Draft Environmental Impact Report

Avalon West Valley Expansion Project

File No. PDC17-056 and PD17-027

Cover Image: Studio T Square

Prepared by the

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

In Consultation with

DAVID J. POWERS & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS & PLANNERS

December 2018

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Department of Planning, Building and Code Enforcement
ROSALYNN HUGHEY, DIRECTOR

NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT (EIR) AND PUBLIC COMMENT PERIOD

Project Description: A Draft Environmental Impact Report (DEIR) for the Avalon Expansion Project. The project, as proposed, would redevelop approximately 7.46 acres of the 18.9-acre site. The project would demolish two parking garages (one with up to 210 parking stalls and one up to 620 parking stalls), associated surface parking lots, and the leasing/amenity building and pool area. The project would construct up to 307 residential units in two buildings (the Avalon Building and Manzanita Building), for a combined total of 1,180 residential units (including the existing Eaves Community). The project would also add approximately 17,800 square feet of ground floor retail at the corner of Saratoga and Blackford Avenue, and a new stand-alone parking garage (three levels above-grade and one level below-grade). The total proposal new parking is approximately 1,148 spaces. Additionally, approximately 19,393 square feet of amenity space and two swimming pools would be constructed within the two new buildings. The project proposes a total of 129,687 square feet of open space between the proposed Avalon and Manzanita Building and the existing Eaves Building.

Location: The 18.9-acre project site is comprised of five parcels (APNs 299-37-024, -026, -030, -031, -032, and -033) located east of Saratoga Avenue, between Blackford Avenue and Manzanita Drive in the City of San José.

Council District: 1 **File Nos.:** PDC17-056, PD17-027, PT18-049.

The proposed project will have potentially significant environmental effects with regard to air quality, biological resources, hazardous materials, and noise. The California Environmental Quality Act (CEQA) requires this notice to disclose whether any listed toxic sites are present at the project location. The project site is not present on any list pursuant to Section 65962.5 of the California Government Code.

The Draft EIR and documents referenced in the Draft EIR are available for review online at the City of San José's "Active EIRs" website at www.sanjoseca.gov/activeeirs and are also available at the following locations:

Department of Planning, Building, and Code Enforcement
200 East Santa Clara St., 3rd Floor
San José, CA 95113
(408) 535-3555

Dr. MLK Jr. Main Library
150 E. San Fernando St.,
San José, CA 95112
(408) 277-4822

West Valley Branch Library
1243 San Tomas Aquino Road
San José, CA 95002
(408) 244-4747

The public review period for this Draft EIR begins on **December 21, 2018 and ends on February 11, 2019.** Written comments must be received at the Planning Department by **5:00 p.m. on February 11, 2019**, in order to be addressed as part of the formal EIR review process. Comments and questions should be referred to Thai-Chau Le in the Department of Planning, Building and Code Enforcement at 408-535-5658, via e-mail: Thai-Chau.Le@sanjoseca.gov, or by regular mail at the mailing address listed for the Department of Planning, Building, and Code Enforcement, above (send to the attention of Thai-Chau Le). For the official record, please your written comment letter and reference File Nos. PDC17-056, PD17-027, PT18-049.

Following the close of the public review period, the Director of Planning, Building, and Code Enforcement will prepare a Final Environmental Impact Report that will include responses to comments received during the review period. At least ten days prior to the public hearing on the EIR, the City's responses to comments received during the public review period will be available for review and will be sent to those who have commented in writing on the EIR during the public review period.

Rosalynn Hughey, Director
Planning, Building and Code Enforcement

Deputy

Date

12/14/18

TABLE OF CONTENTS

Figures

Tables

Photos

Appendices

SUMMARY

The project proposes construction of up to 307 residential units in two buildings, approximately 17,800 square feet of retail, and a total of 1,148 new parking spaces, on approximately 6.9 acres of an existing 18.9-acre site currently developed with an existing multi-family residential development.

Significant Impacts	Mitigation Measures
Air Quality	
Impact AIR-1: Construction activities associated with the proposed project would expose infants near the construction zones and in proximity to the project site to temporary TAC emissions in excess of acceptable thresholds,and would expose sensitive receptors to $PM_{2.5}$ emissions in excess of acceptable thresholds.	**MM AIR-1.1:** All mobile diesel-powered off-road equipment operating on-site for more than two days and larger than 25 horsepower shall, at a minimum, meet U.S. Environmental Protection Agency (EPA) particulate matter emissions standards for Tier 4 engines or equivalent. Alternatively, the use of equipment that includes CARB certified Level 3 Diesel Particulate Filters or alternatively-fueled equipment (i.e., non-diesel) could meet this requirement. **MM AIR-1.2:** Prior to the issuance of any demolition, grading and/or building permits, whichever occurs earliest, the project applicant shall submit a construction operations plan that includes specifications of the equipment to be used during construction to the Supervising Environmental Planner of the City of San José Department of Planning, Building and Code Enforcement for review and approval. The plan shall be accompanied by a letter signed by an air quality specialist, verifying that the equipment included in the plan meets the standards set forth in these mitigation measures. **Less Than Significant With Mitigation**
Biological Resources	
Impact BIO-1: Construction activities associated with the proposed project could result in the loss of fertile eggs or nest abandonment.	**MM BIO-1.1:** The project applicant shall schedule demolition and construction activities to avoid the nesting season. The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February 1st through August 31st (inclusive). If demolition and construction cannot be scheduled between September 1st and January 31st (inclusive), pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests are disturbed during project implementation. This

Significant Impacts	Mitigation Measures
	survey shall be completed no more than 14 days prior to the initiation of construction activities during the early part of the breeding season (February 1st through April 30th, inclusive) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May 1st through August 31st, inclusive). During this survey, the ornithologist shall inspect all trees and other possible nesting habitats immediately adjacent to the construction areas for nests. If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist, in consultation with the California Department of Fish and Wildlife (CDFW), shall determine the extent of a construction-free buffer zone to be established around the nest, typically 250 feet, to ensure that raptor or migratory bird nests shall not be disturbed during project construction. Prior to any tree removal, or approval of any grading or demolition permits (whichever occurs first), the ornithologist shall submit a report indicating the results of the survey and any designated buffer zones to the satisfaction of the City's Supervising Environmental Planner. **Less Than Significant With Mitigation**
Hazards and Hazardous Materials	
Impact HAZ-1: Implementation of the proposed project could expose construction workers to residual agricultural soil contamination.	**MM HAZ-1.1:** Prior to issuance of any grading permits, the qualified hazardous materials specialist shall collect shallow soil samples within the near surface soil and test for organochlorine pesticides and pesticide-based metals arsenic and lead to determine if contaminants from previous agricultural operations have occurred at concentrations above established construction worker safety and residential environmental screening levels. The results of the soil sampling and testing shall be provided to the City's Supervising Planner and Municipal Environmental Compliance Officer for review, approval, and/or referral. **MM HAZ-1.2:** If sampling analysis shows contaminated soils are found in concentrations above established regulatory environmental

Significant Impacts	Mitigation Measures
	screening levels, the project applicant shall enter into the Santa Clara County Department of Environmental Health's (SCCDEH) Voluntary Cleanup Program (VCP), or equivalent, to formalize regulatory oversight of the mitigation of contaminated soil to ensure the site is safe for construction workers and the public after development. The applicant must remove contaminated soil to levels acceptable to the SCCDEH (or equivalent oversight agency). It is also possible that some of the contaminated soil may be left in-place buried under hardscape and/or several feet of clean soil under the approval of the SCCDEH (or equivalent oversight agency). A Removal Action Plan, Soil Mitigation Plan or other similarly titled report describing the remediation shall be prepared and implemented to document the removal and /or capping of contaminated soil, prior to the issuance of any demolition, grading and/or building permits, whichever occurs earliest. A copy of these reports shall be submitted to the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement and the Municipal Compliance Officer of the City of San José Environmental Services Department. All work and reports produced shall be performed under the regulatory oversight and approval of the SCCDEH (or equivalent oversight agency). **Less Than Significant With Mitigation**
Noise	
Impact NOI-1: Concrete pours during the evening hours (7:00 PM to 7:00 AM) would exceed the City's allowable noise levels of 50 dBA L_{max} in bedrooms and 55 dBA L_{max} in other rooms.	**MM NOI-1.1:** To reduce construction noise levels during evening hours work to nearby residences, the following mitigation measures shall be implemented by the project applicant prior to the start of any evening construction activity: • The project applicant shall notify by mail all sensitive receptors and residences within 200 feet of the construction sites at least two weeks prior to the night-time concrete pours. In addition to mailing, notification

Significant Impacts	Mitigation Measures
	methodology shall also include online and on-site posting. All notifications shall provide specific details on the schedule of the dates, times, duration, and proposed activities of all construction work occurring outside of the City's allowable hours of construction (7:00 AM to 7:00 PM, Monday through Friday). Notices shall provide tips on reducing noise intrusion, for example, by closing windows facing the planned construction. Any modifications made to the dates, times, and duration of the concrete pours will require new noticing. • The project applicant shall designate a construction noise coordinator to respond to concerns of neighboring receptors about noise construction disturbance. The construction noise coordinator shall be available for responding to any construction noise complaints during the hours that construction is to take place. A toll-free telephone number and email address shall be provided in all notices (mailed, online website, and construction site postings) for receiving questions or complaints during construction and shall also include procedures that the construction noise coordinator will do for responding to callers and email messages. Procedures for reaching the public liaison officer via telephone or in person shall be included in the above notices and also posted at the construction site(s). • The project applicant shall implement one of the following two options to control night-time construction noise occurring between the hours of 10:00 PM and 7:00 AM to reduce the occurrence of sleep disturbance to nearby residents: o **Option 1:** ▪ Install temporary sound walls or acoustic blankets to shield adjacent residences from all

Significant Impacts	Mitigation Measures
	night-time concrete pours. The sound walls or acoustic blankets shall have a height of no less than three feet higher than noise-generating piece(s) or parts of equipment, a Sound Transmission Class (STC) of 27 or greater, and a surface with a solid face from top to bottom without any openings or cutouts along the face or at the base of the barrier; and ▪ Offer to temporarily relocate occupants of residences that are located within 75 feet of evening construction activities by offering hotel vouchers to all affected residents. A minimum of one week notice of the offer shall be provided. o **Option 2:** ▪ Offer to temporarily relocate occupants of residences within 200 feet of evening construction activities by offering hotel vouchers to all affected residents. A minimum of one week notice of the offer shall be provided. **MM NOI-1.2:** Prior to the issuance of any grading permits, the project applicant shall submit a construction plan to the Supervising Environmental Planner for review and approval. The construction plan shall include, but is not limited to, the following information: • A proposed construction schedule, list of equipment to be used during construction activities, and the equipment specifications. • Contact information of the construction noise coordinator and a description of the coordinator's specified roles and responsibilities.

Significant Impacts	Mitigation Measures
	• An example notification template for the evening hour concrete pours that the project applicant will use. • Confirmation of which option, identified in NOI-1.1, the project applicant shall implement. • Notification radius and addresses of all sensitive receptors and residences within 200 feet of the construction sites. **Less Than Significant With Mitigation**

SUMMARY OF ALTERNATIVES TO THE PROPOSED PROJECT

The California Environmental Quality Act (CEQA) requires that an EIR identify alternatives to the project as proposed. The CEQA Guidelines state that an EIR must identify alternatives that would feasibly attain the most basic objectives of the project, but avoid or substantially lessen significant environmental effects, or further reduce impacts that are considered less than significant with the incorporation of mitigation. A summary of project alternatives follows. A full analysis of project alternatives is provided in Section 8.0 Alternatives Analysis.

No Project – No Development Alternative

The No Project – No Development Alternative would retain the existing residential site as is. If the project site were to remain as is, there would be no new impacts. Please refer to *Section 8.0, Alternatives,* for a complete analysis of this alternative.

Existing Zoning Alternative

The project site is currently designated *MUN – Mixed Use Neighborhood* under the City's General Plan and has a zoning designation of *R-M – Multiple Residence*. The purpose of the R-M zoning district is to reserve land for the construction, use and occupancy of higher density residential development and higher density residential commercial mixed use development. This alternative would allow for construction of residential and mixed-use development, based on an allowable height of 45 feet (3.5 stories). Under the Existing Zoning Alternative, the proposed project would include construction of the Manzanita Building (approximately 45 feet tall) with 55 residential units consistent with the proposed project. Construction of the Avalon Building as proposed would not be allowed, however, as it exceeds the 45-foot height limit. If the Avalon Building were to be constructed under the Existing Zoning Alternative, the building would retain the ground floor retail and include up to 84 residential units[1], resulting in a loss of 168 residential units compared to the proposed project. Please refer to *Section 8.0, Alternatives,* for a complete analysis of this alternative.

[1] Based on the 45 foot height limit under the existing zoning alternative, the Avalon Building would be allowed to construct the retail component (first floor) and two floors with residential units. Assuming 42 units on each floor, the Avalon building would have 84 units in total.

Reduced Density Alternative

Under the reduced density alternative, the site would be developed with a smaller project size. Please refer to *Section 8.0, Alternatives,* for a complete analysis of this alternative.

AREAS OF PUBLIC CONTROVERSY

Section 15123 of the State CEQA Guidelines requires the summary section of a Draft EIR to identify areas of controversy known to the Lead Agency, including issues raised by agencies and the public. The following provides a brief summary of the issues raised in comment letters received on the Notice of Preparation (Appendix A) and at the public scoping meeting.

- Analyze visual character (e.g., height) and compatibility of proposed development with the surrounding land uses
- Analyze greenhouse gas emissions from future workers traveling to the site
- Analysis of any existing groundwater contamination at the plaza and on-site
- Analysis of any soil contaminants and its effects on existing and adjacent neighborhoods
- Analyze residents exposure to dust during construction
- Increase of students within public schools as a result of the project
- Project's consistency with General Plan Policy-2.6.
- Analyze project's increase in public utilities to existing City lines
- Analyze displacement of existing residents as a result of project construction
- Analysis of the following air quality impacts:
  - Measures to meet state air quality standards
  - Airborne asbestos from demolition of the existing structures
- Analysis of the following transportation impacts:
  - Increases in project traffic on surrounding roadways and to adjacent neighborhood
  - Reconfiguration of Blackford, Moorpark, Kiely, and I-280 to accommodate addition traffic from proposed project
  - Driver visibility on surrounding streets and for residents existing the site
  - Measures to prevent additional cut-through traffic
  - Current traffic flow during peak times
  - Safety impact to pedestrians, bicyclists, and school vehicles
  - Truck and moving vans effects on surrounding streets
  - Truck traffic effects on pedestrian safety
  - Parking spots for residents and visitors not adequate
  - Parking within neighborhood
  - Traffic control plan during construction phase
- Analysis of the following noise and vibration impacts:
  - Noise and vibration impacts to nearby residents
  - Noise and vibration impacts from project construction
  - Noise and vibration impacts from trash collection

SECTION 1.0 INTRODUCTION

1.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

The City of San Jose, as the Lead Agency, has prepared this Environmental Impact Report (EIR) for the Avalon West Valley Expansion Project in compliance with CEQA, the CEQA Guidelines, and the requirements of the City of San José.

As described in CEQA Guidelines Section 15121(a), an EIR is an informational document that assesses potential environmental impacts of a proposed project, as well as identifies mitigation measures and alternatives to the proposed project that could reduce or avoid adverse environmental impacts (CEQA Guidelines 15121(a)). As the CEQA Lead Agency for this project, the City of San José is required to consider the information in the EIR along with any other available information in deciding whether to approve the project. The basic requirements for an EIR include discussions of the environmental setting, environmental impacts, mitigation measures, cumulative impacts, alternatives, and growth-inducing impacts. It is not the intent of an EIR to recommend either approval or denial of a project.

1.2 EIR PROCESS

1.2.1 Notice of Preparation and Scoping

In accordance with Sections 15063 and 15082 of the CEQA Guidelines, the City of San José has prepared a Notice of Preparation (NOP) for this EIR. The NOP was circulated to local, state, and federal agencies on February 16, 2018. The standard 30-day comment period concluded on March 19, 2018. The NOP provided a general description of the proposed project and identified possible environmental impacts that could result from implementation of the project. The City of San José also held a public scoping meeting on April 26, 2018 to discuss the project and solicit public input as to the scope and contents of this EIR. The meeting was held at West Valley Branch Library located at 1243 San Tomas Aquino Road in the City of San José. Appendix A of this EIR includes the NOP and comments received on the NOP.

1.2.2 Draft EIR Public Review and Comment Period

Publication of this Draft EIR will mark the beginning of a 45-day public review and comment period. During this period, the Draft EIR will be available to local, state, and federal agencies and to interested organizations and individuals for review. Notice of this Draft EIR will be sent directly to every agency, person, and organization that commented on the NOP. Written comments concerning the environmental review contained in this Draft EIR during the 45-day public review period should be sent to:

Thai-Chau Le
200 East Santa Clara Street, 3rd Floor Tower
San José, CA 95113
(408) 535-5658
Thai-Chau.Le@sanjoseca.gov

1.3 FINAL EIR/RESPONSES TO COMMENTS

Following the conclusion of the 45-day public review period, the City will prepare a Final EIR in conformance with CEQA Guidelines Section 15132. The Final EIR will consist of:

- Revisions to the Draft EIR text, as necessary;
- List of individuals and agencies commenting on the DEIR;
- Responses to comments received on the DEIR, in accordance with CEQA Guidelines (Section 15088);
- Copies of letters received on the DEIR.

Section 15091(a) of the CEQA Guidelines stipulates that no public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings. If the lead agency approves a project despite it resulting in significant adverse environmental impacts that cannot be mitigated to a less than significant level, the agency must state the reasons for its action in writing. This Statement of Overriding Considerations must be included in the record of project approval.

1.3.1 Notice of Determination

If the project is approved, the City of San José will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15094(g)).

SECTION 2.0 PROJECT INFORMATION AND DESCRIPTION

2.1 PROJECT DESCRIPTION

2.1.1 Project Location and Background

The 18.9-acre project site is comprised of six parcels (APNs 299-37-024, -026, -030, -031, -032, and -033) located east of Saratoga Avenue, between Blackford Avenue and Manzanita Drive in the City of San José (see Figures 2.1-1, 2.1-2, and 2.1-3). The project site is located within an urbanized area and is surrounded by retail, housing, and commercial/office land uses.

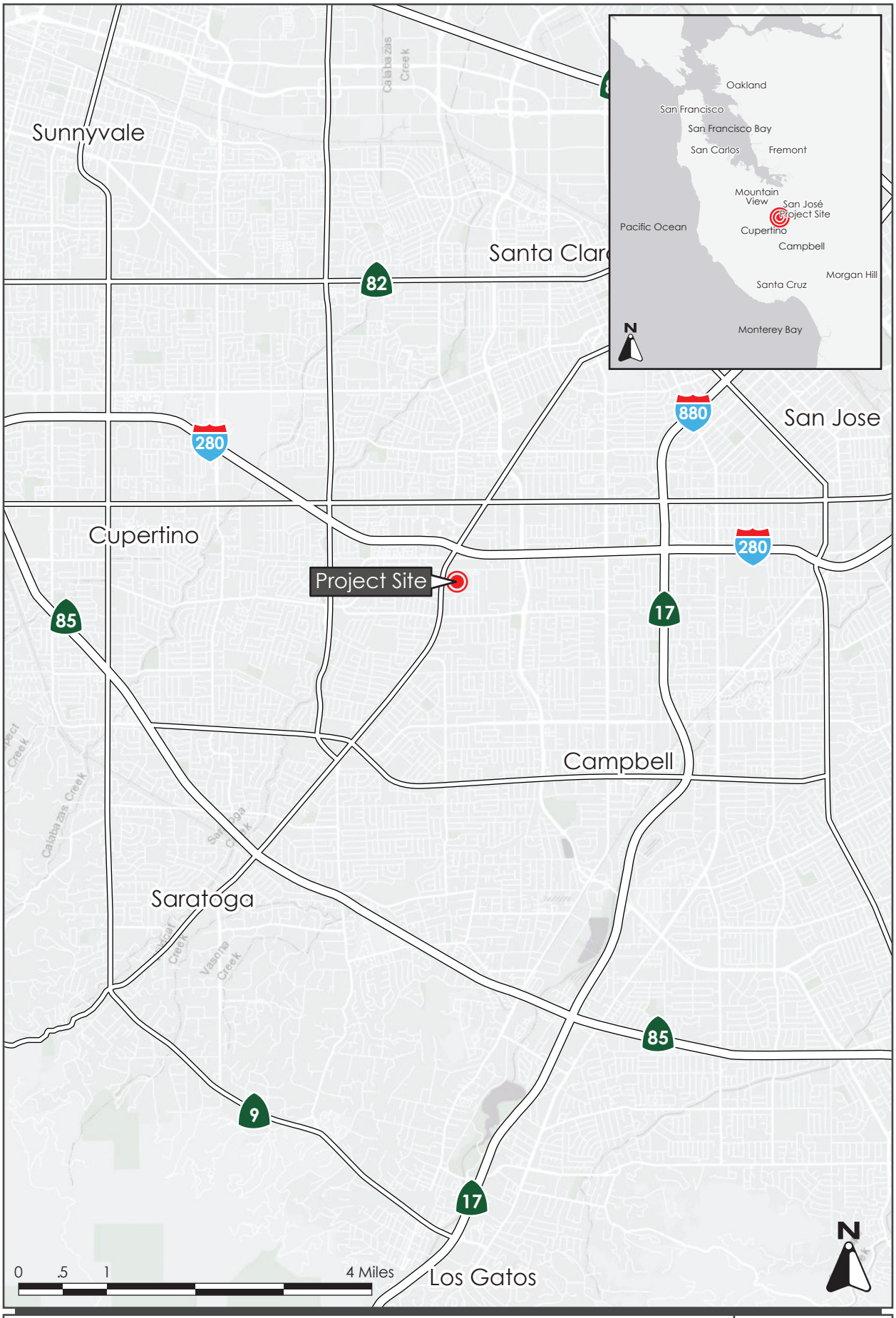
The project site is currently developed with 873 residential apartment units (Eaves Community) within 25 buildings, three parking garages (the Saratoga Garage, Manzanita Garage, and the Blackford Garage) and several surface parking spaces. The Saratoga Garage is located at the southeast corner of the Saratoga Avenue/Blackford Avenue intersection. The Manzanita Garage is located near the center of the site, along Manzanita Drive. The Blackford Garage is located east of the Saratoga Garage and south of Blackford Avenue. The site can be accessed via 14 driveways: seven on Blackford Drive, two on Saratoga Avenue, and five on Manzanita Drive.

