring and Reporting Plan
MATES-IV	Multiple Air Toxic Exposure Study
MCL	Maximum Containment Levels
MCE	Maximum considered earthquake
MT	Metric Tons
Metro	Los Angeles County Metropolitan Transportation Authority
mgd	million gallons per day
mi	mile
MMTCO2e	One Million Metric Tons of Carbon Dioxide-Equivalent
MSSL	Maximum Soil Screening Level
MTCO2e	Metric Tons of Carbon Dioxide-Equivalent

ML	Sandy Silt
MLD	Most Likely Descendant
MM	Mitigation measure
MOU	Memorandum of Understanding
MPE	maximum probable earthquake
MPO	Metropolitan Planning Organization
MRF	Materials recovery facility
MRR	Mandatory Reporting Rule
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
MT	Metric Tons
MTA	Metropolitan Transportation Authority (Metro)
MTBE	methyl tertbutyl ether
$MTCO_2e$	Metric Tons of CO2 equivalent
MUTCD	California Manual for Uniform Traffic Control Devices
MW	megawatt
MWD	Metropolitan Water District
mw-h	megawatt-hours
MWELO	(Model) Water Efficient Landscaping Ordinance
N2O	nitrous oxide
NAAQS	National ambient air quality standards
NAHC	Native American Heritage Commission
NAT	No Action Taken
NCHRP	National Cooperative Highway Research Program
NEPA	National Environmental Policy Act
NESHAPs	National Emission Standards for Hazardous Air Pollutants

NEV	neighborhood electric vehicle
NF3	Nitrogen Trifluoride
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association
NHM	Natural History Museum
NHPA	National Historical Preservation Act
NHTSA	National Highway Traffic Safety Administration
NIH	National Institute of Health
NO_2	nitrogen dioxide
NOI	Notice of Intent
NOP	Notice of Preparation
NOT	Notice of Termination
NOx	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRA	National Resources Agency
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O_3	Ozone
OES	Governor's Office of Emergency Services
O&M	Operation and Maintenance
OHP	Office of Historic Preservation
OPR	Office of Planning and Research
OS	Open Space zone
OSHA	Occupational Safety and Health Administration
OSY	Operating Safe Yield

PATH	Partnership for Advancing Technology in Housing
Pb	lead
PCE	Passenger Car Equivalency
PCB	Polychlorinated Biphenyls
PDF	Project Design Feature
PEC	Potential Environmental Concern
PEV	plug-in electric vehicle
PF	Plant Factor
PFCs	perfluorocarbons
PGA_M	peak ground acceleration
PHEV	plug-in hybrid electric vehicles
PHI	Public Health Investigation
PIPP	Public Information and Participation Program
PM	particulate matter
PM_{10}	respirable particulate matter
$PM_{2.5}$	fine particulate matter
PO	Professional Office zone
PPE	personal protective equipment
ppd	pounds per day
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
PRG	Preliminary Remediation Goals
PRMMP	Paleontological Resources Monitoring and Mitigation Plan
PSRP	Power System Reliability Program

psi	pounds per square inch
PST	Pacific Standard Time
PUC	Public Utilities Commission
Qa	Quaternary alluvial deposits
Qc	Quaternary fan deposits
RAP	Remedial Action Plan
RCM	Regulatory Compliance Measure
RCP	Regional Comprehensive Plan
RCPG	Regional Comprehensive Plan and Guide
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
RDA	Water Resource Development Assessment
REC	Recognized Environmental Condition
RFS	Renewable Fuel Standard
RGA	Rules of General Application
RHNA	Regional Housing Needs Assessment
RMS	root mean square
ROG	reactive organic gas
RPS	Renewable Portfolio Standards
RPA	Register of Professional Archaeologist
RTP	Regional Transportation Plan
RTIP	Regional Transportation Improvement Program
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SAFE	Solvents/Automotive/Flammables/Electronics
SARA	Superfund Amendment and Reauthorization Act

SB	Senate Bill
SC	Dense Sand
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCG	Southern California Gas Company
SCS	Sustainable Communities Strategies
SDWA	Safe Water Drinking Act
sf	square feet
SF6	sulfur hexafluoride
SFHA	Special Flood Hazard Area
SGCWD	San Gabriel County Water District
SGVMWD	San Gabriel Valley Municipal Water District
SIP	State Implementation Plan
SLF	Sacred Lands File
SM	Silty Sand
SMARA	State Mining and Reclamation Act of 1975
SMGB	State Mining and Geology Board
SMP	Soils Management Plan
SOHP	State Office of Historic Preservation
SO_2	sulfur dioxide
SO_4	sulfates
SOx	sulfur oxides
SOPA	Society of Professional Archaeologists
SP	Very Dense Sand

SQG	small quantity generators
SQMP	Stormwater Quality Management Program
SR	State Route
SRA	Source Receptor Area
SRRE	Source Reduction and Recycling Element
SSMP	Sewer System Management Plan
SUSMP	Standard Urban Stormwater Mitigation Plan
SVP	Society of Vertebrate Paleontology
SW	Very Dense Sand
SWGS	Solid Waste Generation Study
SWIRP	Solid Waste Integrated Resources Plan
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
TAP	Technical Assistance Program
TAZ	Transportation Analysis Zone
TCA	trichloroethane
TCLP	Toxicity Characteristics Leaching Procedures
TCR	Tribal Cultural Resources
TDM	transportation demand management
TIA	Traffic Impact Analysis
TISG	Transportation Impact Study Guidelines
TL	Transmission loss
TMDL	Total Maximum Daily Loads
TMO	Transportation Management Organization

TNM	Traffic Noise Model
TOD	transit-oriented development
TPA	Transit Priority Area
Tpd	tons per day
TPH	Total Petroleum Hydrocarbons
TPHd	Total Petroleum Hydrocarbons as Diesel
TRB	Transportation Research Board
TSCA	Toxic Substances Control Act
TSM	transportation system management
TTLC	Total Threshold Lead Concentration
TTLO	Total Threshold Limit Concentration
ULI	Urban Land Institute
ULSD	Ultra Low Sulfur Diesel
UNFCCC	United Nations Framework Convention on Climate Change
USDOE	United States Department of Energy
USDOT	United States Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGBC	U.S. Green Building Council
USGS	U.S. Geological Survey
UST	underground storage tank
UTD	Underground Tanks Division
UWMP	urban water management plan
µg/L	micrograms per liter
µg/m3	micrograms per cubic meter
v/c ratio	Volume-to-Capacity ratio

VCP	Vitrified Clay Pipe
Vdb	Vibration Magnitude
VIN	Vehicle Identification Number
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
WCI	Western Regional Climate Action Initiative
WDR	waste discharge requirements
WEAP	Worker's Environmental Awareness Program
WELO	(Model) Water Efficient Landscaping Ordinance
Wh	Watt Hours
WHO	World Health Organization
WMA	Watershed Management Areas
WMC	Watershed Management Committees
WNWRP	Whittier Narrows Water Reclamation Plant
WQCMPUR	Water Quality Compliance Master Plan for Urban Runoff
WSA	Water Supply Assessment
WSAP	Water Supply Allocation Plan
WWECP	Wet Weather Erosion Control Plan
XRF	X-Ray Fluorescence Analyzer
ZEV	zero-emission vehicle

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Alhambra Unified School District

Alhambra Civic Library