2.1.2 Proposed Development

The project, as proposed, would redevelop approximately 7.46 acres of the 18.9-acre site. The project would demolish the Saratoga parking garage (up to 210 parking stalls) and the Manzanita parking garage (up to 620 parking stalls), associated surface parking lots, and the leasing/amenity building and pool area directly south of the Saratoga Garage. The Blackford Garage would remain as is. The project would construct up to 307 residential units in two buildings (the Avalon Building and Manzanita Building), for a combined total of 1,180 residential units (including the existing Eaves Community). The project would also add approximately 17,800 square feet of ground floor retail, and a new stand-alone parking garage with approximately 742 parking spaces. Additionally, two swimming pools would be constructed within the two buildings. The project proposes a total of 129,687 square feet of open space between the proposed Avalon and Manzanita Building and the existing Eaves Building. Please refer to Figures 2.1-4 to 2.1-6 for a site plan and elevations.

2.1.2.1 *Avalon Building*

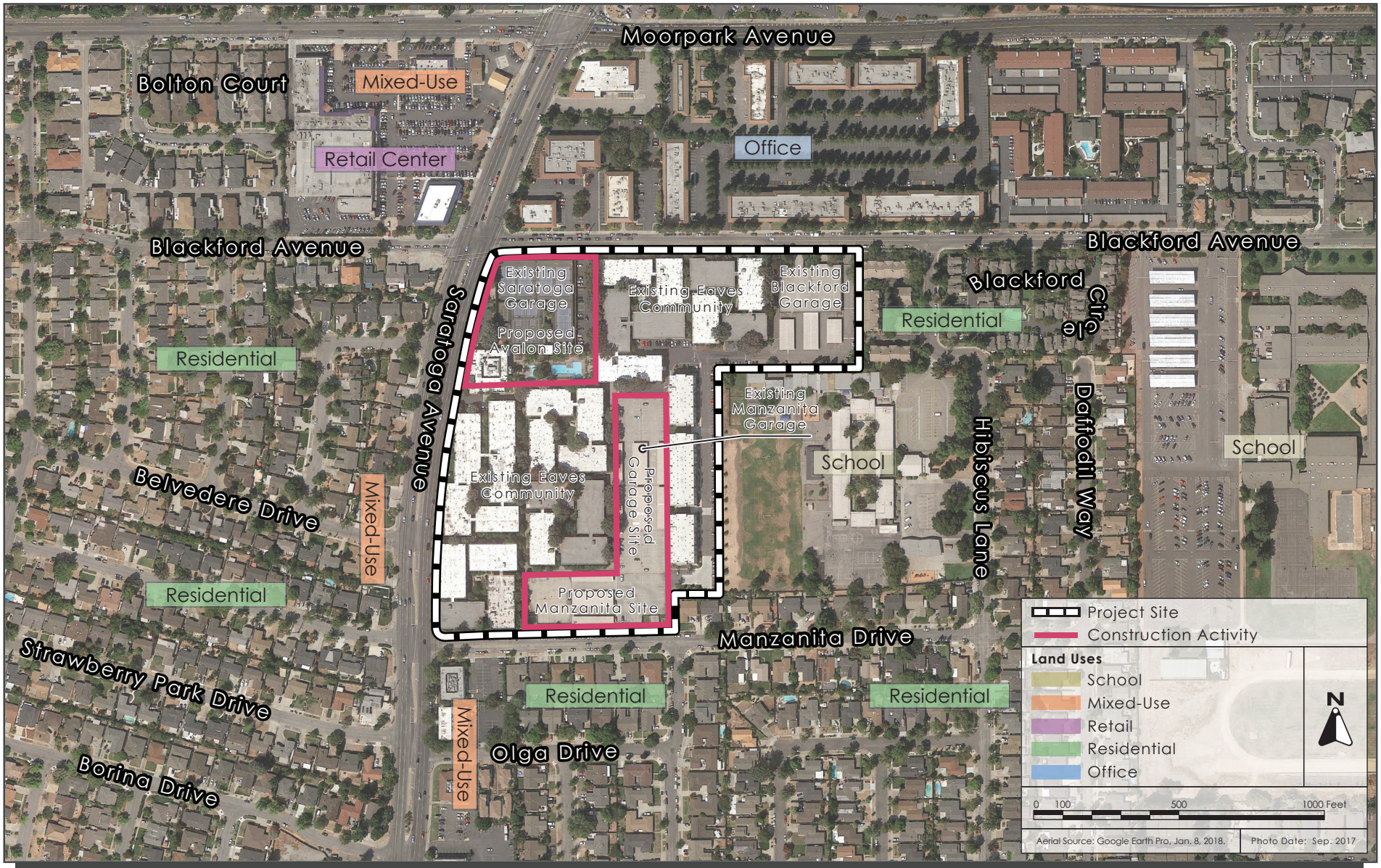
The project would demolish the existing Saratoga parking garage, which has 126 parking spaces, the existing surface lot, which has eight parking spaces, and leasing/amenity building located at the northwest corner of the property and construct a 252-unit, six- to seven-story mixed-use building with up to 17,800 square feet of retail space. The residential units would be located above a three level parking structure (two levels below-grade and one level above-grade), on floors two to seven. The Avalon Building would have a maximum height of approximately 85 feet.



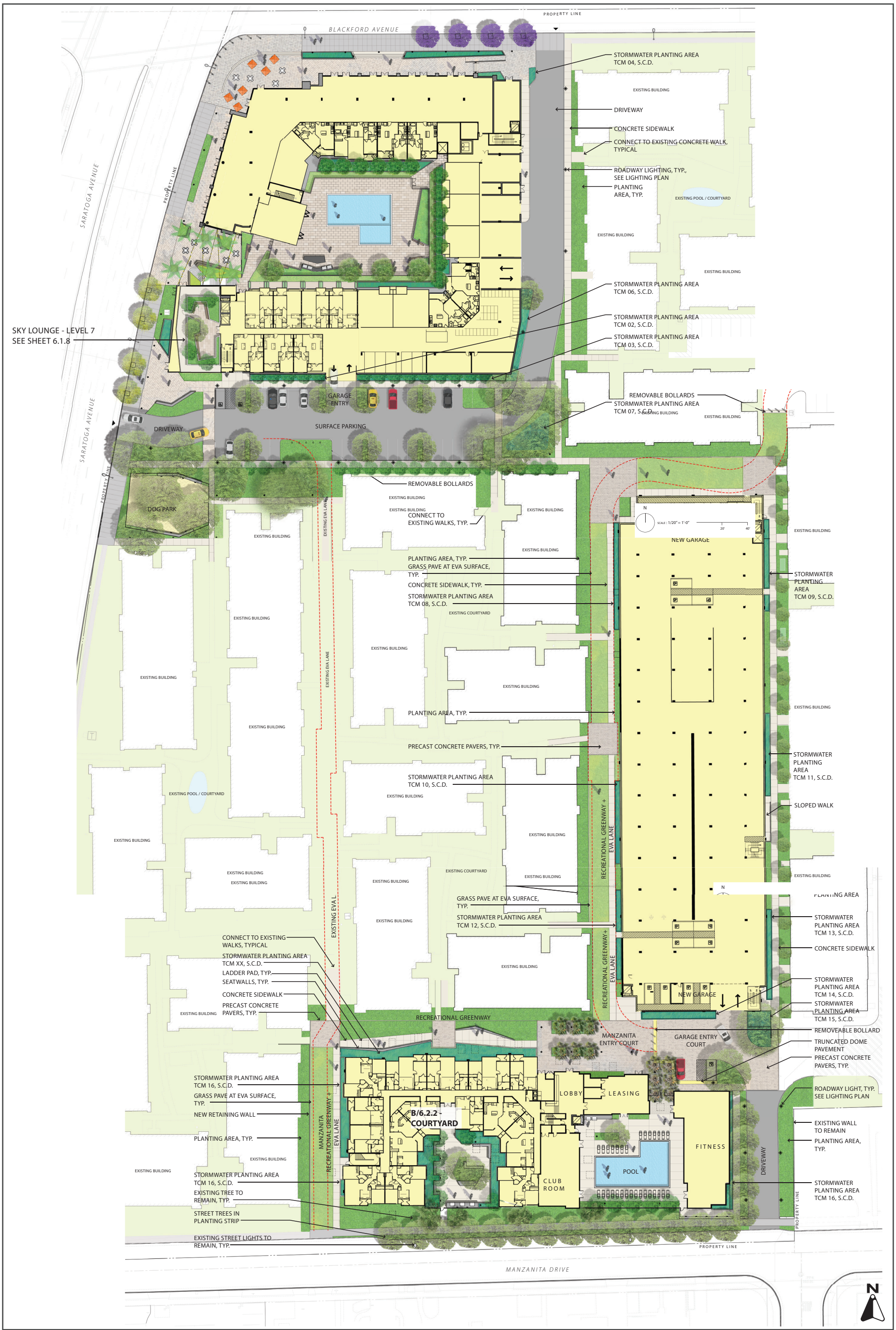
REGIONAL MAP | FIGURE 2.1-1

VICINITY MAP

FIGURE 2.1-2

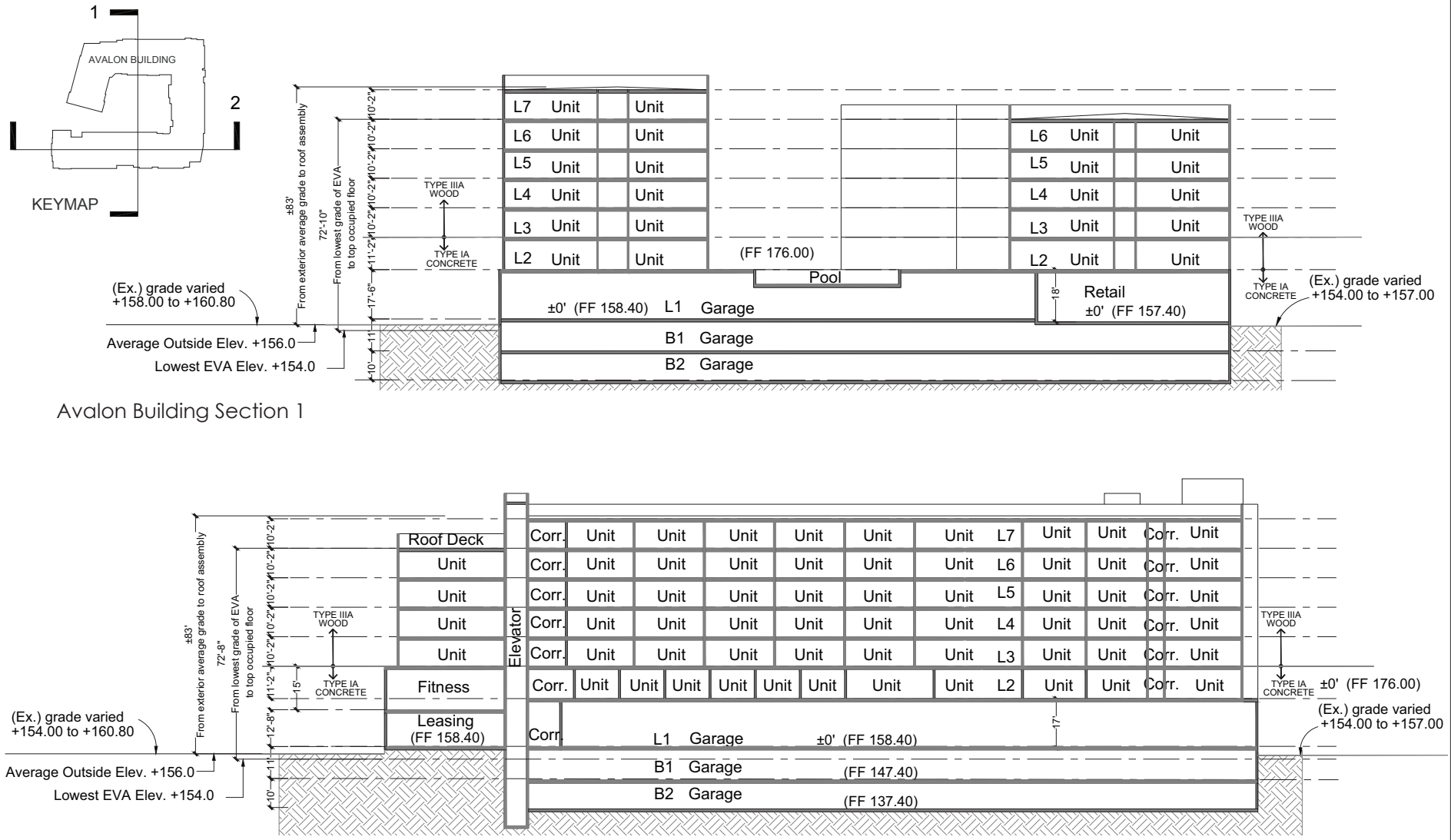


AERIAL PHOTOGRAPH AND SURROUNDING LAND USES | FIGURE 2.1-3

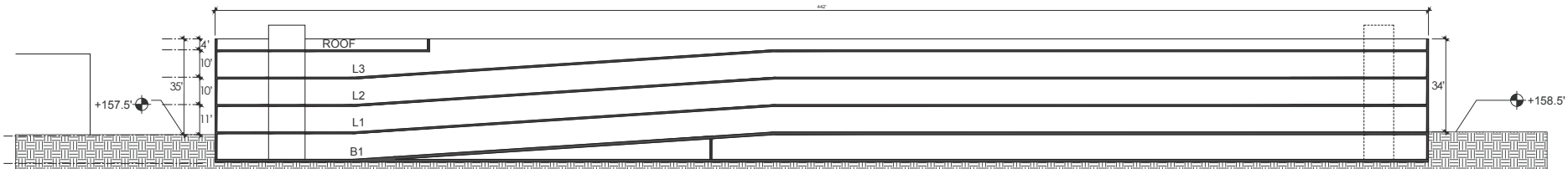


SITE PLAN

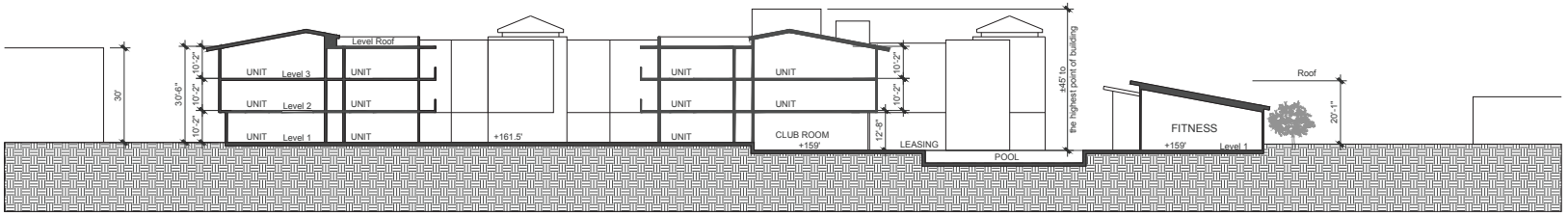
FIGURE 2.1-4



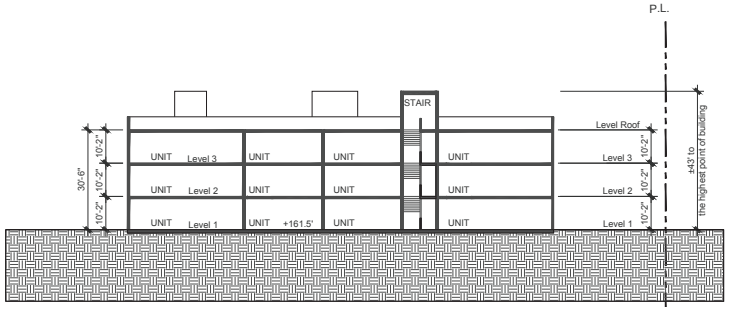
AVALON BUILDING ELEVATIONS | FIGURE 2.1-5



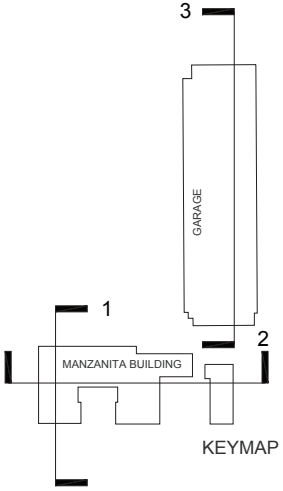
Garage Building Section 3



Manzanita Building Section 2



Manzanita Building Section 1



MAZANITA BUILDING AND GARAGE ELEVATIONS | FIGURE 2.1-6

The proposed retail would be located along the northern and northwestern portions of the building. The Avalon Building would include an approximately 3,119 square foot fitness room, a 1,370 square foot club room, and a pool. On the seventh floor of the building, the project proposes a 745 square foot roof deck. An approximately 3,350 square foot dog park is proposed south of the proposed Avalon Building. The project would have a total of 406 parking spaces for the proposed Avalon Building area. Of the 406 parking spaces, 369 parking spaces would be provided within the building and 37 surface parking spaces would be located within the new surface lot south of the proposed Avalon Building. Thirty-eight of the 369 parking spaces proposed within the new Avalon Building would be for retail. The project is also proposing "flex" parking spaces. The flex spaces would be available for use by the commercial patrons during the commercial operation hours.

2.1.2.2 *Manzanita Building and Parking Garage*

The existing parking garage located at the center and southern portion of the site would be demolished and replaced with a new stand-alone garage and a three-story residential building with 55 units. The Manzanita Building would be approximately 45 feet tall. On-site amenities proposed for the Manzanita Building consist of an approximately 4,330 square foot courtyard, a 2,400 square foot club room, a 4,000 square foot fitness area, and a 6,840 square foot landscaped courtyard with a pool located on the ground floor of the building.

The new stand-alone parking garage would be located immediately northeast of the proposed Manzanita building. The proposed parking garage would be three levels above-grade and one level below-grade with a maximum height of approximately 35 feet. The garage would provide up to 742 parking stalls.

With both the Manzanita Building and the Avalon Building, the overall project would demolish the existing Saratoga and Manzanita parking garages and leasing/amenity buildings, to construct up to 307 residential units, 17,800 square feet of retail/commercial space, residential amenities including two pools, and a total of 1,148new parking spaces within the existing multi-family residential development on an approximately 18.9-acre site.

2.1.2.3 *Site Access*

The site can currently be accessed via 14 existing full access driveways: seven on Blackford Drive, two on Saratoga Avenue, and five on Manzanita Drive. Vehicular access to the Avalon Building would be provided via one existing full access driveway on Blackford Avenue and one existing right-turn only driveway on Saratoga Avenue. The other existing driveway along Saratoga Avenue would be removed. The driveways that would remain on Blackford Avenue and Saratoga Avenue would provide access to the surface parking and parking garages. The proposed stand-alone parking garage would be accessed via one existing full access driveway on Manzanita Drive. The remaining four driveways on Manzanita Drive would be removed.

2.1.2.4 *Utility Connections*

There are existing 21-inch reinforced concrete pipe (RCP) storm drain connected to an existing 24 inch RCP storm drain main along the Blackford Avenue project frontage and an existing 24-inch RCP storm drain main along Saratoga Avenue, which serves the existing project site. There is also an existing 12-inch concrete (non-reinforced) storm drain main along Manzanita Drive, which may be

extended to the project frontage and serve the proposed project site, if necessary. Stormwater runoff from the site would be treated by flow-through planters and biotreatment ponds.

Wastewater from the project site would be directed to an existing six-inch vitrified clay pipe (VCP) sanitary sewer main on Manzanita Drive and to an existing 27-inch RCP (cured-in-place) sanitary sewer main on Blackford Avenue.

2.1.2.5 *Green Building*

The proposed project would be required to build to the California Green Building Code (CALGreen), which includes design provisions intended to minimize wasteful energy consumption. The proposed development would be designed to achieve Leadership in Energy and Environmental Design (LEED) Gold certification.

2.1.2.6 *Construction*

Construction of the new stand-alone parking garage and Manzanita Building would begin in 2020 and finish in 2021. Construction of the Avalon Building would begin in 2021 and end in 2023. The project proposes extended construction hours which would include Saturday work from 9:00 AM to 5:00 PM up to twice a month and 24-hour construction operations on up to 10 days to accommodate large concrete pours.[2] A total of 29 concrete pours is anticipated.

2.1.3 General Plan and Zoning Designation

The project site is currently designated *MUN – Mixed Use Neighborhood* under the City's General Plan and has a zoning designation of *R-M – Multiple Residence*. The *MUN* designation is intended for development with either townhouse or small lot single-family residences. This designation supports commercial or mixed-use development integrated within the *MUN* area. Development within this designation should occur through the use of standard Zoning Districts which specify the minimum lot size. The allowable density for mixed-use development shall be determined using an allowable FAR of 0.25 to 2.0 (one to 3.5 stories).

The project site is zoned *R-M – Multiple Residence*. The purpose of the *R-M* zoning district is to reserve land for the construction, use and occupancy of higher density residential development and higher density residential commercial mixed use development. Under the *R-M* zoning district, the lot acreage shall not exceed 6,000 square feet. The maximum height allowed in this district is 45 feet.

Additionally, the project site is located within the Saratoga Avenue Urban Village and is proposed as a Signature Project. Within the designated Urban Villages, a residential mixed-use signature project may develop ahead of preparation of an Urban Village Plan if it meets certain requirements. Please refer to *Section 3.10, Land Use and Planning,* for the project's consistency with the General Plan and zoning designations and the Saratoga Urban Village.

[2] A 24-hour concrete pour is defined as construction work that is outside of City's allowable hours (7:00 AM to 7:00 PM, Monday through Friday).

2.2 PROJECT OBJECTIVES

The stated objectives of the project proponent are to:

1. Redevelop the project site to allow for the creation of a mixed-use signature project in the Saratoga Ave Urban Village, through a Planned Development Zoning and Planned Development Permit processes.
2. Support San José General Plan policies, such as Policies H-3.1 and H-3.2, regarding intensification of new housing units in Urban Villages.

3. Meet high sustainability and green building standards by designing the development to meet U.S. Green Building Code, LEED and Cal-Green standards for new construction.

4. Construct oriented, ground level retail space along Saratoga Avenue and Blackford Avenue. This retail space must be sized appropriately, and have appropriate signage, visibility, access, and internal building infrastructure to attract desirable retailers to the building.

5. Provide on-site retail opportunities to property residents and surrounding neighbors, and support growth in employment and commercial activity by locating limited retail and other commercial uses within the project.

6. Provide an economically sustainable number of units that will allow the project proponent to invest in enhancing of the character of the neighborhood by providing common open space areas including plazas, courtyards, and seating areas.

7. Increase the housing density at this key Urban Village site, which features easy access to transportation corridors, bus corridor stops, commercial services, and jobs.

8. Repair and upgrade the automobile parking facilities on site to replace aging, unattractive, and dilapidated parking garages with new and modern facilities.

9. Update the site's overall automobile parking ratio to more accurately reflect the demand from today's renter demographic. At the same time, create new opportunities for bicycle parking and car share spaces to encourage alternate modes of transportation.

10. Create a sustainable community by designing public spaces to encourage alternative forms of transportation, such as walking, bicycling, and public transportation.

11. Assist the City of San José to satisfy its Regional Housing Needs Allocation for market rate housing units.

2.3 USES OF THE EIR

This EIR is intended to provide the City of San José, other public agencies, and the general public with the relevant environmental information needed in considering the proposed project. The City of San José anticipates that discretionary approvals by the City, including but not limited to the following, will be required to implement the project addressed in this EIR:

- Planned Development Zoning
- Planned Development Permit
- Tentative Map
- Demolition Permit
- Building Permit
- Grading Permit
- Public Works Clearances
- Tree Removal Permits

SECTION 3.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

3.1	Aesthetics	3.10	Hydrology and Water Quality
3.2	Agricultural and Forestry Resources	3.11	Land Use and Planning
3.3	Air Quality	3.12	Mineral Resources
3.4	Biological Resources	3.13	Noise and Vibration
3.5	Cultural Resources	3.14	Population and Housing
3.6	Energy	3.15	Public Services
3.7	Geology and Soils	3.16	Recreation
3.8	Greenhouse Gas Emissions	3.17	Transportation/Traffic
3.9	Hazards and Hazardous Materials	3.18	Utilities and Service Systems

The discussion for each environmental subject includes the following subsections:

ENVIRONMENTAL SETTING

This subsection: 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.

IMPACTS

This subsection: 1) includes thresholds of significance for determining impacts, 2) discusses the project's consistency with those thresholds, and 3) discusses the project's consistency with applicable plans. For significant impacts, feasible mitigation measures are identified. "Mitigation measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Each impact is numbered using an alphanumeric system that identifies the environmental issue. For example, **Impact HAZ-1** denotes the first potentially significant impact discussed in the Hazards and Hazardous Materials section. Mitigation measures are also numbered to correspond to the impact they address. For example, **MM NOI-2.3** refers to the third mitigation measure for the second impact in the Noise section.

The project's consistency with applicable plans (such as general plans, specific plans, and regional plans) is also discussed within this subsection pursuant to CEQA Guidelines Section 15125(d).

CONCLUSION

This subsection provides a summary of the project's impacts on the resource.

Important Note to the Reader

The California Supreme Court in a December 2015 opinion [*California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 (No. S 213478)] confirmed that CEQA, with several specific exceptions, is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project. Therefore, the evaluation of the significance of project impacts under CEQA in the following sections focuses on impacts of the project on the environment, including whether a project may exacerbate existing environmental hazards.

The City of San José currently has policies that address existing conditions (e.g., air quality, noise, and hazards) affecting a proposed project, which are also addressed in this section. This is consistent with one of the primary objectives of CEQA and this document, which is to provide objective information to decision-makers and the public regarding a project as a whole. The CEQA Guidelines and the courts are clear that a CEQA document (e.g., EIR or Initial Study) can include information of interest even if such information is not an "environmental impact" as defined by CEQA.

Therefore, where applicable, in addition to describing the impacts of the project on the environment, this chapter will discuss Planning Considerations that relate to policies pertaining to existing conditions. Such examples include, but are not limited to, locating a project near sources of air emissions that can pose a health risk, in a floodplain, in a geologic hazard zone, in a high noise environment, or on/adjacent to sites involving hazardous substances.

3.1 AESTHETICS

3.1.1 Environmental Setting

3.1.1.1 *Regulatory Framework*

Residential Design Guidelines

The *Residential Design Guidelines* establish a framework for private residential units in San José and reinforce guidelines established in the General Plan. The Residential Design Guidelines address a variety of areas, including street frontage, perimeter setbacks, parking, landscaped areas, building design, and street design, that ultimately influence how developers and residents view and interact with one another in the City of San José.

City Council's Private Outdoor Lighting Policy 4-3

On March 1, 1983, the City of San Jose implemented the Outdoor Lighting on Private Development policy. The purpose of the policy is to promote energy-efficient outdoor lighting on private development in the City of San Jose that provides adequate light for night-time activities while benefiting the continued enjoyment of the night sky and continuing operation of the Lick Observatory by reducing light pollution and sky glow.

City of San José Interim Lighting Policy Broad Spectrum Lighting for Private Development

The City adopted an Interim Lighting Policy to encourage the use of broad spectrum lighting such as LED for private streets, parking areas, and pedestrian areas as an alternative to low pressure sodium. Projects that met specific standards outlined in the Interim Policy regarding outdoor lighting plans, illumination levels, backlight, uplight, glare, correlated color temperature, and dimming qualify for a permit adjustment and an exception to the required use of low pressure sodium lighting on private development.

Envision San José 2040 General Plan

The General Plan includes the following aesthetic policies applicable to the proposed project.

Policy CD-1.1: Require the highest standards of architecture and site design, and apply strong design controls for all development projects, both public and private, for the enhancement and development of community character and for the proper transition between areas with different types of land uses.

Policy CD-1.7: Require developers to provide pedestrian amenities, such as trees, lighting, recycling and refuse containers, seating, awnings, art, or other amenities, in pedestrian areas along project frontages. When funding is available, install pedestrian amenities in public rights-of-ways.

Policy CD-1.11: To create a more pleasing pedestrian-oriented environment, for new building frontages, include design elements with a human scale, varied and articulated facades using a variety of materials, and entries oriented to public sidewalks or pedestrian pathways. Provide windows or entries along sidewalks and pathways; avoid black walls that do not enhance the pedestrian

experience. Encourage inviting, transparent facades for ground-floor commercial spaces that attract customers by revealing active uses and merchandise displays.

Policy CD-1.12: Use building design to reflect both the unique character of a specific site and the context of surrounding development and to support pedestrian movement throughout the building site by providing convenient means of entry from public streets and transit facilities where applicable, and by designing ground level building frontages to create an attractive pedestrian environment along building frontages. Unless it is appropriate to the site and context, franchise-style architecture is strongly discouraged.

Policy CD-1.17: Minimize the footprint and visibility of parking areas. Where parking areas are necessary, provide aesthetically pleasing and visually interesting parking garages with clearly identified pedestrian entrances and walkways. Encourage designs that encapsulate parking facilities behind active building space or screen parked vehicles from view from the public realm. Ensure that garage lighting does not impact adjacent uses, and to the extent feasible, avoid impacts of headlights on adjacent land uses.

Policy CD-1.23: Further the Community Forest Goals and Policies in this Plan by requiring new development to plant and maintain trees at appropriate locations on private property and along public street frontages. Use trees to help soften the appearance of the built environment, help provide transitions between land uses, and shade pedestrian and bicycle areas.

Policy CD-1.24: Within new development projects include preservation of ordinance-sized and other significant trees, particularly natives. Avoid any adverse effect on the health and longevity of such trees through design measures, construction, and best maintenance practices. When tree preservation is not feasible, include replacements or alternative mitigation measures in the project to maintain and enhance our Community Forest.

Policy CD-4.9: For development subject to design review, ensure the design of new or remodeled structures is consistent or complementary with the surrounding neighborhood fabric (including but not limited to prevalent building scale, building materials, and orientation of structures to the street).

Signature Project

According to General Plan Policy IP-5.10, a signature project allows residential development to proceed within Urban Village areas in advance of the preparation of an Urban Village Plan. A signature project clearly advances and can serve as a catalyst for the full implementation of the *Envision General Plan* Urban Village strategy. A signature project may be developed within an Urban Village designated as part of the current Plan Horizon, or in a future Horizon Urban Village area by making use of the residential Pool capacity. A residential, mixed-use signature project may proceed within Urban Village areas in advance of the preparation of an Urban Village Plan if it fully meets the following requirements:

- The project demonstrates high-quality architectural, landscape and site design features.
- The project is consistent with the recommendations of the City's Architectural Review Committee or equivalent recommending body if the project is subject to review by such body.

3.1.1.2 *Existing Conditions*

Project Site

The 18.9-acre project site is located at the southeast corner of Blackford and Saratoga Avenue. The project site is currently developed with 873 residential apartment units and three parking garages (the Saratoga Garage, Manzanita Garage, and the Blackford Garage). The existing residential buildings on-site are primarily stucco with flat roofs. Each unit includes a fenced patio (Photo 1). The buildings are clustered together which allows for extensive landscaping throughout the site. Articulated planter beds are located around the buildings and these are planted with trees and shrubs. Lawns fill in the areas between the buildings, and the site has a dense canopy of trees. The street frontages are also landscaped with trees, shrubs, and grass. The site is well maintained (Photo 2).

Access to the site is provided by 14 full access driveways: seven on Blackford Drive, two on Saratoga Avenue, and five on Manzanita Drive. The entrances to all three parking garages are gated. The Saratoga Garage fronts Blackford Drive and Saratoga Avenue. The Saratoga Garage is two levels above-grade with tennis courts covering the entire second level and parking spaces on the ground floor. The tennis courts are fenced and light poles surround the courts. South of the Saratoga Garage is a pool deck and spa (which would be removed as part of the project). The Manzanita Garage faces Manzanita Drive and has one-level of above-grade and one-partially below-grade parking level (Photos 3 - 5).

Surrounding Area

Development in the area generally consists of residential and commercial/office/retail development. The property is bordered by Blackford Avenue to the north, Manzanita Drive to the south, and Saratoga Avenue to the west, and schools and both single-family and multi-family residences to the east. Building heights within the vicinity of the site vary from one- to three-stories.

Located immediately north of the project site is Blackford Avenue, an east-west, two-lane street. North of Blackford Avenue are two-story commercial/office buildings with clay tile roofs. These buildings are primarily stucco with vertical wall paneling and brown-tinted windows (Photo 6). The second floors protrude over walkways on the ground floor, and are supported by stone columns. All the other commercial/office buildings located north of Blackford Avenue utilize similar building materials and are set back from the roadway by the existing sidewalk and landscaping.

Located east of the project site are two-story, single-family condominiums. The condominiums have vertical paneling and gable roofs. They are set back by from the roadway the existing sidewalk and landscaping. West Valley Middle School, Action Day Preschool, MACC Preschool, and Pasitos Preschool are all located east of the site.

West of the project site is Saratoga Avenue, a north-south roadway that extends from Scott Boulevard in San José to Saratoga Sunnyvale Road in Los Gatos. West of Saratoga Avenue is a commercial plaza and single-family residences. The buildings within the commercial plaza are one-story and have blue mansard[3] roofs. There are brown-tinted windows located at the southwestern corner of the commercial building. The commercial plaza is set back from the roadways by the

[3] Mansard roofs are defined as a roof with four sloping sides.

Photo 1: View of the project site, looking northwest from the existing Manzanita Garage.

Photo 2: View of the project site, looking west on Saratoga Avenue.

PHOTOS	1 & 2

Photo 3: View of the project site, looking west on Saratoga Avenue.

Photo 4: View of the existing Manzanita Garage, looking southeast from the existing apartments on-site.

PHOTOS	3 & 4

Photo 5: View of the existing Saratoga Garage, looking northwest from the existing apartments on-site.

Photo 6: View of the surrounding development, looking north on Blackford Avenue.

PHOTOS	5 & 6

Photo 7: View of surrounding development, looking northwest on Blackford Avenue.

Photo 8: View of the surrounding development, looking west on Saratoga Avenue.

Photo 9: View of the surrounding development, looking south from the existing Manzanita Garage.

PHOTO	9

existing sidewalk and landscaping and parking. Some of the single-family residences located on the west side of Saratoga Avenue have been converted to commercial/office land uses. Please refer to Photos 7 and 8 for photos of the surrounding development.

South of the project site is Manzanita Drive, an east-west, two-lane residential street. Several one-story single-family residences are located on the south side of Manzanita Drive (see Photo 9).

3.1.1.3 *Scenic Views and Resources*

Based on the City's General Plan, views of hillside areas, including the foothills of the Diablo Range, Santa Cruz Mountains, Silver Creek Hills, and Santa Teresa Hills are scenic features in the San José area. The project site and the surrounding area are relatively flat and prominent viewpoints, other than the surrounding buildings, are limited. The project area has minimal to no scenic views of the Diablo foothills to the north, Santa Cruz Mountains to the south, and Santa Teresa Hills to the east. No natural scenic resources, such as outcropping, are present on-site or in the project area.

3.1.1.4 *Light and Glare*

Sources of light and glare are abundant in the urban environment of the project area, including but not limited to street lights, parking lot lights, security lights, vehicular headlights, internal building lights, and reflective building surfaces and windows. In particular, the tennis courts on the second level of the Saratoga Garage have tall light standards.

3.1.2 Aesthetic Impacts

3.1.2.1 *Thresholds of Significance*

For the purposes of this EIR, an aesthetic impact is considered significant if the project would:

1. Have a substantial adverse effect on a scenic vista;
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
3. Substantially degrade the existing visual character or quality of the site and its surroundings; or
4. Create a new source of substantial light or glare which would adversely affect day or night-time views in the area.

3.1.2.2 *Consistency with Plans*

The proposed project would be required to go through architectural review and comply with design standards established by the City. The proposed stand-alone parking garage would be located behind the Manzanita Building amenity space and slightly visible from Manzanita Drive. The building façades that face Saratoga and Blackford Avenue would have large windows which would enhance the pedestrian experience. Therefore, the proposed project would be compatible with the surrounding land uses and General Plan policies CD-1.1, CD-1.7, CD-1.11, CD-1.12, CD-1.17, CD-1.24, and CD-4.9 by including new landscaping, providing structured and below-grade parking, participating in the

architectural review process, and providing pedestrian-oriented streetscapes and facilities throughout the project site.

3.1.2.3 *Effects on Scenic Vistas and Highways (Threshold Nos. 1 and 2)*

Most of the City is relatively flat and prominent viewpoints, other than buildings, are limited. The project area in particular has minimal to no scenic views due to the existing built environment and no designated scenic resources. The site is not located along or visible from a designated state scenic highway or City scenic rural corridor. The closest designated state scenic highway is California State Route (SR) 9, which is located approximately five miles to the southwest from the project site. [4] The site is not visible from SR 9.

The project site is visible from the surrounding roadways including Saratoga Avenue, Blackford Avenue, and Manzanita Drive and the surrounding properties. The proposed Avalon Building would have a maximum height of 85 feet while the Manzanita Building would have a maximum height of 45 feet. The new stand-alone parking garages would be approximately 35 feet tall. While the proposed development may block views from existing on-site and off-site residences and adjacent businesses, private views are not protected scenic resources under CEQA. Therefore, impacts related to scenic vistas would not occur. **(No Impact)**

3.1.2.4 *Visual Character (Threshold No. 3)*

Generally, visual effects discussed in a CEQA document would be of two types: impacts from the project's appearance (i.e., visual character) and what views, if any, a project would obscure. Aesthetic values are, by their nature, subjective. Opinions as to what constitutes a degradation of visual character would differ among individuals. The best available means for assessing what constitutes a visually acceptable standard for new structures are the City's Design Guidelines and adopted City policies. All future development on-site would be reviewed for consistency with applicable design guidelines and policies prior to issuance of planning permits.

Development in the area consists of retail, residential, and commercial/office land uses. The project area has a mix of architectural styles with no particular style being dominant. For this reason, the proposed building design would be compatible with the mixed visual character of the area. Because the proposed Avalon Building would be taller than other buildings in the immediate project area, the project would alter the existing visual character of the site. The General Plan FEIR (as amended) concluded that new development and redevelopment allowed under the General Plan would alter the appearance of San José; and implementation of applicable policies and regulations (including the City's Design Guidelines) would avoid substantial degradation of the visual character of the City. The proposed project would comply with applicable plans, policies and regulations outlined in the General Plan FEIR (as amended). Therefore, the proposed project would have a less than significant impact on the visual character or quality of the City. **(Less Than Significant Impact)**

[4] California Department of Transportation. *California Scenic Highway Mapping System.* Available at http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm. Accessed July 11, 2018.

3.1.2.5 *Shade and Shadow (Threshold No. 3)*

The CEQA Guidelines do not provide a quantifiable threshold by which to assess the level of impact resulting from increased shading. As a result, it is the discretion of the Lead Agency to determine the impact threshold. Currently, for CEQA purposes, the City of San José only has an adopted threshold of significance for shade and shadow in the vicinity of certain public parks in the Downtown area. No thresholds for increased shade and shadow apply to other areas of the City, including private open space.

As of June 2018, there were no existing solar collectors seen on the roofs of the adjacent properties that would be shaded by the project. The California Solar Rights Act (AB 3250, 1978) and the Solar Shade Act (AB 2321, 1978) protect existing solar panels and solar easements from trees and shrubs planted after installation of the solar panels, but provide no guarantee of solar access as it pertains to new building construction.

The proposed Avalon Building would increase shading on Saratoga Avenue, Blackford Avenue, and the adjacent commercial/office building during the winter morning hours. In the winter afternoon hours, the proposed Avalon Building would shade Blackford Avenue and the adjacent commercial/office building.

While the project would increase the amount of shade during winter months, the project would not preclude the use of any public or private open space. Consistent with City policy and the CEQA Guidelines, since there is no adopted quantifiable threshold and shading would only increase for a limited number of hours per day in the winter months, the project would not result in significant shade or shadow impact. **(Less Than Significant Impact)**

3.1.2.6 *Light and Glare (Threshold No. 4)*

Sources of light and glare in the project area include streetlights, parking lot lights from nearby businesses, security lights, vehicular headlights, internal building lights, and reflective building surfaces and windows. As proposed, pedestrian/signature lighting would be located along the Saratoga Avenue and Blackford Avenue street frontages. Roadway lighting is proposed within the surface parking lot and driveways.

Implementation of the project would increase night-time light and glare compared to existing conditions due to the proposed building design and the net increase in vehicles traveling to and from the site. The project does not propose to use highly reflective construction material (e.g., mirrored glass); therefore, the project would not create substantial glare. The General Plan FEIR (as amended) concluded that while new development and redevelopment under the General Plan could create additional sources of night-time light and daytime glare, implementation of adopted plans and conformance with adopted policies and regulations would avoid substantial light and glare impacts. The proposed project would be required to comply with the City's Outdoor Lighting on Private Development Policy (Policy 4-3). The project would also go through a design review process, prior to the issuance of building permits, and would be reviewed for consistency with the City's Design Guidelines, and other applicable codes, policies, and regulations. As a result, the proposed project would not significantly impact adjacent land uses with increased night-time light levels or daytime

glare from building materials. **(Less Than Significant Impact)**

3.1.3 Conclusion

Implementation of the proposed project would have a less than significant visual impact. **(Less Than Significant Impact)**

3.2 AIR QUALITY

The following discussion is based upon an Air Quality and Greenhouse Gas Assessment and a Supplemental Memo prepared by *Illingworth & Rodkin, Inc.* in July 2018 and November 2018, respectively. In addition, a Concrete Pour Memo was prepared in December 2018. The reports are attached in Appendix B of this document.

3.2.1 Environmental Setting

3.2.1.1 *Regulatory Framework*

Air Quality Overview

Federal, state, and regional agencies regulate air quality in the San Francisco Bay Area Air Basin, within which the proposed project is located. At the federal level, the United States (U.S.) Environmental Protection Agency (EPA) is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The California Air Resources Board (CARB) is the state agency that regulates mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act.

The federal Clean Air Act requires the EPA to set national ambient air quality standards for six common air pollutants (referred to as "criteria pollutants"): particulate matter (PM), ground-level ozone, carbon monoxide, sulfur oxides, nitrogen oxides, and lead. The EPA and the CARB have adopted ambient air quality standards establishing permissible levels of these pollutants to protect public health and the climate.

Violations of ambient air quality standards are based on air pollutant monitoring data and are determined for each air pollutant. "Attainment" status for a pollutant means that a given air district meets the standard set by the EPA and/or CARB. The Bay Area as a whole does not meet state or federal ambient air quality standards for ground level ozone and fine particulate matter ($PM_{2.5}$), nor does it meet state standards for respirable particulate matter (PM_{10}). The Bay Area is considered in attainment or unclassified for all other pollutants.

Bay Area Air Quality Management District

BAAQMD is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. These ambient air quality standards are levels of contaminants which represent safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. Table 3.2-1 identifies the major criteria pollutants, characteristics, health effects, and typical sources for the Bay Area.

Table 3.2-1: Major Criteria Pollutants

Pollutant	Characteristics	Health Effects	Major Sources
Ozone	A highly reactive photochemical pollutant created by the	- Eye Irritation - Respiratory function impairment	The major sources of ozone precursors are combustion sources such

Table 3.2-1: Major Criteria Pollutants			
Pollutant	**Characteristics**	**Health Effects**	**Major Sources**
	action of sun light on ozone precursors. Often called photochemical smog.		as factories and automobiles, and evaporation of solvents and fuels.
Carbon Monoxide	Carbon monoxide is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels.	- Impairment of oxygen transport in the bloodstream - Aggravation of cardiovascular disease - Fatigue, headache, confusion, dizziness - Can be fatal in the case of very high concentrations	Automobile exhaust, combustion of fuels, combustion of wood in wood stoves and fireplaces.
Nitrogen Dioxide	Reddish-brown gas that discolors the air, formed during combustion.	- Increased risk of acute and chronic respiratory disease	Automobile and diesel truck exhaust, industrial processes, and fossil-fueled power plants.
Sulfur Dioxide	Sulfur dioxide is a colorless gas with a pungent, irritating odor.	- Aggravation of chronic obstruction lung disease - Increased risk of acute and chronic respiratory disease	Diesel vehicle exhaust, oil-powered power plants, and industrial processes.
Particulate Matter	Solid and liquid particles of dust, soot, aerosols and other matter that are small enough to remain suspended in the air for a long period of time.	- Aggravation of chronic disease and heart/lung disease symptoms	Combustion, automobiles, field burning, factories and unpaved roads. Also a result of photochemical processes.

BAAQMD has permit authority over stationary sources, acts as the primary reviewing agency for environmental documents, and develops regulations that must be consistent with or more stringent than, federal and state air quality laws and regulations.

Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state air quality standards would be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two closely related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how the BAAQMD will continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities.

The 2017 CAP includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as particulate matter, ozone, and toxic air contaminants; to reduce emissions of methane and other "super-GHGs" that are potent climate pollutants in the near-term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

Envision San José 2040 General Plan

The General Plan includes the following aesthetic policies applicable to the proposed project.

Policy MS-10.1: Assess projected air emissions from new development in conformance with the BAAQMD CEQA Guidelines and relative to State and Federal standards. Identify and implement air emissions reduction measures.

Policy MS-10.2: Consider the cumulative air quality impacts from proposed developments for proposed land use designation changes and new development, consistent with the region's Clean Air Plan and State law.

Policy MS-11.1: Require completion of air quality modeling for sensitive land uses such as new residential developments that are located near sources of pollution such as freeways and industrial uses. Require new residential development projects and projects categorized as sensitive receptors to incorporate effective mitigation into project designs or be located an adequate distance from sources of toxic air contaminants (TACs) to avoid significant risks to health and safety.

Policy MS-11.2: For projects that emit toxic air contaminants, require project proponents to prepare health risk assessments in accordance with BAAQMD-recommended procedures as part of environmental review and employ effective mitigation to reduce possible health risks to a less than significant level. Alternatively, require new projects (such as, but not limited to, industrial, manufacturing, and processing facilities) that are sources of TACs to be located an adequate distance from residential areas and other sensitive receptors.

Policy MS-13.1: Include dust, particulate matter, and construction equipment exhaust control measures as conditions of approval for subdivision maps, site development and planned development permits, grading permits, and demolition permits. At a minimum, conditions shall conform to construction mitigation measures recommended in the current BAAQMD CEQA Guidelines for the relevant project size and type.

Policy MS-13.2: Construction and/or demolition projects that have the potential to disturb asbestos (from soil or building material) shall comply with all the requirements of the California Air Resources Board's air toxic control measures (ATCMs) for Construction, Grading, Quarrying, and Surface Mining Operations.

3.2.1.2 *Existing Conditions*

Air quality in the region is controlled by the rate of pollutant emissions and meteorological conditions. Meteorological conditions, such as wind speed, atmospheric stability, and mixing height may all affect the atmosphere's ability to mix and disperse pollutants. Long-term variations in air quality typically result from changes in air pollutant emissions, while frequent, short-term variations result from changes in atmospheric conditions. BAAQMD monitors air quality conditions at over 30 locations throughout the Bay Area.

Table 3.2-2 below shows violations of state and federal standards at the downtown San José

monitoring station (the nearest monitoring station to the project site) during the 2015-2017 period (the most recent years for which data is available) include O_3, $PM_{2.5}$, and PM_{10}.[5,6]

Table 3.2-2: Ambient Air Quality Standards Violations and Highest Concentrations

Pollutant	Standard	Days Exceeding Standard		
		2015	2016	2017
SAN JOSÉ STATION				
Ozone	State 1-hour	0	0	3
	Federal 8-hour	2	0	4
Carbon Monoxide	Federal 8-hour	0	0	0
	State 8-hour	0	0	0
Nitrogen Dioxide	State 1-hour	0	0	0
PM_{10}	Federal 24-hour	0	0	0
	State 24-hour	1	0	6
$PM_{2.5}$	Federal 24-hour	2	0	6

Source: Bay Area Air Quality Management District. "Annual Bay Area Air Quality Summaries." Accessed: May 4, 2018. Available at: http://www.baaqmd.gov/about-air-quality/air-quality-summaries.

"Attainment" status for a pollutant means that a given air district meets the standard set by the EPA and/or CARB. The Bay Area, as a whole, does not meet state or federal ambient air quality standards for ground level O_3 and $PM_{2.5}$, nor does it meet state standards for PM_{10}. The Bay Area is considered in attainment or unclassified for all other pollutants.

Toxic Air Contaminants

Another group of substances found in ambient air are toxic air contaminants (TACs) under the California CAA. In California, TACs are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level.

Particulate matter from 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). Diesel is of particular concern since it can be distributed over large regions, thus leading to widespread public exposure. CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of diesel particulate matter (DPM).

Fine particulate matter is a complex mixture of substances that includes elements such as carbon and metals; compounds such as nitrates, organics, and sulfates; and complex mixtures such as diesel exhaust and wood smoke. Long-term and short-term exposure to $PM_{2.5}$ can cause a wide range of health effects. Common stationary sources of TACs and $PM_{2.5}$ include gas stations, dry cleaners, and

[5] PM refers to Particulate Matter. Particulate matter is referred to by size (i.e., 10 or 2.5) because the size of particles is directly linked to their potential for causing health problems.
[6] Bay Area Air Quality Management District. "Annual Bay Area Air Quality Summaries." Accessed: May 4, 2018. Available at: http://www.baaqmd.gov/about-air-quality/air-quality-summaries.

diesel backup generators. The other, more significant, common source is motor vehicles on roadways and freeways.

Sensitive Receptors

Sensitive receptors are groups of people that are more susceptible to pollutant exposure (i.e., children, the elderly, and people with illnesses). Locations that may contain a high concentration of sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, schools, parks, and places of assembly. The nearest sensitive receptors to the proposed construction zones would be residences located approximately 45 feet east of the proposed Avalon Building and 30 feet north of the proposed Manzanita Building. West Valley Middle School and several preschools are located approximately 200 feet east of the project site.

3.2.2 Air Quality Impacts

3.2.2.1 *Thresholds of Significance*

For the purposes of this EIR, an air quality impact is considered significant if the project would:

1. Conflict with or obstruct implementation of the applicable air quality plan;
2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
3. 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors);
4. Expose sensitive receptors to substantial pollutant concentrations; or
5. Create objectionable odors affecting a substantial number of people.

3.2.2.2 *Consistency with Plans (Threshold No. 1)*

Bay Area 2017 Clean Air Plan

BAAQMD is the agency primarily responsible for assuring the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. BAAQMD's most recent adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). Determining consistency with the 2017 CAP involves assessing whether applicable control measures in the 2017 CAP are implemented. Implementation of the control measures improves air quality and protects health.

The consistency of the project is evaluated with respect to each set of applicable control measures in Table 3.2-3 below.

Table 3.2-3: Bay Area 2017 CAP Applicable Control Measures		
Control Measures	**Description**	**Project Consistency**
Transportation Control Measures		
Trip Reduction Programs	Encourage trip reduction policies and programs in local plans, e.g., general and specific plans. Encourage local governments to require mitigation of vehicle travel as part of new development approval, to develop innovative ways to encourage rideshare, transit, cycling, and walking for work trips.	The project proposes a multi-family residential development and approximately 17,800 square feet of retail at a location in proximity to VTA bus routes 57 and 58. The project would include 81 bicycle parking spaces. The project, therefore, is consistent with this measure.
Bicycle and Pedestrian Access and Facilities	Encourage planning for bicycle and pedestrian facilities in local plans, e.g., general and specific plans, fund bike lanes, routes, paths and bicycle parking facilities.	The project would include 81 bicycle parking spaces. The project area is well equipped with pedestrian facilities including sidewalks and crosswalks. The project, therefore, is consistent with this measure.
Land Use Strategies	Support implementation of Plan Bay Area, maintain and disseminate information on current climate action plans and other local best practices.	The project proposes mixed-use development at an urban location in proximity to two bus routes. In addition, the project is increasing density at an existing residential development. The project, therefore, is consistent with this measure.
Building Control Measures		
Green Building	Identify barriers to effective local implementation of the CALGreen (Title 24) statewide building energy code; develop solutions to improve implementation/enforcement. Engage with additional partners to target reducing emissions from specific types of buildings.	The project would comply with the City's Green Building Program and CALGreen requirements. The project, therefore, is consistent with this measure.
Decrease Electricity Demands	Work with local governments to adopt additional energy efficiency policies and programs. Support local government energy efficiency program via best practices, model ordinances, and technical support. Work with partners to develop messaging to decrease electricity demand during peak times.	The proposed building would be constructed in compliance with the San José Green Building Ordinance (Policy 6-32) and the CALGreen requirements.
Urban Heat Island Mitigation	Develop and urge adoption of a model ordinance for "cool parking" that promotes the use of cool surface treatments for new parking facilities.	The project would be required to comply with the City's Green Building Ordinance and the most

Table 3.2-3: Bay Area 2017 CAP Applicable Control Measures		
Control Measures	**Description**	**Project Consistency**
	Develop and promote adoption of model building code requirements for new construction or re-roofing/roofing upgrades for commercial and residential multi-family housing.	recent California Building Code (CBC) which would increase building efficiency over standard construction. Therefore, the project is consistent with this control measure.
Waste Management Control Measures		
Recycling and Waste Reduction	Develop or identify and promote model ordinances on community-wide zero waste goals and recycling of construction and demolition materials in commercial and public construction projects.	The City adopted the Zero Waste Strategic Plan which outlines policies to help the City foster a healthier community and achieve its Green Vision goals, including 75 percent diversion by 2013 and zero waste by 2022. In addition, the project would comply with the City's Construction and Demolition Diversion Program during construction which ensures that at least 75 percent of construction waste generated by the project is recovered and diverted from landfills. Therefore, the project is consistent with this control measure.
Water Control Measures		
Support Water Conservation	Develop a list of best practices that reduce water consumption and increase on-site water recycling in new and existing buildings; incorporate into local planning guidance.	The project would comply with CALGreen and reduce potable indoor water consumption and outdoor water use by including water efficient fixtures and planting drought tolerant non-invasive landscaping. The project, therefore, would be consistent with this measure.
Natural and Working Lands Measures		
Urban Tree Planting	Develop or identify an existing model municipal tree planting ordinance and encourage local governments to adopt such an ordinance. Include tree planting recommendations, the Air District's technical guidance, best management practices for local plans, and CEQA review.	The project would be required to adhere to the City's tree replacement policy. Refer to *Section 3.3, Biological Resources* for further discussion on tree replacements. Therefore, the project is consistent with this control measure.

The project would be consistent with applicable control measures and with the planned growth under the City's General Plan. Therefore, the proposed project would not result in a significant impact related to consistency with the Bay Area 2017 CAP. **(Less Than Significant Impact)**

The proposed project includes mitigation measures and Standard Permit Conditions to reduce and/or avoid significant emissions impacts. Therefore, the project is consistent with Policies MS-10.1, MS-10.2, MS-11.1, MS-11.2, MS-13.1, and MS-13.2.

3.2.3 CEQA Thresholds of Significance

Impacts from the Project

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the Lead Agency and must be based to the extent possible on scientific and factual data. The City of San José has carefully considered the thresholds updated by BAAQMD in May 2017 and regards these thresholds to be based on the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and $PM_{2.5}$.

As part of an effort to attain and maintain ambient air quality standards for ozone and PM_{10}, the BAAQMD has established thresholds of significance for these air pollutants and their precursors. The BAAQMD CEQA Air Quality thresholds used in this analysis are identified in Table 3.2-4 below.

Table 3.2-4: Thresholds of Significance Used in Air Quality Analyses

Pollutant	Construction	Operation-Related	
	Average Daily Emissions (pounds/day)	Average Daily Emissions (pounds/day)	Maximum Annual Emissions (tons/year)
ROG, NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
Fugitive Dust (PM_{10}/$PM_{2.5}$)	BMPs	None	None
Risk and Hazards for New Sources and Receptors (Project)	Same as Operational Threshold	• Increased cancer risk of >10.0 in one million • Increased non-cancer risk of > 1.0 Hazard Index (chronic or acute) • Ambient $PM_{2.5}$ increase: > 0.3 μ/m^3 [Zone of influence: 1,000-foot radius from property line of source or receptor]	
Risk and Hazards for New Sources and Receptors (Cumulative)	Same as Operational Threshold	• Increased cancer risk of >100 in one million • Increased non-cancer risk of > 10.0 Hazard Index (chronic or acute) • Ambient $PM_{2.5}$ increase: > 0.8 μ/m^3 [Zone of influence: 1,000-foot radius from property line of source or receptor]	

Sources: *BAAQMD CEQA Thresholds Options and Justification Report (2009)* and *BAAQMD CEQA Air Quality Guidelines* (dated May 2017).

3.2.3.1 *Operational Air Quality Impacts (Threshold Nos. 2 and 4)*

An air quality assessment (refer to Appendix B) was completed to address operational air quality impacts from the proposed development on-site. The California Emissions Estimator Model (CalEEMod) was used to estimate emissions from operation of the proposed project with full buildout. Full operation of the site was assumed to occur in late 2024. The following proposed project land uses were input into CalEEMod: 307 dwelling units entered as "Apartment Mid-Rise", 17,800 square foot as "Strip Mall", 1,168 parking spaces as "Unenclosed Parking with Elevator", 399 parking spaces as "Enclosed Parking with Elevator", and 38 parking spaces as "Parking Lot". Please refer to Appendix B for a list of inputs that were used in the CalEEMod. Table 3.2-5 below shows the projected estimated daily air emissions. Please note the existing land uses on 6.9 acres of the 18.9-acre site were not included in the analysis because these uses produce very low operational and traffic emissions.

Table 3.2-5: Operational Emissions for the Project

Description[1]	ROG	NOx	PM_{10}	$PM_{2.5}$
Tons Per Year				
2024 Project	2.0	1.6	1.5	0.4
BAAQMD Thresholds	***10***	***10***	***15***	***10***
Exceed BAAQMD Threshold?	***No***	***No***	***No***	***No***
Pounds Per Day				
2024 Project	10.9	8.7	8.6	2.4
BAAQMD Thresholds	***54***	***54***	***82***	***54***
Exceed BAAQMD Threshold?	***No***	***No***	***No***	***No***

Notes: [1] Assumes a 365-day operation

As seen in the table above, operational emissions would not exceed BAAQMD thresholds; therefore, the project would have a less than significant operational criteria pollutant emissions impact. **(Less Than Significant Impact)**

Carbon Monoxide Emissions

In addition to the operation emissions of the criteria pollutants discussed above, another federally and state regulated criteria pollutant is carbon monoxide. The area is attained for both the state and federal ambient air quality standards for carbon monoxide. A determination of the project's potential to result in significant local air pollutant emissions (i.e., carbon monoxide) is based on its consistency with the local Congestion Management Program and its potential to add sufficient vehicle trips to one or more intersections that would cause the intersection(s) to exceed 44,000 vehicles per hour. Air pollutant monitoring data indicate that CO levels have been below state and federal standards in the Bay Area since the early 1990s and, as a result, the region has been in attainment for CO.

The project would generate up to 1,896 net new daily traffic trips (*refer to Section 3.13,* Transportation) which is insufficient to increase the traffic volume at any local intersection above the BAAQMD screening criteria of 44,000 vehicles per hour. Therefore, implementation of the project would not result in a significant CO emissions impact. **(Less Than Significant Impact)**

3.2.3.2 *Construction Air Quality Impacts (Threshold Nos. 2 and 4)*

Construction Criteria Pollutant Emissions

BAAQMD developed screening criteria to provide a conservative indication of whether construction activities associated with a project would result in potentially significant criteria pollutant impacts. For construction-related emissions, the screening size for "mid-rise apartments" and "strip mall" land use types are 240 dwelling units and 277,000 square feet, respectively. The proposed project would exceed the screening size for mid-rise apartments.

To quantify the effects of project construction, construction criteria pollutant emissions were computed using CalEEMod. The proposed land uses were input into CalEEMod and it was assumed that the project would be built out in two phases over a period of approximately 27 months (approximately 598 construction workdays), beginning in June 2020. Please refer to Appendix B for a list of inputs that were used in CalEEMod.

Table 3.2-6 below shows the average daily emissions from construction period criteria pollutants.

Table 3.2-6: Construction Period Criteria Pollutant Emissions

Scenario	ROG	NO_x	PM_{10}	$PM_{2.5}$
Manzanita Building and Stand-Alone Parking Garage (Phase 1)				
Total Construction Emissions (tons)	0.9	4.6	0.2	0.2
Average daily emissions (pounds per day)[1]	6.2	31.0	1.1	1.0
BAAQMD Thresholds (pounds per day)	*54*	*54*	*82*	*54*
Avalon Building (Phase 2)				
Total Construction Emissions (tons)	2.3	4.2	0.1	0.1
Average daily emissions (pounds per day)[2]	6.7	28.1	0.9	0.8
BAAQMD Thresholds (pounds per day)	*54*	*54*	*82*	*54*
Exceed Threshold?	**No**	**No**	**No**	**No**

Notes: [1,2] Assumes 299 construction workdays for each phase for a total of 598 construction workdays.

Construction activities on-site would include demolition, site preparation, grading, building construction, paving, and architectural coating. As shown above, neither phase of construction would exceed the BAAQMD significance thresholds and, as a result, the project would have a less than significant construction period emissions impact. **(Less Than Significant Impact)**

Dust Generation

Construction activities on-site would generate dust and other particulate matter that could temporarily impact nearby land uses, particularly sensitive receptors. Consistent with City policies, mitigation measures, and control measures identified in the General Plan FEIR, the project would implement the following Standard Permit Conditions during all phases of construction to reduce dust and other particulate matter emissions.

Standard Permit Conditions

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be water two times per day.

- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

With implementation of the Standard Permit Conditions, construction dust and other particulate matter would have a less than significant temporary construction air quality impact. **(Less Than Significant Impact)**

Construction Community Risk Impacts

Emissions from construction-related automobiles, trucks, and heavy equipment are a primary concern due to release of DPM, organic TACs, and $PM_{2.5}$, which are regulated air pollutants. The nearest sensitive receptors to the construction zones would be on-site residences located approximately 45 feet east of the proposed Avalon Building and 30 feet north of the proposed Manzanita Building. Additionally, West Valley Middle School, Action Day Preschool, MACC Preschool, and Pasitos Preschool are all located approximately 200 feet east of the site. The U.S. EPA AERMOD dispersion model was used to predict DPM and $PM_{2.5}$ concentrations at existing sensitive receptors in the vicinity of the project site. The models, assumptions, and results are described further in Appendix B.

As noted in Table 3.2-4 above, community risk thresholds for TACs, PM2.5, and non-cancer risks are as follows:

- Increased cancer risk of >10.0 in one million
- Increased non-cancer risk of > 1.0 Hazard Index (chronic or acute)
- Ambient $PM_{2.5}$ increase: > 0.3 micrograms per cubic meter (μ/m^3)

The maximum-modeled DPM (both TACs and non-cancer risks) and $PM_{2.5}$ concentrations were identified at the Avalon and Manzanita sites at nearby residential and school receptor locations as shown in Figure 3.2-1, below. The BAAQMD recommended exposure parameters were used for the cancer risk calculations (refer to Appendix B).

Figure 3.2-1: Maximum-Modeled DPM and $PM_{2.5}$ Concentration Locations

Table 3.2-7 provides a summary of the maximum health risk impacts from project construction.

Table 3.2-7: Maximum Health Risk Impacts from Project

Construction Activity	Cancer Risk (per million)	Annual $PM_{2.5}$ (μ/m^3)	Chronic Hazard Index
Manzanita Construction			
Residential Exposure – Infant	**82.1**	**0.57**	0.06
– Adult	1.4		
School Children Exposure	1.0	0.04	<0.01
Avalon Construction			
Residential Exposure – Infant	**88.2**	**0.54**	0.06
– Adult	1.5		
School Children Exposure	1.5	0.04	<0.01
Project Construction			
Residential Exposure – Infant	**87.8**	**0.60**	0.06
– Adult	<1.0		
School Children Exposure	2.5	0.06	0.01
BAAQMD Thresholds	*10.0*	*0.3*	*1.0*

Notes: Bold denotes levels above single-source thresholds.

Based on the calculation above, the maximum residential excess cancer risk and the maximum $PM_{2.5}$ concentration would exceed BAAQMD's significance threshold of 10 per one million for cancer risk and 0.3 μ/m^3 for annual $PM_{2.5}$.

Impact AIR-1: Construction activities associated with the proposed project would expose infants near the construction zones and in proximity to the project site to temporary TAC emissions in excess of acceptable thresholds, and would expose sensitive receptors to $PM_{2.5}$ emissions in excess of acceptable thresholds. **(Significant Impact)**

In addition to the Standard Permit Conditions listed in *Section 3.2.3.2, Construction Air Quality Impacts,* and in conformance with General Plan Policies MS-10.1 and MS-13.1, the following mitigation measures would be implemented during all demolition and construction activities to reduce TAC emissions impacts.

MM AIR-1.1: All mobile diesel-powered off-road equipment operating on-site for more than two days and larger than 25 horsepower shall, at a minimum, meet U.S. Environmental Protection Agency (EPA) particulate matter emissions standards for Tier 4 engines or equivalent. Alternatively, the use of equipment that includes CARB certified Level 3 Diesel Particulate Filters or alternatively-fueled equipment (i.e., non-diesel) could meet this requirement.

MM AIR-1.2: Prior to the issuance of any demolition, grading, and/or building permits, whichever occurs earliest**,** the project applicant shall submit a construction operations plan that includes specifications of the equipment to be used during construction to the Supervising Environmental Planner of the City of San José Department of Planning, Building and Code Enforcement for review and approval. The plan shall be accompanied by a letter signed by an air quality specialist, verifying that the equipment included in the plan meets the standards set forth in these mitigation measures.

Diesel engines that meet U.S. EPA Tier 4 emissions standards for particulate matter are the most effective means for reducing diesel particulate matter and $PM_{2.5}$ emissions. The standards combine the best emission control technology in diesel engines to both the combustion and post-combustion (or after treatment) processes and can reduce particulate matter emissions by over 90 percent compared to current average equipment.[7] Implementation of the Standard Permit Conditions would reduce exhaust emissions by five percent and fugitive dust emissions by over 50 percent. Implementation of MM AIR-1.1 and MM AIR-1.2 would further reduce on-site diesel exhaust emissions by 91 percent. Implementation of both the Standard Permit Conditions and mitigation measures would reduce the Avalon and Manzanita Buildings construction cancer risk to seven per million and the annual $PM_{2.5}$ concentration to 0.12 μ/m^3, which would be below BAAQMD's significance threshold. **(Less Than Significant Impact with Mitigation)**

[7] The Tier 4 interim standards became effective in 2011 and control particulate matter. The Tier 4 final standards became effective in 2014/2015 and meet the final requirements for controlling NO_x. Please note that these standards affect the manufacturing of new engines and not the sales. Therefore, the penetration of these equipment into construction fleets is hard to predict.

Night-Time Concrete Pour

The project proposes extended construction hours which would include Saturday work from 9:00 AM to 5:00 PM up to twice a month and up to 10 24-hour concrete pours. Since preparation of the Air Quality and Greenhouse Gas Assessment, more information regarding concrete pours was provided by the applicant. A total of 29 concrete pours are anticipated for both the Avalon Building and the Manzanita Building. Each concrete pour is estimated to take up to eight hours and would require three trucks per hour to deliver the concrete to the site. Emissions for the concrete pours were analyzed using CARB EMFAC 2014 model for heavy-duty trucks. During each concrete pour, it was assumed that three trucks[8] (one pump truck, one delivery truck connected to the pump truck, and one delivery truck waiting to connect) would be present. Emissions from 29 concrete pours would represent approximately one percent of the mitigated (MM MM AIR-1.1 and MM AIR-1.2) construction emissions and less than one percent of the unmitigated emissions identified in Table 3.2-7 above. Even with the increase in emission from the proposed 10 night-time concrete pours, the project would not exceed BAAQMD thresholds. Therefore, the concrete pours would have a less than significant impact to construction cancer risk. **(Less Than Significant Impact)**

3.2.3.3 *Odor Impacts (Threshold No. 5)*

The project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. These emissions may be noticeable from time to time by adjacent receptors; however, the odors would be localized and temporary and are not likely to affect people on- and off-site. Implementation of the proposed project would not result in long-term or short-term odor impacts. **(Less Than Significant Impact)**

3.2.3.4 *Cumulative Air Quality Impacts (Threshold No. 3)*

Please refer to *Section 4.0, Cumulative Impacts,* for a discussion of cumulative air quality impacts.

3.2.3.5 *Project Air Quality Issues Not Covered Under CEQA (Threshold No. 4)*

On December 17, 2015, the California Supreme Court issued an opinion that CEQA does not generally require an analysis of the impacts of locating development in areas subject to environmental hazards (i.e., impacts to a project) unless the project would exacerbate existing environmental hazards.[9] Specific circumstances where CEQA does require the analysis of exposing new populations to environmental hazards include the location of development near airports, schools near sources of toxic contamination, and certain infill and workforce housing.[10] The proposed project does not fall under any of these situations.

Nevertheless, the City of San José has policies that address existing air quality conditions affecting a proposed project, which are also discussed below. The criteria used by the City for determining

[8] All trucks were assumed to be diesel trucks.
[9] California Supreme Court published opinion in *California Building Industry Association v. Bay Area Air Quality Management District, 62 Cal. 4th 369* (No. S 213478), filed December 17, 2015.
[10] Although CEQA does not generally require an evaluation of the effects of existing hazards on future users of the proposed project, it calls for such an analysis in several specific contexts involving certain airport (Public Resources Code Section 21096) and school construction projects (Public Resources Code Section 21151.8), and some housing development projects (Public Resources Code subsection 21159.21, subds.(f), (h), 21159.22, subds. (a), (b)(3), 21159.23, subd. (a)(2)(A), 21159.24, subd. (a)(1), (3), 21155.1, subd. (a)(4), (6)).

whether new receptors would be affected are the same as those listed for Project Health Risk and Cumulative Health Risk in the Table 3.2-4 (refer to *Section 3.2.3, CEQA Thresholds of Significance*).

Operational Community Risk Impacts

Increased community risk can occur either by introducing a new sensitive receptor, such as a residential use, in proximity to an existing source of TACs or by introducing a new source of TACs to existing sensitive receptors within the project vicinity. The proposed project would place new sensitive receptors (i.e. residences) in proximity to existing sources of TACs (i.e. freeways, high volume roadways, or stationary sources). General Plan Policy MS-11.1 requires completion of air quality modeling for sensitive land uses such as new residential developments that are located near sources of pollution. The policy also requires new residential development projects and projects categorized as sensitive receptors to incorporate effective mitigation into project design or be located an adequate distance from sources of TACs to avoid significant risks to health and safety.

The location of these sources and the level of community risk associated with them is shown in the following Table 3.2-8 and Table 3.2-9. DPM, organic TACs, and $PM_{2.5}$ emissions from traffic on Saratoga Avenue were developed using the CARB EMFAC2014 emission factor model and a traffic mix based on BAAQMD data for non-highway roads in the County. Residential occupation of the site was assumed to begin in 2021 or later. Dispersion modeling of TAC and $PM_{2.5}$ emissions was completed using the U.S. EPA AERMOD model to evaluate potential health impacts to future residents at the proposed buildings. The proposed residential units would be located on floors two to seven of the proposed Avalon Building and floors one to three of the Manzanita Building. For a list of inputs and adjustments used in the EMFAC2014 emission factor model and U.S. EPA AERMOD, please refer to Appendix B.

Mobile Sources of TACs

Community health risk assessments typically look at all sources of TACs (including highways, streets, and stationary sources identified by BAAQMD) within 1,000 feet of a project site. Traffic on high volume roadways (10,000 average daily trips or more) is a source of TAC emissions that may adversely impact sensitive receptors in close proximity to the roadways. A review of the project area indicates that traffic on Saratoga Avenue exceeds 10,000 average daily trips.

The maximum-modeled TAC and $PM_{2.5}$ concentrations from Saratoga Avenue would occur at the second floor of the Avalon Building and at the first floor of the Manzanita Building. The maximum concentrations at each of the proposed buildings occurred at the residential units closest to Saratoga Avenue. TAC and $PM_{2.5}$ concentrations from Saratoga Avenue traffic would decrease with distance from the roadway and increasing floor level heights at the site. The following table summarizes the maximum health risk impacts from Saratoga Avenue traffic.

Table 3.2-8: Maximum Health Risk Impacts from Saratoga Avenue			
Receptor Locations	**Cancer Risk (per million)**	**Annual $PM_{2.5}$ (μ/m^3)**	**Chronic Hazard Index**
Avalon Building			
2nd Floor Maximum Impact	1.7	0.17	<0.01
3rd Floor Maximum Impact	0.9	0.08	<0.01
Manzanita Building			
1st Floor Maximum Impact	1.5	0.20	<0.01
2nd Floor Maximum Impact	1.4	0.17	<0.01
3rd Floor Maximum Impact	1.0	0.12	<0.01
BAAQMD Thresholds	*10.0*	*0.3*	*1.0*

Stationary Sources of TACs

BAAQMD's stationary source map tool identified three gas stations (Plant #G12254, Plant #G9351, and Plant #G10399) which are local sources of TACs. The following table summarizes the maximum health risk impacts from stationary sources at the proposed Avalon and Manzanita Buildings.

Table 3.2-9: Maximum Health Risk Impacts from Stationary Sources			
Receptor Locations	**Cancer Risk (per million)**	**Annual $PM_{2.5}$ (μ/m^3)**	**Chronic Hazard Index**
Manzanita Building			
Plant #G12254 (Gas Station) at 460 feet	0.56	N/A	<0.01
Plant #G9351 (Gas Station) at 730 feet	0.21	N/A	<0.01
Plant #G10399 (Gas Station) at 700 feet	0.11	N/A	<0.01
Avalon Building			
Plant #G12254 (Gas Station) at 1,000 feet	0.16	N/A	<0.01
Plant #G9351 (Gas Station) at 1,000 feet	0.13	N/A	<0.01
Plant #G10399 (Gas Station) at 1,000 feet	0.07	N/A	<0.01
BAAQMD Thresholds	*10.0*	*0.3*	*1.0*
Note: Gasoline stations are not a source of $PM_{2.5}$ concentrations.			

As seen in the table above, the maximum cancer risks, $PM_{2.5}$ concentration, and hazard index are below their respective BAAQMD significance thresholds.

3.2.4 Conclusion

The project would not result in significant operational regional or local air quality impacts, conflict with applicable air quality plans and standards, or expose sensitive receptors to substantial pollutant concentrations. **(Less Than Significant Impact)**

With implementation of the identified Standard Permit Conditions, the project would not result in significant construction-related regional or local air quality impacts. **(Less Than Significant Impact)**

With implementation of the identified Standard Permit Conditions and mitigation measures MM AIR-1.1 and MM AIR-1.2, the project would reduce community risk impacts from construction to less than significant. **(Less Than Significant Impact with Mitigation)**

3.3 BIOLOGICAL RESOURCES

The following discussion is based on an Arborist Report prepared by *HMH Engineers* in April 2018.[11] The report is attached in Appendix C of this document.

3.3.1 Regulatory Framework

Special-Status Species

Individual plant and animal species listed as rare, threatened or endangered under state and federal Endangered Species Acts are considered 'special-status species.' Federal and state "endangered species" legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project would result in the "take" of a species listed as threatened or endangered. To "take" a listed species, as defined by the State of California, is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" said species. "Take" is more broadly defined by the federal Endangered Species Act to include "harm" of a listed species.

In addition to species listed under state and federal Endangered Species Acts, Section 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, are considered for environmental review per the CEQA Guidelines. These may include plant species of concern in California listed by the California Native Plant Society and CDFW listed "Species of Special Concern".

Migratory Bird and Birds of Prey Protections

Federal and state laws also protect most bird species. The federal Migratory Bird Treaty Act prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

Birds of prey, such as owls and hawks, are protected in California under provisions of the state Fish and Game Code. The code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by the CDFW.

Sensitive Habitats

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to regulation, protection, or consideration by the U.S. Army Corps of Engineers (USACE), Regional

[11] Please note – there is a counting error in the arborist report. The total number of trees is listed as 240 instead of 239.

Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act. U.S. EPA regulations, called for under Section 402 of the Clean Water Act, also include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge into waters of the U.S. (e.g., streams, lakes, bays, etc.).

Santa Clara Valley Habitat Plan/Natural Community Conservation Plan

The Santa Clara Valley Habitat Plan/Natural Community Conservation Plan (SCVHP) was approved in 2013 and covers an area of 519,506 acres, or approximately 62 percent of Santa Clara County. It was developed and adopted through a partnership between Santa Clara County, the Cities of San José, Morgan Hill, and Gilroy, Santa Clara Valley Water District (SCVWD), Santa Clara Valley Transportation Authority (VTA), USFWS, and CDFW. The SCVHP is intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in approximately 500,000 acres of southern Santa Clara County. The Santa Clara Valley Habitat Agency is responsible for implementing the plan.

City of San José Tree Ordinance

Ordinance-sized trees, heritage trees, and street trees make up the urban forest and are protected under the City of San José Tree Ordinance. The City of San José Tree Removal Controls (San José City Code, Sections 13.31.010 to 13.32.100) protect all trees having a trunk that measures 38 inches or more in circumference (12.1 inches in diameter) at the height of 4.5 feet above the natural grade. The ordinance protects both native and non-native species. A tree removal permit is required from the City for the removal of ordinance-size trees. In addition, any tree found by the City Council to have special significance due to history, girth, height, species, or unique quality can be designated as a Heritage Tree due to its size, history, unusual species, or unique quality. It is illegal to prune or remove a heritage tree without first consulting the City Arborist and obtaining a permit.

Envision San José 2040 General Plan

The General Plan includes the following biological resource policies applicable to the proposed project.

Policy CD-1.23: Further the Community Forest Goals and Policies in this Plan by requiring new development to plant and maintain trees at appropriate locations on private property and along public street frontages. Use trees to help soften the appearance of the built environment, help provide transitions between land uses, and shade pedestrian and bicycle areas.

Policy CD-1.24: Within new development projects, include preservation of ordinance-sized and other significant trees, particularly natives. Any adverse effect on the health and longevity of such trees should be avoided through design measures, construction, and best maintenance practices. When tree preservation is not feasible include replacements or alternative mitigation measures in the project to maintain and enhance our Community Forest.

Policy ER-5.1: Avoid implementing activities that result in the loss of active native birds' nests, including both direct loss and indirect loss through abandonment, of native birds. Avoidance of activities that could result in impacts to nests during the breeding season or maintenance of buffers between such activities and active nests would avoid such impacts.

Policy ER-5.2: Require that development projects incorporate measures to avoid impacts to nesting migratory birds.

Policy MS-21.4: Encourage the maintenance of mature trees, especially natives, on public and private property as an integral part of the community forest. Prior to allowing the removal of any mature tree, pursue all reasonable measures to preserve it.

Policy MS-21.5: As part of the development review process, preserve protected trees (as defined by the Municipal Code), and other significant trees. Avoid any adverse effect on the health and longevity of protected or other significant trees through appropriate design measures and construction practices. Special priority should be given to the preservation of native oaks and native sycamores. When tree preservation is not feasible, include appropriate tree replacement, both in number and spread of canopy.

Policy MS-21.6: As a condition of new development, require, where appropriate, the planting and maintenance of both street trees and trees on private property to achieve a level of tree coverage in compliance with and that implements City laws, policies, or guidelines.

3.3.2 Existing Conditions

3.3.2.1 *Overview of Habitat Found On-Site*

Vegetation on-site includes landscaping, comprised of grass, shrubs, and trees. The project site is located within an urbanized area of San José surrounded by retail, housing, and commercial/office land uses. The project site is located within the SCVHP study area and is designated as "Urban-Suburban" land.[12] "Urban-Suburban" land is comprised of areas where native vegetation has been cleared for residential, commercial, industrial, transportation, or recreational structures, and is defined as having one or more structures per 2.5 acres.

Habitats in developed areas, such as the site, are typically low in diversity and include predominantly urban adapted birds and animals. There are no sensitive habitats on-site, such as freshwater marsh or serpentine grasslands.

3.3.2.2 *Special Status Species*

Special-status species are those plants and animals listed under the state and federal Endangered Species Acts (including candidate species); plants listed on the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (1994); and animals designated as Species of Special Concern by the CDFW. Additionally, nesting birds are considered special-status species and are protected by the USFWS under the Migratory Bird Treaty Act. Most special status animal species occurring in the Bay Area use habitats that are not present on the project site. Since the native vegetation of the area is no longer present on-site, native wildlife species have been supplanted by species that are more compatible with an urbanized area; however, there is still the potential for nesting birds to be located in trees in and around the project site.

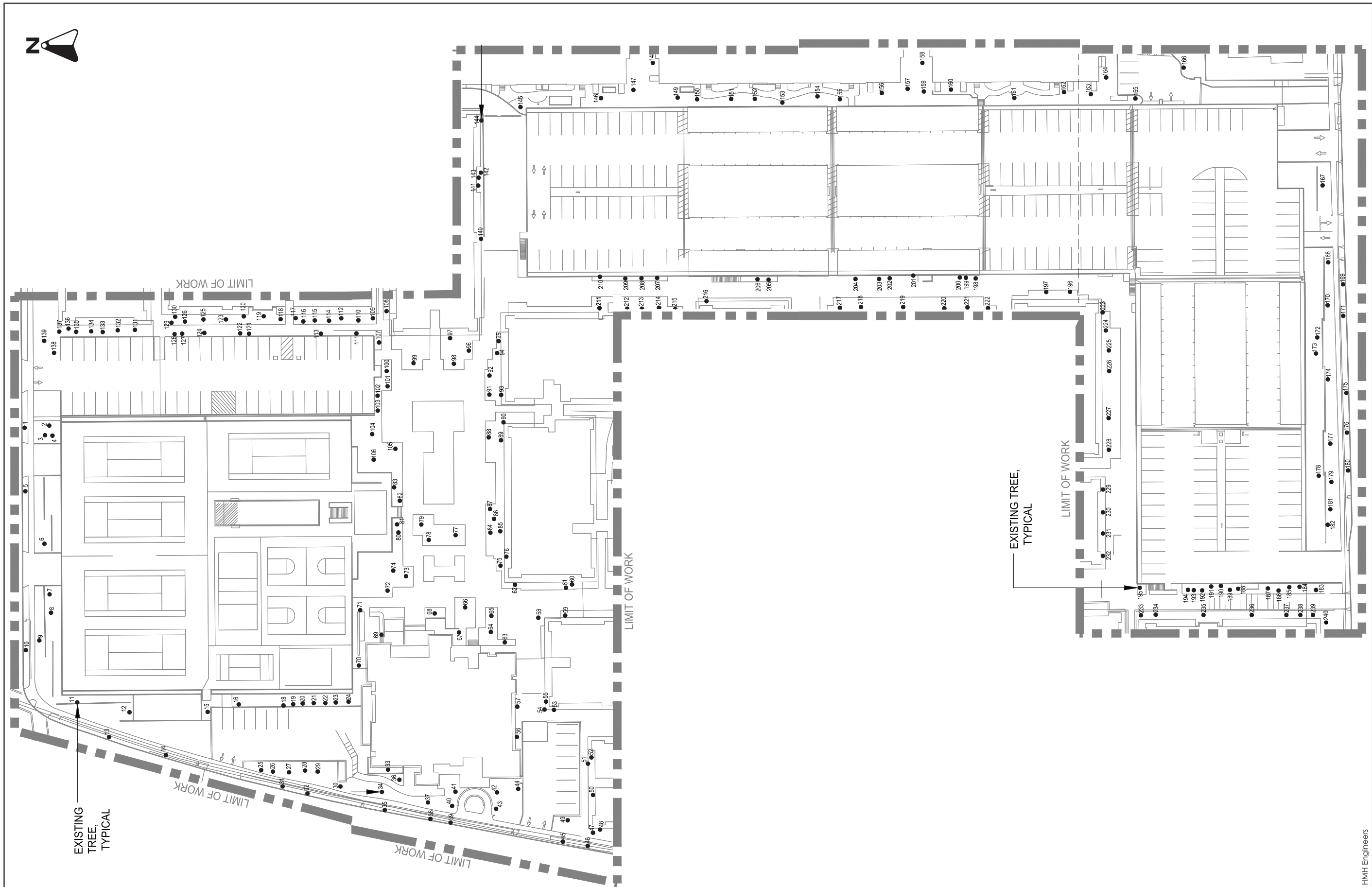
[12] Santa Clara Valley Habitat Plan. "Santa Clara Valley Habitat Agency Geobrowser." Accessed: February 22, 2018. Available at: http://www.hcpmaps.com/habitat/.

3.3.2.3 *Trees*

Trees (both native and non-native) are valuable to the human environment for the benefits they provide including resistance to global climate change (i.e., carbon dioxide absorption), protection from weather, nesting and foraging habitat for raptors and other migratory birds, and as a visual enhancement to the urban environment. There are a total of 239 trees located within the proposed areas of construction. None of the trees surveyed are considered native to San José. In accordance with City policy, trees that are a minimum of 12.1 inches in diameter (38 inches in circumference) at 4.5 feet above ground, as well as Heritage Trees, are protected from removal without a permit. Of the 239 trees surveyed, 135 are ordinance-sized trees. The location of the trees is shown on Figure 3.3-1.

Table 3.3-1: Tree Species Observed

Common Name	Scientific Name	Circumference			Total No. of Trees
		0-19.0 inches	19-38 inches	Greater than 38 inches	
Japanese maple	Acer palmatum	7	0	0	7
White alder	Alnus rhombifolia	4	0	1	5
River birch	Betula nigra	16	0	0	16
Dracaena palm	Dracaena spp.	1	0	0	1
Bronze loquat	Eriobotrya deflexa	10	22	25	57
Blue gum	Eucalyptus globulus	0	4	41	45
Crepe myrtle	Lagerstroemia indica	2	0	0	2
Bay laurel	Laurus nobilis	6	0	0	6
Glossy privet	Ligustrum lucidum	2	0	2	4
Southern magnolia	Magnolia grandiflora	0	0	2	2
Common olive	Olea europaea	0	0	37	37
Canary island date palm	Phoenix canariensis	0	0	1	1
Monterey pine	Pinus radiata	0	0	4	4
Lemonwood	Pittosprorum eugenioides	2	4	1	7
Flowering cherry	Prunus spp.	1	0	0	1
Indian hawthorn	Rhaphiolepis indica	7	0	0	7
Queen palm	Syagrus romanzoffiana	0	15	21	36
Chinese elm	Ulmus parvifolia	1	0	0	1
				Total:	239



Source: HMH Engineers

TREE LOCATION MAP

FIGURE 3.3-1

3.3.3 Biological Resources Impacts

3.3.3.1 *Thresholds of Significance*

For the purposes of this EIR, a biological resource impact is considered significant if the project would:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS);
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;
3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal filling, hydrological interruption, or other means?
4. 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;
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.3.3.2 *Consistency with Plans*

The project includes mitigation measures to reduce impacts to migratory birds and to avoid the loss of active nests during construction. In addition, the project will be required to replace trees removed on-site consistent with City standards. Therefore, the project is consistent with Policies CD-1.23, CD-1.24, ER-5.1, ER-5.2, MS-21.4, MS-21.5, and MS-21.6.

3.3.3.3 *Impacts to Sensitive Species and Habitats (Threshold Nos. 1 – 4)*

Vegetation, Habitats, and Wildlife

The larger project site is currently developed with 873 residential apartment units and three parking garages. Due to the history of development on-site and existing urbanized use of the project area, no natural habitats exist on or adjacent to the site that would support endangered, threatened, or special status species. There are no federally protected wetlands, as defined by Section 404 of the Clean Water Act on-site. The proposed project would not adversely affect special status species, riparian habitat, or wetland habitat. **(Less Than Significant Impact)**

Impacts to Nesting Migratory Birds

While the project site is located within an urban environment, the trees on-site could provide nesting and/or foraging habitat for raptors and migratory birds. Migratory birds, like nesting raptors, are protected under provisions of the Migratory Bird Treaty Act and CDFW Code Sections 3503, 3503.5,

and 3800. The CDFW defines "taking" as causing abandonment and/or loss of reproductive efforts through disturbance. Any loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment would constitute a significant impact.

Impact BIO-1: Construction activities associated with the proposed project could result in the loss of fertile eggs or nest abandonment. **(Significant Impact)**

Mitigation and Avoidance Measures

In accordance with the Migratory Bird Treaty Act, CDFW, and General Plan Policies ER-5.1 and ER-5.2, the following mitigation measures are included to reduce impacts to raptors and migratory birds during construction:

MM BIO-1.1: The project applicant shall schedule demolition and construction activities to avoid the nesting season. The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February 1st through August 31st (inclusive).

If demolition and construction cannot be scheduled between September 1st and January 31st (inclusive), pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests are disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of construction activities during the early part of the breeding season (February 1st through April 30th, inclusive) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May 1st through August 31st, inclusive). During this survey, the ornithologist shall inspect all trees and other possible nesting habitats immediately adjacent to the construction areas for nests. If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist, in consultation with the California Department of Fish and Wildlife (CDFW), shall determine the extent of a construction-free buffer zone to be established around the nest, typically 250 feet, to ensure that raptor or migratory bird nests shall not be disturbed during project construction.

Prior to any tree removal, or approval of any grading or demolition permits (whichever occurs first), the ornithologist shall submit a report indicating the results of the survey and any designated buffer zones to the satisfaction of the City's Supervising Environmental Planner.

With implementation of the identified mitigation measures, the project's impact to nesting birds and raptors would be less than significant. **(Less Than Significant Impact with Mitigation)**

3.3.3.4 *Impacts to Trees (Threshold No. 5)*

There are 239 trees located within the construction zones. Of the 239 trees, there are 135 ordinance-sized trees. For the purposes of this analysis, it is assumed that all 239 trees would be removed. As

part of the project's Standard Permit Conditions, all trees removed as a result of the project would be required to be replaced in accordance with all applicable laws, policies, or guidelines, including:

- City of San José Tree Removal Control (Municipal Code Section 13.31.010 to 13.32.100)
- San José Municipal Code Section 13.28
- General Plan Policies MS-21.4, MS-21.5, and MS-21.6

Table 3.3-2: City of San José Standard Tree Replacement Ratios

Circumference of Tree to Be Removed[1]	Type of Tree to be Removed[2]			Minimum Size of Each Replacement Tree
	Native	Non-Native	Orchard	
38 inches or greater[3]	5:1	4:1	3:1	15-gallon
19 to 38 inches	3:1	2:1	none	15-gallon
Less than 19 inches	1:1	1:1	none	15-gallon

[1]As measured 4.5 feet above ground level
[2] x:x = tree replacement to tree loss ratio
[3]Ordinance-sized tree
Notes: Trees greater than 12.1 inches in diameter shall not be removed unless a Tree Removal Permit, or equivalent, has been approved for the removal of such trees. For multi-family residential, commercial, and industrial properties, a Tree Removal Permit is required for removal of trees of any size.
A 12.1-inch tree equals 38 inches in circumference.
One 24-inch box tree = two 15-gallon trees.

In accordance with City policy, tree replacement would be implemented as shown on Table 3.3-2. Of the 239 trees, 135 trees would be replaced at a 4:1 ratio, 45 trees would be replaced at a 2:1 ratio, and 59 trees would be replaced at a 1:1 ratio with 15-gallon containers. The total number of trees required to be planted on-site would be 689 trees.

In the event the project site does not have sufficient area to accommodate the require tree mitigation, the following condition shall be implemented:

Standard Permit Condition

- If replacement trees cannot be fully planted on the project site, the project proponent shall make payment to the City for funding to plant any additional trees within the City boundary prior to the issuance of any building permits. These funds will be used for tree planting and maintenance of planted trees for approximately three years. The project proponent shall provide the payment receipt for "off-site tree planting" to the Planning Project Manager prior to issuance of any building permit.

The proposed project would be required to meet the requirements as noted above. The General Plan FEIR concluded that compliance with local laws, policies, or guidelines, as proposed by the project, would reduce impacts to the urban forest to a less than significant level. **(Less Than Significant Impact)**

3.3.3.5 *Consistency with the Habitat Conservation Plan (Threshold No. 6)*

As mentioned previously, the project site is located within the SCVHP area and is designated as "Urban-Suburban" land. Private development in the plan area is subject to the SCVHP if it meets the following criteria:

- The activity is subject to either ministerial or discretionary approval by the County of one of the cities;
- The activity is described in Section 2.3.2 *Urban Development* or in Section 2.3.7 *Rural Development*;[13] and
- In Figure 2-5 (of the HCP), the activity is located in an area identified as "Private Development is Covered," OR the activity is equal to or greater than two acres AND
    - The project is located in an area identified as "Rural Development Equal to or Greater than Two Acres is Covered," or "Urban Development Equal to or Greater than Two Acres is Covered" OR
    - The activity is located in an area identified as "Rural Development is not Covered" but, based on land cover verification of the parcel (inside the Urban Service Area) or development area, the project is found to impact serpentine, wetland, stream, riparian, or pond land cover types; or the project is located in occupied nesting habitat for western burrowing owl.

The proposed project is consistent with the activity described in *Section 2.3.2* of the SCVHP and would require discretionary approval by the City. Consistent with the SCVHP, the project applicant shall implement the following Standard Permit Condition.

Standard Permit Condition

- The project is subject to applicable SCVHP conditions and fees (including the nitrogen deposition fee) prior to issuance of any grading permits. The project applicant shall submit a SCVHP Coverage Screening Form or Nitrogen Deposition Only Application Form (if no land cover fees apply) to the Supervising Environmental Planner of the Department of Planning, Building and Code Enforcement for review and shall complete subsequent forms, reports, and/or studies as needed.

With implementation of the identified Standard Permit Condition, the project would not conflict with the provisions of the SCVHP. **(Less Than Significant Impact)**

3.3.4 Conclusion

Implementation of the MM BIO-1.1 would reduce impacts to raptors and other migratory birds. **(Less Than Significant Impact With Mitigation)**

[13] Covered activities in urban areas include residential, commercial, and other types of urban development within the Cities of Gilroy, Morgan Hill, and San José planning limits of urban growth in areas designated for urban or rural development, including areas that are currently in the unincorporated County (i.e., in "pockets" of unincorporated land inside the cities' urban growth boundaries).

The project would be required to meet the minimum tree replacement standards. Conformance with City policies would result in a less than significant impact on trees and the City's urban forest. In addition, the project would comply with the identified Standard Permit Condition and would not conflict with the provisions of the SCVHP. **(Less Than Significant Impact)**

Implementation of the project would not have a substantial adverse impact on any special status plant or animal species. **(Less Than Significant Impact)**

3.4 CULTURAL RESOURCES

3.4.1 Environmental Setting

3.4.1.1 *Regulatory Framework*

State Regulations Regarding Cultural and Paleontological Resources

Archaeological, paleontological, and historical sites are protected by a number of State policies and regulations under the California Public Resources Code, California Code of Regulations (Title 14 Section 1427), and California Health and Safety Code. California Public Resources Code Sections 5097.9-5097.991 require notification of discoveries of Native American remains and provides for the treatment and disposition of human remains and associated grave goods.

Both state law and County of Santa Clara County Code (Sections B6-19 and B6-20) require that the Santa Clara County Coroner be notified if cultural remains are found on a site. If the Coroner determines the remains are those of Native Americans, the Native American Heritage Commission and a "most likely descendant" must also be notified.

Assembly Bill 52 – Tribal Cultural Resources

A tribal cultural resource can be a site, feature, place, or 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. It also must be either on or eligible for the California Historic Register, a local historic register, or the lead agency, at its discretion, chooses to treat the resource as a tribal cultural resource. Assembly Bill 52 (AB 52), which amendment the Public Resources Code, requires lead agencies to participate in formal consultations with California Native American tribes during the CEQA process, if requested by any tribe, to identify tribal cultural resources that may be subject to significant impacts by a project. Where a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document must discuss the impact and whether feasible alternatives or mitigation measures could avoid or substantially lessen the impact. Consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or when it is concluded that mutual agreement cannot be reached.

Paleontological Resources Regulations

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. They range from mammoth and dinosaur bones to impressions of ancient animals and plants, trace remains, and microfossils. These are in part valued for the information they yield about the history of the earth and its past ecological settings. The California Public Resources Code (Section 5097.5) specifies that unauthorized removal of a paleontological resource is a misdemeanor. Under the CEQA Guidelines, a project would have a significant impact on paleontological resources if it will disturb or destroy a unique paleontological resource or site or unique geologic feature.

Envision San José 2040 General Plan

The General Plan includes the following cultural resources policies applicable to the proposed project.

Policy ER-10.2: Recognizing that Native American human remains may be encountered at unexpected locations, impose a requirement on all development permits and tentative subdivision maps that upon discovery during construction, development activity will cease until professional archaeological examination confirms whether the burial is human. If the remains are determined to be Native American, applicable state laws shall be enforced.

Policy ER-10.3: Ensure that City, State, and Federal historic preservation laws, regulations, and codes are enforced, including laws related to archaeological and paleontological resources, to ensure the adequate protection of historic and pre-historic resources.

3.4.1.2 *Existing Setting*

Prehistoric Subsurface Resources

Native Americans occupied Santa Clara Valley and the greater Bay Area for more than 5,000 years. The exact time period of the Ohlone (originally referred to as Costanoan) migration into the Bay Area is debated by scholars. Dates of the migration range between 3,000 B.C. and 500 A.D. Regardless of the actual time frame of their initial occupation of the Bay Area and, in particular, Santa Clara Valley, it is known that the Ohlone had a well-established population of approximately 7,000 to 11,000 people with a territory that ranged from the San Francisco Peninsula and the East Bay south through the Santa Clara Valley and down to Monterey and San Juan Bautista.

The Ohlone lived in small villages referred to as tribelets. Each tribelet occupied a permanent primary habitation site and also had smaller resource procurement camps. The Ohlone, who were hunter/gatherers, traveled between their various village sites to take advantage of seasonal food resources (both plants and animals). During winter months, tribelets would merge to share food stores and engage in ceremonial activities.

Artifacts pertaining to the Ohlone occupation of San José have been found primarily along the City's major waterways. The project site is not in proximity to any local waterways. The nearest waterway is Saratoga Creek, located approximately 1.1 miles west of the project site. Therefore, the potential to discover any artifacts or cultural resources on-site is low.

There are no existing conditions or physical evidence that would suggest the presence of prehistoric resources on-site. There are no recorded prehistoric sites on or adjacent to the project site and no evidence of prehistoric artifacts were found during previous construction activities on-site or on adjacent sites.

Mission Period

Spanish explorers began coming to Santa Clara Valley in 1769. From 1769 to 1776 several expeditions were made to the area during which time the explorers encountered the Native American tribes who had occupied the area since prehistoric times. Expeditions in the Bay Area and throughout

California lead to the establishment of the California Missions and, in 1777, the Pueblo de San José de Guadalupe was established.

The pueblo was originally located northeast of the project site, near the old San José City Hall. This location was prone to flooding and the pueblo was relocated in the late 1780's or early 1790's south to what is now downtown San José. The current intersection of Santa Clara Street and Market Street in downtown San José was the center of the second pueblo. The project site is more than three miles from the second pueblo.

Post-Mission Period to Mid-20th Century

In the mid-1800's, San José began to be redeveloped as America took over the territory from Mexico and new settlers began to arrive in California as a result of the gold rush and the expansion of business opportunities in the west. Development during the post-mission period was concentrated within the downtown area and did not extend to the project site.

After the turn of the century, the project area was utilized as farm land with sparse housing on large tracts of land. Development in the project area primarily occurred after World War II.

From at least 1899 until 1939, the project site was undeveloped. In 1939, the project site was developed with two residences and used as agricultural land. By 1948, the site was developed with two additional residences. By 1969, the majority of the site was developed with the existing apartment complex. There was vacant land on the southeastern portion of the site. By 2013, the remaining apartment building to the southeast was constructed. No significant changes have occurred since 2013. Due to the lack of development on-site prior to 1970, the probability for discovering historic artifacts on-site is low.

Historic Buildings

The existing buildings on the project site were constructed in 1969. The existing structures are not listed on the City's Historic Resources Inventory. The adjacent commercial buildings and residences are not listed on the Historic Resources Inventory and do not appear eligible for the California Register of Historic Resources or the National Register of Historic Places.

Paleontological Resources

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. Based on the underlying geologic formation of the project site, the General Plan FEIR (as amended) found the project site to have a generally high sensitivity (at depth) for paleontological resources. The project site is located in a Holocene sediment area.

3.4.2 Cultural Resources Impacts

3.4.2.1 *Thresholds of Significance*

For the purposes of this EIR, a cultural resources impact is considered significant if the project would:

1. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5;
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5;
3. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
4. Disturb any human remains, including those interred outside of dedicated cemeteries;
5. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
    - 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
    - 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 this criteria, the significance of the resource to a California Native American tribe shall be considered.

3.4.2.2 *Consistency with Plans*

The project would have no impact on historic structure on or off the project site. With implementation of standard permit conditions, the project would be consistent with General Plan Policies ER-10.2 and ER-10.3.

3.4.2.3 *Impacts to Historic Resources (Threshold No. 1)*

Under CEQA, a structure need not be listed on a national, state, or local register to qualify as a significant resource. A structure is considered a significant resource under CEQA if it is found to be eligible for inclusion on a national, state, or local register. Furthermore, a prized architectural style or appealing aesthetic is not the sole determining factor in the historical significance of a structure, as structures can also be significant for association with important persons or events. Public opinions on what is visually appealing or architecturally important change over time, so a structure's aesthetic value may not be appreciated by modern standards. That does not, however, preclude it from being eligible for listing as a historic resource.

The existing buildings on the project site were constructed in 1969 and are not listed on the City of San Jose Historic Resources Inventory. The adjacent commercial buildings and residences are not listed on the Historic Resources Inventory. In addition, the existing and adjacent buildings do not represent a specific type of architectural style and is unlikely to yield any information significant to historic or prehistory. Therefore, implementation of the proposed project would have a less than significant impact on historic resources or structures. **(Less Than Significant Impact)**

3.4.2.4 *Impacts to Archaeological Resources (Threshold Nos. 2 and 4)*

Prehistoric and Historic Subsurface Resources

The site has a low potential for containing prehistoric archaeological resources due to the distance to the nearest waterway (Saratoga Creek), approximately 1.1 miles to the west. Cultivation of the land and development of the project site over the last 75 years has failed to generate reports of any archaeological finds; however, grading and excavation up to 21 feet in depth for the parking garages could uncover and/or damage as yet unrecorded subsurface resources.

The project is not located near a waterway or near any known native occupation area. Therefore, the potential to disturb any prehistoric human remains is low. Nevertheless, the City has Standard Permit Conditions to reduce impacts to subsurface prehistoric and historic archaeological resources, including human remains.

The following Standard Permit Conditions are included in the project to reduce impacts to subsurface prehistoric and historic resources during grading and excavation of the proposed project.

Standard Permit Conditions

Consistent with General Plan policies ER-10.2 and ER-10.3, the following Standard Permit Conditions shall be implemented by the project to reduce or avoid impacts to subsurface cultural resources.

- In the event that prehistoric or historic resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped, the Supervising Environmental Planner and Historic Preservation Officer of the Department of Planning, Building and Code Enforcement will be notified, and a qualified archaeologist will examine the find. The archaeologist will 1) evaluate the find(s) to determine if they meet the definition of a historical or archaeological resource; and (2) make appropriate recommendations regarding the disposition of such finds prior to issuance of building permits. If the finds do not meet the definition of a historical or archaeological resources, no further study or protection is necessary prior to project implementation. If the find(s) does meet the definition of a historical or archaeological resource, then it should be avoided by project activities. Project personnel should not collect or move any cultural material. Fill soils that may be used for construction purposes should not contain archaeological materials.

- If avoidance is not feasible, adverse effects to such resources should be mitigated in accordance with the recommendations of the archaeologist. Recommendations could include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery would be submitted to Supervising Environmental Planner and Historic Preservation Officer of the Department of Planning, Building and Code Enforcement and the Northwest Information Center.

- If any human remains are found during any field investigations, grading, or other construction activities, all provisions of California Health and Safety Code Sections 7054

and 7050.5 and Public Resources Code Sections 5097.9 through 5097.99, as amended per Assembly Bill 2641, shall be followed. In the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The project applicant shall immediately notify the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement and the qualified archaeologist, who will then notify the Santa Clara County Coroner. The Coroner will make a determination as to whether the remains are Native American.

- If the remains are believed to be Native American, the Coroner will contact the NAHC within 24 hours. The NAHC will then designate a Most Likely Descendant (MLD). The MLD will inspect the remains and make a recommendation on the treatment of the remains and associated artifacts.

- If one of the following conditions occurs, the landowner or his authorized representative shall work with the Coroner to reinter the Native American human remains and associated grave goods with appropriate dignity in a location not subject to further subsurface disturbance:
    - The NAHC is unable to identify a MLD or the MLD failed to make a recommendation within 24 hours after being notified by the NAHC.
    - The MLD identified fails to make a recommendation; or
    - The landowner or his authorized representative rejects the recommendation of the MLD, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

With implementation of these Standard Permit Conditions, redevelopment would have a less than significant impact on subsurface cultural resources and human remains. **(Less Than Significant Impact)**

3.4.2.5 *Paleontological Resources (Threshold No. 3)*

As discussed in *Section 3.5.1.4* above, the General Plan FEIR (as amended) found the project site to have a high sensitivity (at depth) for paleontological resources. Geologic units of Holocene age are generally not considered sensitive for paleontological resources, however, mammoth remains were found along the Guadalupe River in San José in 2005.

The project site is located in a Holocene sediment area. Excavation for the proposed underground parking garages would not exceed 21 feet below grade. Due to the project site's location on a younger geologic unit, distance from documented paleontological resources (i.e., the mammoth remains along the Guadalupe River), and existing urban development, the potential to encounter paleontological resources is low. The City would require the project to comply with all applicable City regulatory programs pertaining to unknown buried paleontological resources including the following Standard Permit Conditions for avoiding and reducing construction related paleontological resources impacts.

Standard Permit Conditions

- The project proponent shall ensure all construction personnel receive paleontological awareness training that includes information on the possibility of encountering fossils during construction, the types of fossils likely to be seen, based on past finds in the project areal and proper procedures in the event fossils are encountered. Worker training shall be prepared and presented by a qualified paleontologist.

- If vertebrae fossils are discovered during construction, all work on the site shall stop immediately until a qualified professional paleontologist can assess the nature and importance of the find and recommend appropriate treatment. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds. The project applicant shall be responsible for ensuring that the recommendations of the paleontological monitor regarding treatment and reporting are implemented.

The General Plan FEIR (as amended) concluded that with implementation of existing regulations and adopted General Plan policies, new development within San José would have a less than significant impact on paleontological resources**. (Less Than Significant Impact)**

3.4.2.6 ***Tribal Cultural Resources*** *(Threshold No. 5)*

The project site is located over five miles east of the Guadalupe River, which is considered a highly sensitive area for prehistoric and archaeological deposits, including tribal cultural objects. No other tribal cultural features, including sites, features, places, cultural landscapes or sacred places have been identified based on available information.

Assembly Bill (AB) 52 requires lead agencies to complete formal consultations with California Native American tribes during the CEQA process to identify tribal cultural resources that may be subject to significant impacts by a project. Where a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document must discuss the impact and whether feasible alternatives or mitigation measures could avoid or substantially lessen the impact. This consultation requirement applies only if the tribes have sent written requests for notification of projects to the lead agency. At the time of preparation of this EIR, no Native American tribes that are or have been traditionally and/or culturally affiliated within the project vicinity have requested notification from the City of San José under AB 52 regarding projects in the area and their effects on a tribal cultural resource. **(Less Than Significant Impact)**

3.4.3 Conclusion

Consistent with the findings of the General Plan FEIR (as amended), implementation of the proposed project would have a less than significant impact on historic resources, as well as subsurface cultural and paleontological resources. With implementation of the identified Standard Permit Conditions, the proposed project would have a less than significant impact on buried human remains. **(Less Than Significant Impact)**

3.5 ENERGY

This section was prepared pursuant to CEQA Guidelines Section 15126.4 (a)(1)(C) and Appendix F (Energy Conservation), which require EIRs include a discussion of potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Environmental impacts associated with energy consumption include the depletion of nonrenewable resources (oil, natural gas, coal, etc.) and emissions of pollutants during both the production and consumption phases.

3.5.1 Environmental Setting

3.5.1.1 *Regulatory Framework*

Renewable Energy Standards

In 2002, California established its Renewables Portfolio Standard (RPS) Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2010. In 2006, California's 20 percent by 2010 RPS goal was codified under Senate Bill (SB) 107. Under the provisions of SB 107, investor-owned utilities were required to generate 20 percent of their retail electricity using qualified renewable energy technologies by the end of 2010. In 2008, Executive Order S-14-08 was signed into law and required that retail sellers of electricity serve 33 percent of their load with renewable energy by 2020.

In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 for retail sellers and publicly owned utilities, requires them to procure 50 percent of the state's electricity from renewable sources by 2030.

Building Codes

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6, of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years, and the 2016 Title 24 updates went into effect on January 1, 2017.[14] Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.[15]

In January 2010, the state adopted the California Green Building Standards Code (CALGreen), which established mandatory green building standards for buildings in California. CALGreen was also updated and went in to effect on January 1, 2017. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality.

[14] California Building Standards Commission. "Welcome to the California Building Standards Commission." Accessed: January 30, 2018. Available at: http://www.bsc.ca.gov.
[15] California Energy Commission. "2016 Building Energy Efficiency Standards." Accessed: February 7, 2018. Available at: http://www.energy.ca.gov/title24/2016standards/.

At the local level, the City of San José sets green building standards for municipal development. All projects are required to submit a Leadership in Energy and Environmental Design (LEED)[16], GreenPoint[17], or Build It Green checklist with the development proposal. Private developments are required to implement green building practices if they meet the Applicable Projects criteria defined by Council Policy 6-32 and shown in 3.5-1 below.

Table 3.5-1: Private Sector Green Building Policy Applicable Projects

Applicable Project*	Minimum Green Building Rating
Commercial/Industrial – Tier 1 (Less than 25,000 Square Feet)	LEED Applicable New Construction Checklist
Commercial/Industrial – Tier 2 (25,000 Square Feet or greater)	LEED Silver
Residential – Tier 1 (Less than 10 units)	GreenPoint or LEED Checklist
Residential – Tier 2 (10 units or greater)	GreenPoint Rated 50 points or LEED Certified
High Rise Residential (75 feet or higher)	LEED Certified

Notes: *For mixed-use projects – only that component of the project triggering compliance with the policy shall be required to achieve the applicable green building standard.
Source: City of San José. "Private Sector Green Building." Accessed: February 22, 2018. Available at: http://www.sanjoseca.gov/index.aspx?NID=3284.

3.5.1.2 *Existing Conditions*

Energy consumption is analyzed in an EIR because of the environmental impacts associated with its production and usage. Such impacts include the depletion of nonrenewable resources (e.g., oil, natural gas, coal, etc.) and emissions of pollutants during both the production and consumption phases of energy use.

Energy usage is typically quantified using British thermal units (Btu).[18] As points of reference, the approximate amount of energy contained in a gallon of gasoline, a cubic foot of natural gas, and a kilowatt hour (kWh) of electricity are 123,000 Btu, 1,000 Btu, and 3,400 Btu respectively. Utility providers measure gas usage in therms. One therm is approximately equal to 100,000 Btu.

Electrical energy is expressed in units of kilowatts (kW) and kilowatt hour (kWh). One kW, a measurement of power (energy used over time), equals one thousand joules[19] per second. A kWh is a

[16] Created by the non-profit organization United States Green Building Council, LEED is a certification system that assigns points for green building measures based on a 110-point rating scale.
[17] Created by the California based non-profit organization Build It Green, GreenPoint is a certification system for residential development that assigns points for green building measures based on a 381-point rating scale for multi-family development and 341-point rating scale for single-family developments.
[18] A Btu is the amount of energy that is required to raise the temperature of one pound of water by one degree Fahrenheit.
[19] As defined by the International Bureau of Weights and Measures, the joule is a unit of energy or work. One joule equals the work done when one unit of force (a Newton) moves through a distance of one meter in the direction of the force.

measurement of energy. If run for one hour, a 1,000 watt (one kW) hair dryer would use one kWh of electrical energy. Other measurements of electrical energy include the megawatt (1,000 kW) and the gigawatt (1,000,000 kW).

Total energy usage in California was approximately 7,830 trillion Btu in the year 2016 (the most recent year for which this specific data was available).[20] The breakdown by sector was approximately 18 percent for residential uses, 19 percent for commercial uses, 24 percent for industrial uses, and 39 percent for transportation.[21]

Existing energy use associated with operation of the structures and uses at the project site primarily consists of fuel for vehicle trips to and from the site, electricity for lighting and cooling, and natural gas for operations within the existing buildings. Given the nature of land uses proposed as part of the project, the remainder of this discussion will focus on the three most relevant sources of energy: electricity, natural gas, and gasoline for vehicle trips.

Electricity

The electricity supply in California involves a complex grid of power plants and transmission lines. In 2016, California produced approximately 93 percent of the electricity it consumed and the rest was imported. California's non CO_2-emitting electric generation (from nuclear, large hydroelectric, solar, wind, and other renewable sources) accounted for 50 percent of total in-state generation for 2016, compared to 40 percent in 2015.[22] Electricity supplied from out-of-state, coal-fired power plants has continued to decrease since 2006, following the enactment of a state law requiring California utilities to limit new long-term financial investments to power plants that meet California emissions standards.[23]

California's total system electric generation in 2016 was 290,567 gigawatt-hours (GWh), which was down 1.6 percent from 2015's total generation of 295,405 GWh. California's in-state electric generation was up by approximately one percent at 198,227 GWh compared to 196,195 GWh in 2015, and energy imports were down by 6,869 GWh to 92,341 GWh.[24] In 2016, total in-state solar generation increased 31.5 percent from 2015 levels and wind generation increased 10.8 percent. Growth in annual electricity consumption from traditional power plants declined reflecting increased energy efficiency and higher self-generation from solar photovoltaic power systems. Per capita drops in electrical consumption are predicted through 2027 as a result of energy efficiency gains and increased self-generation (particularly for photovoltaic systems).[25] Due to population increases, however, it is estimated that future demand in California for electricity will grow at approximately

[20] U.S. Energy Information Administration. "California Energy Consumption Estimates 2016." Accessed: July 2, 2018. Available at: https://www.eia.gov/state/?sid=CA#tabs-2.
[21] Ibid.
[22] California Energy Commission. "Total System Electric Generation." Accessed: February 7, 2018. Available at: http://www.energy.ca.gov/almanac/electricity_data/total_system_power.html.
[23] U.S. Energy Information Administration. "California State Profile and Energy Estimates Profile Analysis." Accessed: February 7, 2018. Available at: https://www.eia.gov/state/analysis.php?sid=CA#40.
[24] California Energy Commission. "Total System Electric Generation." Accessed: February 7, 2018. Available at: http://www.energy.ca.gov/almanac/electricity_data/total_system_power.html.
[25] California Energy Commission. "California Energy Demand Updated Forecast, 2017-2027." Accessed: February 7, 2018. Available at: http://docketpublic.energy.ca.gov/PublicDocuments/16-IEPR-05/TN214635_20161205T142341_California_Energy_Demand_Updated_Forecast.pdf.

one percent each year through 2027, and that 319,256 GWh of electricity would be utilized in the state in 2027.[26]

Pacific Gas and Electric Company (PG&E) is the City of San José energy utility provider, providing both natural gas and electricity for residential, commercial, industrial, and municipal uses. PG&E generates or buys electricity from hydroelectric, nuclear, renewable, natural gas, and coal facilities. In 2016, natural gas facilities provided 17 percent of PG&E's electricity delivered to retail customers; nuclear plants provided 24 percent; hydroelectric operations provided 12 percent; renewable energy facilities including solar, geothermal, and biomass provided 33 percent; and 14 percent was unspecified.[27]

Electricity usage for differing land uses varies substantially by the type of uses in a building, the type of construction materials used, and the efficiency of the electricity-consuming devices used. Electricity in Santa Clara County in 2016 was consumed primarily by the commercial sector (77 percent), followed by the residential sector consuming 23 percent. In 2016, a total of approximately 16,777 GWh of electricity was consumed in Santa Clara County.[28]

Natural Gas

In 2016, approximately three percent of California's natural gas supply came from in-state production, while 97 percent was imported from other western states and Canada.[29] California's natural gas is supplied by interstate pipelines, including the Mojave Pipeline, Transwestern Pipeline, Questar Southern Trails Pipeline, Tuscarora Pipeline, and the Baja Norte/North Baja Pipeline.[30] As a result of improved access to supply basins, as well as pipeline expansion and new projects, these pipelines currently have excess capacity. [31]

In 2016, approximately 31 percent of the natural gas delivered for consumption in California was for electricity generation, 36 percent for industrial uses, 19 percent for residential uses, 11 percent for commercial uses, and less than one percent for vehicle fuel. As with electricity usage, natural gas usage depends on the type of uses in a building, the type of construction materials used, and the efficiency of gas-consuming devices. In 2016, California consumed approximately 2.03 billion MBtu of natural gas (or 2.03 quadrillion Btu); a decrease from 2015 when 2.12 billion MBtu were consumed.[32] In Santa Clara County, a total of 42.1 MBtu of natural gas was consumed in 2016.[33]

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[26] Ibid.
[27] Pacific Gas and Electric Company. "Exploring Clean Energy Solutions." Accessed February 22, 2018. Available at: https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page.
[28] California Energy Commission. "Electricity Consumption by County." Accessed: February 21, 2018. Available at: http://ecdms.energy.ca.gov/elecbycounty.aspx.
[29] California Gas and Electric Utilities. "2016 California Gas Report." Accessed: July 14, 2017. Available at: http://docketpublic.energy.ca.gov/PublicDocuments/16-BSTD-06/TN212364_20160720T111050_2016_California_Gas_Report.pdf.
[30] Ibid.
[31] Ibid.
[32] U.S. Energy Information Administration. "Natural Gas Delivered to Consumers in California." Accessed: July 14, 2017. Available at: http://www.eia.gov/dnav/ng/ng_sum_lsum_dcu_SCA_a.htm.
[33] California Energy Commission. "Gas Consumption by County." Accessed: February 21, 2018. Available at: http://ecdms.energy.ca.gov/gasbycounty.aspx.

Gasoline for Motor Vehicles

California crude oil production levels have been declining over the last 30 years; however, the state still accounts for six percent of the United States' crude oil production and petroleum refining capacity.[34] In 2016, 143.4 billion gallons of gasoline were consumed in the U.S. (setting an annual gasoline consumption record) and 15.5 billion gallons were consumed in California.[35,36] The U.S. has seen low gasoline prices and high demand in the last few years, though forecast growth in demand is expected to slow as retail prices begin to increase.[37]

The average fuel economy for light-duty vehicles (autos, pickups, vans, and SUVs) in the U.S. has steadily increased from about 13.1 miles-per-gallon (mpg) in the mid-1970s to 22.0 mpg in 2015.[38] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. That standard, which originally mandated a national fuel economy standard of 35 mpg by the year 2020, applies to cars and light trucks of Model Years 2011 through 2020.[39,40] In 2012, the federal government raised the fuel economy standard to 54.5 mpg for cars and light-duty trucks by Model Year 2025.[41]

3.5.1.3 *Energy Use of Existing Development*

For the purposes of this analysis, it is assumed the 6.9 acres of the 18.9-acre project site proposed for redevelopment does not currently generate energy use. Therefore, the following calculations were conservatively overestimated.

3.5.2 Energy Impacts

3.5.2.1 *Thresholds of Significance*

Based on Appendix F of the CEQA Guidelines, and for the purposes of this EIR, a project will result in a significant energy impact if the project will:

1. Result in a wasteful, inefficient, or unnecessary consumption of energy; or

[34] U.S. Energy Information Administration. "California State Profile and Energy Estimates Profile Analysis." Accessed: February 21, 2018. Available at: https://www.eia.gov/state/analysis.php?sid=CA#40.
[35] U.S. Energy Information Administration. "Frequently Asked Questions." Accessed: February 21, 2018. Available at: https://www.eia.gov/tools/faqs/faq.cfm?id=23&t=10.
[36] California State Board of Equalization. "Taxable Gasoline, Diesel Fuel, Jet Fuel Ten Year Reports." Accessed February 21, 2018. Available at: http://www.cdtfa.ca.gov/taxes-and-fees/MVF_10_Year_Report.pdf.
[37] U.S. Energy Information Administration. "Short-Term Energy Outlook, U.S. Liquid Fuels." Accessed: March 7, 2018. Available at: http://www.eia.gov/forecasts/steo/report/us_oil.cfm.
[38] U.S. Environmental Protection Agency. "Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles." Accessed: February 21, 2018. Available at: http://www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/publications/national_transportation_statistics/html/table_04_23.html.
[39] U.S. Department of Energy. "Energy Independence & Security Act of 2007." Accessed: February 21, 2018. Available at: http://www.afdc.energy.gov/laws/eisa.
[40] Public Law 110–140—December 19, 2007. "Energy Independence & Security Act of 2007." Page 1449. Accessed: February 21, 2018. Available at: http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf.
[41] National Highway Traffic Safety Administration. "Obama Administration Finalizes Historic 54.5 mpg Fuel Efficiency Standards." Accessed: February 21, 2018. Available at: https://www.nhtsa.gov/press-releases/obama-administration-finalizes-historic-545-mpg-fuel-efficiency-standards.

2. Result in a substantial increase in demand upon energy resources in relation to projected supplies.

3.5.2.2 *Estimated Energy Use of the Proposed Project (Threshold Nos. 1 and 2)*

As proposed, the project would construct up to 307residential units in two buildings, approximately 17,800 square feet of retail, and a total of 1,148 new parking spaces. In addition, Construction activities at the project site would take approximately 27 months and would consist of demolition, grading, excavation, and site preparation for construction of the proposed project. Operation of the proposed project would consume energy (in the form of electricity and natural gas) primarily for building heating and cooling, lighting, cooking, and water heating. The following table summarizes the estimated energy use of the proposed project. Existing uses on-site that would remain are not accounted for as that energy usage is already occurring.

Table 3.5-2: Estimated Annual Energy Use of Proposed Development

Development	Electricity Use (kWh)	Natural Gas Use (kBtu)
Proposed Project [1]		
307 Mid-Rise Apartments	1,267,400	2,652,300
17,800 square feet of Strip Mall	190,282	42,186
742 Unenclosed Parking with Elevator	575,792	0
369 Enclosed Parking Spaces with Elevator	862,592	0
Parking Lot with 37 Spaces	5,320	0
Total:	2,901,386	2,694,486

Source: [1] Illingworth & Rodkin, Inc. *Avalon West Valley Expansion Air Quality & GHG Assessment*. Attachment 2. July 10, 2018.
Note: CalEEMod does not have "commercial/retail" land use, so "strip mall" was used.

3.5.2.3 *Site Transportation-Related Energy Use (Threshold Nos. 1 and 2)*

The project would generate up to 1,896 net new daily trips (refer to *Section 3.13.2.3, Trip Generation Estimates*). The total annual VMT for the project would be approximately 4,058,138.[42] Using the U.S. EPA fuel economy estimates (22.0 mpg), the proposed development would have a net increase in consumption of approximately 184,461 gallons of gasoline per year.[43]

3.5.2.4 *Operational Impacts from the Proposed Project (Threshold Nos. 1 and 2)*

As proposed, the project would demolish two parking garages and the leasing/amenity building and pool area directly south of the Saratoga Garage. Implementation of the project would increase electricity use by approximately 2,872,496 kWh and natural gas use by approximately 2,634,026 kBtu. Annual gasoline consumption as a result of the project would increase by approximately 184,461 gallons.

The energy use increase is likely overstated because the estimates for energy use do not take into account the efficiency measures incorporated into the project or the existing uses on the construction

[42] Illingworth & Rodkin, Inc. *Avalon West Valley Expansion Air Quality & GHG Assessment*. July 10, 2018.
[43] 4,058,138 VMT / 22.0 mpg = 184,461 gallons of gasoline

sites. The project would be built to the 2016 CALGreen requirements and Title 24 energy efficiency standards, which would improve the efficiency of the overall project.

As mentioned previously, the annual electricity use in California is estimated to increase approximately one percent each year through 2027. The project would increase annual electricity use by approximately 3,275,736 kWh and would not result in a substantial increase in demand on electrical energy resources. In 2016, California used approximately 2,238,436,067 million Btu of natural gas. Based on the relatively small increase in natural gas demand from the project (2,127,760 kBtu per year) compared to the growth trends in natural gas supply and the existing available supply in California, the proposed project would not result in a substantial increase in natural gas demand relative to projected supplies.

Implementation of the project would increase annual gasoline demand by approximately 184,461 gallons. New automobiles purchased by future occupants of the proposed project would be subject to fuel economy and efficiency standards applied throughout the State of California, which means that over time the fuel efficiency of vehicles associated with the project site would improve. The nearest bus stops, Route 57 and 58, are located along Saratoga Avenue at Blackford Avenue and at Manzanita Drive. As discussed in *Section 3.13.2.7, Pedestrian/Bicycle Facilities and Transit Operations*, existing bus services would be able to accommodate the increase in new riders generated by the proposed project. As a result, implementation of the proposed project would not result in a substantial increase on transportation-related energy uses. **(Less Than Significant Impact)**

3.5.2.5 *Energy Efficiency (Threshold Nos. 1 and 2)*

Construction

The anticipated construction schedule assumes that the project would be built over a period of approximately 27 months (approximately 598 construction workdays), beginning in June 2020. The project would require demolition, site preparation, grading, building construction, paving, and architectural coating. The overall construction schedule and process is already designed to be efficient in order to avoid excess monetary costs. That is, equipment and fuel would not be used wastefully on the site because of the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, the opportunities for future efficiency gains during construction are limited. The proposed project, however, does include several measures that would improve the efficiency of the construction process. Implementation of the City's Standard Permit Conditions detailed in *Section 3.2.3.2, Construction Air Quality Impacts*, would restrict equipment idling times to five minutes or less and would require the applicant to post signs on the project site reminding workers to shut off idle equipment.

Energy is consumed during construction because the use of fuels and building materials are fundamental to construction of new buildings. However, energy would not be wasted or used inefficiently by construction equipment and waste from idling would be further reduced with implementation of the Standard Permit Conditions and MM AIR-1.1 and MM AIR-1.2 outlined in Section 3.2, Air Quality. **(Less Than Significant Impact)**

Operation

The proposed project would be required to build to the State's CALGreen code, which includes insulation and design provisions to minimize wasteful energy consumption. Through the proposed project does not include on-site renewable energy resources, the proposed mixed-use development would be built to achieve LEED Gold certification consistent with San José's Council Policy 6-32.

The proposed project would be required to provide a total of 81 bicycle parking spaces, consistent with the City's bicycle parking requirement. The inclusion of bicycle parking and proximity to transit would incentivize the use of alternative methods of transportation to and from the site.

In addition, at least 50 percent of the hardscape surfaces on the site would have a solar reflectance index (SRI) of 29 or more as required for LEED certification. By including pavement that is more reflective than traditional blacktop surfaces, the project would reduce the heat generated locally by hardscape (known as the 'heat island effect') and, by extension, incrementally reduce the use of air conditioning in the new building. Based on the measures required for LEED Certification, the proposed project would comply with existing state energy standards. **(Less Than Significant Impact)**

3.5.3 Conclusion

The project proposes a mixed-use development consisting of residential and retail development, which would place new residences and jobs at an already developed site in San José. The project would not result in the wasteful use of fuel or energy. Implementation of the project would not result in substantial increase in demand upon energy resources in relation to project supplies. **(Less Than Significant Impact)**

3.6 GEOLOGY AND SOILS/MINERAL RESOURCES

The following discussion is based, in part, on a Soil Resource Report generated from the Natural Resources Conservation Service's website in January 2018. A copy of this report is attached in Appendix D of this document.

3.6.1 Environmental Setting

3.6.1.1 *Regulatory Framework*

Mineral Resources and the Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA) was enacted by the California Legislature in 1975 to address the need for a continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property and the environment. SMARA mandated the initiation by the state Geologist of mineral land classification in order to help identify and protect mineral resources in areas within the state subject to urban expansion or other irreversible land uses which would preclude mineral extraction. SMARA also allowed the State Mining and Geology Board, after receiving classification information from the state Geologist, to designate lands containing mineral deposits of regional or statewide significance. Pursuant to the mandate of the Surface Mining and Reclamation Act of 1975 (SMARA), the State Mining and Geology Board has designated the Communications Hill Area (Sector EE), bounded generally by the Southern Pacific Railroad, Curtner Avenue, SR 87, and Hillsdale Avenue as containing mineral deposits that are of regional significance as a source of construction aggregate materials. Neither the state Geologist nor the State Mining and Geology Board have classified any other areas in San José as containing mineral deposits of statewide significance or requiring further evaluation.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed into law following the destructive 1971 San Fernando earthquake. The Act ensures public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. Local agencies are responsible for regulating most development projects within designated fault zones. Alquist-Priolo maps are distributed to affected cities, counties, and state agencies for their use in planning and controlling new construction.

Seismic Hazards Mapping Act

Following the 1989 Loma Prieta earthquake, the Seismic Hazards Mapping Act (SHMA) was passed by the California legislature in 1990. The SHMA (Public Resources Code, Chapter 7.8, Section 2690-2699.6) directs the Department of Conservation, California Geological Survey to identify and map areas prone to liquefaction, earthquake-induced landslides and amplified ground shaking. It also requires that agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the identified hazard is present and the inclusion of appropriate mitigation to reduce earthquake-related hazards.

California Building Standards Code

Title 24 of the California Code of Regulations, known as the California Building Standards Code (CBSC) contains the regulations that govern the construction of buildings in California. Through the CBSC, the state provides a minimum standard for building design and construction. The CBSC contains specific requirements for seismic safety, excavation, foundations, retaining walls and site demolition. It also regulates grading activities, including drainage and erosion control.

The California Building Code (CBC) refers to Part 2 of the CBSC in Title 24 of the California Code of Regulations. The CBC covers grading and other geotechnical issues, building specifications, and non-building structures. The CBC requires that a site-specific geotechnical investigation report be prepared by a licensed professional for proposed developments. The purpose of a site-specific geotechnical investigation is to identify seismic and geologic conditions that require project mitigation, such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is renewed on a triennial basis (every three years).

City of San José Municipal Code

Title 24 of the San José Municipal Code includes the 2016 California Building, Plumbing, Mechanical, Electrical, Existing Building, and Historical Building Codes. The Building Codes include requirements for building foundations, walls, and seismic resistant design. Requirements for building safety and earthquake hazard reduction are also addressed in Chapter 17.40 (Dangerous Buildings) and Chapter 17.10 (Geologic Hazards Regulations) of the City's Municipal Code. Requirements for grading, excavation, and erosion control are included in Chapter 17.04 (Building Code, Part 6 Excavation and Grading). In accordance with the Municipal Code, the Director of Public Works must issue a Certificate of Geologic Hazard Clearance prior to the issuance of grading and building permits within defined geologic hazard zones.

Envision San José 2040 General Plan

The General Plan includes the following geology and soils policies applicable to the proposed project.

Policy EC-3.1: Design all new or remodeled habitable structures in accordance with the most recent California Building Code and California Fire Code as amended locally and adopted by the City of San José, including provisions regarding lateral forces.

Policy EC-4.1: Design and build all new or remodeled habitable structures in accordance with the most recent California Building Code and municipal code requirements as amended and adopted by the City of San José, including provisions for expansive soil, and grading and storm water controls.

Policy EC-4.2: Approve development in areas subject to soils and geologic hazards, including unengineered fill and weak soils and landslide-prone areas, only when the severity of hazards have been evaluated and if shown to be required, appropriate mitigation measures are provided. New development proposed within areas of geologic hazards shall not be endangered by, nor contribute to, the hazardous conditions on the site or on adjoining properties. The City of San José Geologist will

review and approve geotechnical and geological investigation reports for projects within these areas as part of the project approval process.

Policy EC-4.4: Require all new development to conform to the City of San José's Geologic Hazard Ordinance.

Policy EC-4.5: Ensure that any development activity that requires grading does not impact adjacent properties, local creeks, and storm drainage systems by designing and building the site to drain properly and minimize erosion. An Erosion Control Plan is required for all private development projects that have a soil disturbance of one acre or more, adjacent to a creek/river, and/or are located in hillside areas. Erosion Control Plans are also required for any grading occurring between October 15 and April 15.

Policy EC-4.7: Consistent with the San José Geologic Hazard Ordinance, prepare geotechnical and geological investigation reports for projects in areas of known concern to address the implications of irrigated landscaping to slope stability and to determine if hazards can be adequately mitigated.

Action EC-4.11: Require the preparation of geotechnical and geological investigation reports for projects within areas subject to soils and geologic hazards, and require review and implementation of mitigation measures as part of the project approval process.

Action EC-4.12: Require review and approval of grading plans and erosion control plans (if applicable) prior to issuance of Grading Permits by the Director of Public Works.

Policy ES-4.9: Permit development only in those areas where potential danger to health, safety, and welfare of the persons in that area can be mitigated to an acceptable level.

3.6.1.2 *Existing Conditions*

Regional Geology

The City of San José is located within the Santa Clara Valley, which is a broad alluvial plain that lies between the Santa Cruz Mountains to the southwest and west, and the Diablo Range to the northeast. The San Andreas Fault system, including the Monte Vista-Shannon Fault, exists within the Santa Cruz Mountains and the Hayward and Calaveras Fault systems exist within the Diablo Range.

On-Site Geologic Conditions

Topography and Soils

The project site is relatively flat and is underlain by the Urbanland-Stevenscreek complex of zero to two percent slopes. Soils at the site consist of Holocene alluvial fan deposits, a mixture of fine grained sand, silt, and clay. The superficial soils have moderate to high expansion potential.

Groundwater

Groundwater at the project site has been encountered at a depth of approximately 49 feet below ground surface (bgs). Fluctuations in the groundwater level may occur due to seasonal changes, variations in rainfall and underground drainage patterns, and other factors.

Seismicity and Seismic-Related Hazards

The San Francisco Bay Area is one of the most seismically active regions in the U.S. The significant earthquakes that occur in the Bay Area are generally associated with the crustal movements along well-defined active fault zones of the San Andreas Fault system, which regionally trend in a northwesterly direction.

The site is not located within a designated Alquist-Priolo Earthquake Fault Zone or Santa Clara County Fault Hazard Zone[44]. As discussed in the General Plan FEIR (as amended), no known surface expressions of active faults cross the site; therefore, fault rupture is not a significant geologic hazard on the project site.

Nearby active or potentially active faults include the Hayward, Monte Vista-Shannon, Calaveras, and San Andreas faults. The distance from the project site to these faults is shown in Table 3.6-1. Due to the proximity of the project site to these active faults, ground shaking, ground failure, and/or liquefaction as a result of an earthquake could cause damage to structures. The nearest fault to the project site is the Monte Vista-Shannon fault.

Table 3.6-1: Active Faults Near the Project Site

Fault	Distance and Location from Project Site
Hayward (Southeast Extension)	8.6 miles northeast
Hayward (total length)	11.5 miles northeast
Monte Vista-Shannon	4.7 miles southwest
Calaveras	13.0 miles northeast
San Andreas	7.5 miles west

Liquefaction

Liquefaction is a result of seismic activity and is characterized as the transformation of loose, water-saturated soils from a solid state to a liquid state during ground shaking. There are many variables that contribute to liquefaction, including the age of the soil, soil type, soil cohesion, soil density, and groundwater level. Soils susceptible to liquefaction include loose- to medium-dense sand and gravel, low-plasticity silt, and some low-plasticity clay deposits.

[44] County of Santa Clara. Geologic Hazards Zones, Map 19. 2012. Available at https://www.sccgov.org/sites/dpd/DocsForms/Documents/GEO_GeohazardATLAS.pdf. Accessed January 12, 2018.

The project site is not located within a State of California Hazard Zone for liquefaction or Santa Clara County Liquefaction Hazard Zone[45]. Given the on-site soil type, soil density, and depth to groundwater, the potential for liquefaction on-site during seismic shaking is considered low.

Lateral Spreading

Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying alluvial material toward an open or "free" face, such as an open body of water, channel, or excavation. There are no creeks or open bodies of water adjacent to the project site where lateral spreading could occur; therefore, the potential for lateral spreading to affect the site is low.

Landslides

The site is not located within a California Seismic Hazard Zone for landslides or within a Santa Clara County Landslide Hazard Zone[46]. Additionally, the project area is relatively flat. Thus, the probability of landslides occurring at the site during a seismic event is low.

Mineral Resources

Mineral resources known to exist in and near the Santa Clara Valley include cement, sand, gravel, crushed rock, clay, and limestone. Santa Clara County has also supplied a significant portion of the nation's mercury over the past century. Pursuant to the mandate of the Surface Mining and Reclamation Act of 1975 (SMARA), the State Mining and Geology Board has designated the Communications Hill Area, bounded generally by the Union Pacific Railroad, Curtner Avenue, State Route 87, and Hillsdale Avenue as a source of construction aggregate materials.

Neither the State Geologist nor the State Mining and Geology Board has classified any other areas in San José as containing mineral deposits which are either of statewide significance or the significance of which requires further evaluation. Therefore, other than the Communications Hill area cited above, San José does not have mineral deposits subject to SMARA. Communications Hill is located approximately six miles southeast of the project site.

3.6.2 Geology and Soils and Mineral Resources Impacts

3.6.2.1 *Thresholds of Significance*

For the purposes of this EIR, a geology and soils impact is considered significant if the project would:

1. Expose people or structures to 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 (refer to Division of Mines and Geology Special Publication 42);

[45] County of Santa Clara. Geologic Hazards Zones, Map 19. 2012. Accessed on January 12, 2018. Available at: https://www.sccgov.org/sites/dpd/DocsForms/Documents/GEO_GeohazardATLAS.pdf.
[46] Ibid.

- Strong seismic ground shaking;
- Seismic-related ground failure, including liquefaction;
- Landslides;

2. Result in substantial soil erosion or the loss of topsoil; or
3. 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;
4. Be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2016), creating substantial risks to life or property;
5. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.
6. Result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state; or
7. Result in the loss of availability of locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

3.6.2.2 *Consistency with Plans*

The proposed project would be required to be built in conformance with a site-specific geotechnical report and the most recent CBC requirements. In addition, the project would be required to comply with the identified Standard Permit Conditions (refer to *Section 3.6.2.4* below) to avoid and reduce construction-related erosion impacts. As a result, the project would be consistent with Policies EC-3.1, EC-4.1, EC-4.2, EC-4.4, EC-4.5, EC-4.7, and ES-4.9.

3.6.2.3 ***Seismic Risk*** *(Threshold No. 1)*

The project site is located within the San Francisco Bay Area, which has a 72 percent probability of experiencing at least one magnitude 6.7 earthquake during the next 26 years.[47] The site would experience intense ground shaking in the event of a large earthquake.

The site and surrounding areas are relatively flat. The area is not exposed to soil erosion or landslides. The project site is not located near creeks or channels. As a result, the potential for lateral spreading is very low. Construction of the proposed project would not exacerbate soil conditions such that it would cause off-site impacts. **(Less Than Significant Impact)**

3.6.2.4 ***Soil Erosion*** *(Threshold No. 2)*

The project site is flat and exposed soil is limited to small landscaped areas. Ground disturbance would be required for removal of the existing structures and pavement, grading, trenching, and construction of the proposed project. Ground disturbance would expose soils and increase the potential for wind- or water-related erosion and sedimentation at the site until construction is complete.

[47] U.S. Geological Survey. "UCERF3: A New Earthquake Forecast for California's Complex Fault System. Fact Sheet 2015-3009." March 2015. Accessed: June 25, 2018. Available at: http://pubs.usgs.gov/fs/2015/3009/pdf/fs2015-3009.pdf.

The City's NPDES Municipal Permit, urban runoff policies, and the Municipal Code (which are discussed in more detail in Section 4.8, *Hydrology and Water Quality*) are the primary means of enforcing erosion control measures through the Grading Permit and Building Permit process. In addition, a site-specific erosion control plan would be required between October 1st and April 30th, which is the City's observed rainy season. The General Plan FEIR (as amended) concluded that with the regulatory programs currently in place, the impact of accelerated erosion during construction would be less than significant. Additionally, the City would require the project to comply with all applicable City regulatory programs pertaining to construction related erosion including the following Standard Permit Conditions for avoiding and reducing construction related erosion impacts.

Standard Permit Conditions

- All excavation and grading work shall be scheduled in dry weather months or construction sites will be weatherized.
- Stockpiles and excavated soils shall be covered with secured tarps or plastic sheeting.
- Ditches shall be installed, if necessary, to divert runoff around excavations and graded areas.

Because the project would be required to comply with the Standard Permit Conditions, regulations identified in the General Plan FEIR (as amended), City policies, and Municipal Code regulations, implementation of the proposed project would have a less than significant soil erosion impact. **(Less Than Significant Impact)**

3.6.2.5 *Unstable Geologic Unit (Threshold No. 3)*

The site is flat and not subject to landslide, lateral spreading, or subsidence issues. The project site is not located in an area prone to liquefaction, nor is it within a state- or county-designated landslide hazard zone. While the site's risk from unstable geologic conditions is low, the project would still be required to conform to the requirements and policies of the General Plan and adhere to the CBC (through issuance of a City of San José building permit). Conformance would further reduce any potential impacts as a result of unstable geologic units. Consistent with the findings of the General Plan FEIR (as amended), impacts would be less than significant. **(Less Than Significant Impact)**

3.6.2.6 *Expansive Soils (Threshold No. 4)*

The project site is underlain by soils that have a moderate to high expansion potential. To address this potential geologic hazard, prior to issuance of any site-specific grading or building permits, a design-level geotechnical investigation would be prepared and submitted to the City of San José Public Works Department for review and approval (consistent with General Plan Policy EC 4.1). The project would implement the recommendations in the investigation to minimize impacts from expansive soils, which would reduce impacts to a less than significant level. **(Less Than Significant Impact)**

3.6.2.7 *Groundwater (Threshold Nos. 1, 3, and 4)*

The project requires excavation to a depth of approximately 21 feet bgs for construction of the underground parking garages. As mentioned previously, groundwater on-site has been encountered at a depth of approximately 49 feet bgs. Therefore, excavation on-site would not extend near or below 49 feet bgs. The project would not expose people or structures to potential substantial adverse effects involving groundwater. **(Less Than Significant Impact)**

3.6.2.8 *Septic Tanks and Wastewater Disposal (Threshold No. 5)*

The project site is located within an urbanized area of San José where sewers are available to dispose of wastewater from the project site. No septic system would be required for the proposed project; therefore, no impacts related to septic systems would occur. **(No Impact)**

3.6.2.9 *Mineral Resources (Threshold Nos. 6 and 7)*

The project site is not located in an area designated as containing regionally or locally significant mineral resources. **(No Impact)**

3.6.2.10 *Existing Geologic Conditions Affecting the Project (Threshold Nos. 1 – 4)*

As noted previously, on December 17, 2015, the California Supreme Court issued an opinion in CBIA vs. BAAQMD holding that CEQA is primarily concerned with the impacts of a project on the environment and generally does not require agencies to analyze the impact of existing conditions on a project's future users or residents unless the project risks exacerbating those environmental hazards or risks that already exist. Nevertheless, the City has policies and regulations that address existing conditions affecting a proposed project, which are discussed in the following sections.

On-Site Seismic Conditions

The policies within the General Plan have been adopted for the purpose of avoiding or mitigating environmental effects resulting from planned development within the City. New development proposed within areas of geologic hazards shall not be endangered by, nor contribute to, the hazardous conditions on-site or on adjoining properties. To ensure this, General Plan Action EC-4.11 requires the City of San José Geologist to review and approve geotechnical investigation reports for projects within areas subject to soils and geologic hazards as part of the project approval process. In addition, Policy EC-4.4 requires all new development to conform to the City of San José's Geologic Hazard Ordinance to ensure that proposed development sites are suitable.

As discussed in *Section 3.6.1.2, Existing Conditions*, the project site is located within a seismically active region in the U.S. The soils on-site have moderate to high expansion potential which could damage the proposed buildings and other improvements on the project site. As discussed in the General Plan FEIR (as amended), differential settlements, structural damage, warping and cracking of roads and sidewalks, and rupture of utility lines may occur if expansive soils and undocumented fill are not considered during project design and construction. Additionally, the site could experience very strong ground shaking during a seismic event.

To address these potential soils geologic and seismic hazards, the proposed project would be built and maintained in accordance with the design-specific geotechnical investigation and applicable regulations including the most recent CBC, which contains the regulations that govern the construction of structures in California. The General Plan FEIR (as amended) concluded that adherence to the CBC would reduce seismic-related impacts and ensure new development proposed within areas of geologic hazards would not be endangered by the hazardous conditions on the site.

Because implementation of the proposed project would comply with the design-specific geotechnical report, the CBC, and regulations identified in the General Plan FEIR that ensure geologic hazards are adequately addressed, the project would comply with Policies EC-4.2 and EC-4.4 and Action EC-4.11 in the General Plan.

3.6.3 Conclusion

Implementation of the proposed project would not result in new or more significant geologic and seismic-related hazards to adjacent or nearby uses. **(Less Than Significant Impact)**

The proposed project would not result in the loss of availability of any known mineral resources. **(No Impact)**

3.7 GREENHOUSE GAS EMISSIONS

The following discussion is based upon an Air Quality and Greenhouse Gas Assessment prepared by *Illingworth & Rodkin, Inc.* in July 2018 and a Supplemental Memo prepared in November 2018. The reports are attached in Appendix B of this document.

3.7.1 Environmental Setting

Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of greenhouse gases (GHGs) have a broader, global impact. Global warming is a process whereby GHGs accumulating in the atmosphere contribute to an increase in temperature of the earth's atmosphere. The principal GHGs contributing to global warming and associated climate change are CO_2, methane (CH_4), nitrous oxide (N_2O), and fluorinated compounds. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial, and agricultural sectors.

3.7.1.1 *Regulatory Framework*

Clean Air Act

The U.S. EPA is the federal agency responsible for implementing the Clean Air Act (CAA). The US Supreme Court in its 2007 decision in *Massachusetts et al. v. Environmental Protection Agency et al.,* ruled that CO_2 is an air pollutant as defined under the CAA, and that EPA has the authority to regulate emissions of GHGs. Following the court decision, EPA has taken actions to regulate, monitor, and potentially reduce GHG emissions (primarily mobile emissions).

Global Warming Solutions Act

Under the California Global Warming Solution Act, also known as Assembly Bill 32 (AB 32), CARB established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHG, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions will be achieved from significant GHG sources.

In 2016, Senate Bill 32 (SB 32) was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to express the 2030 statewide target in terms of million metric tons of carbon dioxide equivalent ($MMTCO_2e$). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 $MMTCO_2e$.

Senate Bill 375

SB 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. SB 375 builds upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035, as compared to 2005 emissions levels. The per-capita GHG emissions reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission (MTC) partnered with the Association of Bay Area Governments (ABAG), BAAQMD, and Bay Conservation and Development Commission to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as Plan Bay Area. Plan Bay Area establishes a course for reducing per-capita GHG emissions through the promotion of compact, high-density, mixed-use neighborhoods near transit, particularly within identified Priority Development Areas (PDAs). The project site is located within a PDA.[48]

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars program in 2012 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing (criteria) pollutants and GHG emissions into a single coordinated set of requirements for model years 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.[49]

Bay Area 2017 Clean Air Plan

Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

City of San José Municipal Code

The City's Municipal Code includes the following regulations that would reduce GHG emissions from future development:

- Green Building Regulations for Private Development (Chapter 17.84)
- Water Efficient Landscape Standards for New and Rehabilitated Landscaping (Chapter 15.10)
- Transportation Demand Programs for employers with more than 100 employees (Chapter 11.105)
- Construction and Demolition Diversion Deposit Program (Chapter 9.10)
- Wood Burning Ordinance (Chapter 9.10)

Envision San José 2040 General Plan and Greenhouse Gas Reduction Strategy

The General Plan includes strategies, policies, and action items that are incorporated in the City's GHG Reduction Strategy to help reduce GHG emissions. Multiple policies and actions in the General

[48] City of San José. "Priority Development Areas." Accessed: June 27, 2018. Available at: http://www.sanjoseca.gov/index.aspx?NID=2041.
[49] California Air Resources Board. "The Advanced Clean Cars Program." Accessed: June 27, 2018. Available at: https://www.arb.ca.gov/msprog/acc/acc.htm.

Plan have GHG implications, including land use, housing, transportation, water usage, solid waste generation and recycling, and reuse of historic buildings. The City's Green Vision, as reflected in these policies, also has a monitoring component that allows for adaptation and adjustment of City programs and initiatives related to sustainability and associated reductions in GHG emissions. The GHG Reduction Strategy is intended to meet the mandates outlined in the CEQA Guidelines, as well as the BAAQMD requirements for Qualified GHG Reduction Strategies.

The City's GHG Reduction Strategy identifies GHG emissions reduction measures to be implemented by development projects as part of three categories: built environment and energy, land use and transportation, and recycling and waste reduction. Some measures are mandatory for all proposed development projects and others are voluntary. Voluntary measures could be incorporated as mitigation measures for proposed projects, at the City's discretion.

The environmental impacts of the GHG Reduction Strategy were analyzed in the General Plan FEIR as supplemented. Beyond 2020, the emission reductions in the GHG Reduction Strategy are not large enough to meet the City's identified 3.04 metric tons (MT) CO_2e/SP efficiency metric for 2035. An additional reduction of 5,392,000 MT CO_2e per year would be required for the projected service population to meet the City's target for 2035.[50]

Achieving the substantial communitywide GHG emissions reductions needed beyond 2020 cannot be done alone with the measures identified in the GHG Reduction Strategy adopted by the City Council in 2015. The General Plan FEIR disclosed that it would require an aggressive multiple-pronged approach that includes policy decisions and additional emission controls at the federal and state level, new and substantially advanced technologies, and substantial behavioral changes to reduce single occupant vehicle trips—especially to and from work places. Future policy and regulatory decisions by other agencies (such as CARB, California Public Utilities Commission, California Energy Commission, MTC, and BAAQMD) and technological advances are outside the City's control, and therefore could not be relied upon as feasible mitigation strategies at the time of the latest revisions to the GHG Reduction Strategy (e.g., when the Final Supplemental FEIR to the General Plan FEIR was certified on December 15, 2015). Thus, the City Council adopted overriding considerations for the identified cumulative impact for the 2035 timeframe.

The General Plan includes an implementation program for monitoring, reporting progress on, and updating the GHG Reduction Strategy over time as new technologies or practical measures are identified. Implementation of future updates is called for in General Plan Policies IP-3.7 and IP-17.2 and embodied in the GHG Reduction Strategy. The City of San José recognizes that additional strategies, policies and programs, to supplement those currently identified, would ultimately be required to meet the mid-term 2030 reduction target of 40 percent below 1990 levels in the GHG Reduction Strategy and the target of 80 percent below 1990 emission levels by 2050.

The General Plan includes the following GHG policies applicable to the proposed project.

[50] As described in General Plan FEIR, the 2035 efficiency target above, reflects a straight line 40 percent emissions reduction compared to the projected citywide emissions (10.90 MT CO_2e) for San José in 2020. It was developed prior to issuance of Executive Order S-30-15 in April 2015, which calls for a statewide reduction target of 40 percent by 2030 (five years earlier) to keep on track with the more aggressive target of 80 percent reduction by 2050. The necessary information to estimate a second mid-term or interim efficiency target (e.g., statewide emissions, population and employment in 2030) is being developed by CARB.

Policy MS-2.11: Require new development to incorporate green building practices, including those required by the Green Building Ordinance. Specifically, target reduced energy use through construction techniques (e.g., design of building envelopes and systems to maximize energy performance), through architectural design (e.g. design to maximize cross ventilation and interior daylight) and through site design techniques (e.g. orienting buildings on sites to maximize the effectiveness of passive solar design).

Policy MS-14.4: Implement the City's Green Building Policies so that new construction and rehabilitation of existing buildings fully implements industry best practices, including the use of optimized energy systems, selection of materials and resources, water efficiency, sustainable site selection, passive solar building design, and planting of trees and other landscape materials to reduce energy consumption.

3.7.1.2 *Existing Conditions*

The project site is currently developed with 873 residential apartment units and three parking garages. Operation of these buildings generates GHG emissions from motor vehicles traveling to and from the site, and electricity and natural gas usage for lighting, heating and cooling, etc.

3.7.2 Greenhouse Gas Emissions Impacts

3.7.2.1 *Thresholds of Significance*

For the purposes of this EIR, a greenhouse gas emissions impact is considered significant if the project would:

1. Generate a greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

As described previously, BAAQMD adopted thresholds of significance to assist in the review of projects under CEQA. These thresholds were designed to establish the level at which BAAQMD has determined that GHG emissions would cause significant environmental impacts. The significance thresholds identified by BAAQMD are 1,100 MT of CO_2e per year OR 4.6 MT CO_2e per service population per year. In addition, a project that is in compliance with the City's Climate Action Plan (a qualified GHG Reduction Strategy) is considered to have a less than significant GHG impact.

The numeric thresholds set by BAAQMD were calculated to achieve the state's 2020 target of 1990 GHG levels. The project is anticipated to take approximately 27 months to complete, starting in 2020 and finishing in 2023. The project, therefore, would not be fully constructed and occupied until after December 31, 2020.

The state has completed a Scoping Plan which will be utilized by BAAQMD to establish the 2030 efficiency threshold. The efficiency threshold would need to be met by individual projects in order for state and local governments to comply with the SB 32 2030 reduction target. At this time BAAQMD has not published a quantified threshold for 2030. For the purposes of this analysis,

however, a Substantial Progress efficiency metric of 2.6 MT CO_2e/year/service population has been calculated for 2030 based on the GHG reduction goals of Senate Bill 32 and Executive Order B-30-15, taking into account the 1990 inventory and the projected 2030 statewide population and employment levels.

3.7.2.2 *Consistency with Plans (Threshold Nos. 1 and 2)*

Consistency with the San José Greenhouse Gas Reduction Strategy

Per CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. Since the project is consistent with planned growth under the City's General Plan, compliance with the mandatory measures and voluntary measures required by the City would ensure its consistency with the City's GHG Reduction Strategy.

The proposed project's consistency with these measures is detailed below.

Mandatory Criteria

1. Consistency with the Land Use/Transportation Diagram (General Plan Goals/Policies IP-1, LU-10)

2. Implementation of Green Building Measures (GP Goals: MS-1, MS-2, MS-14)
   - Solar Site Orientation
   - Site Design
   - Architectural Design
   - Construction Techniques
   - Consistency with City Green Building Ordinances and Policies
   - Consistency with GHGRS Policies: MS-1.1, MS-1.2, MC-2.3, MS-2.11, and MS-14.4

3. Pedestrian/Bicycle Site Design Measures
   - Consistency with Zoning Ordinance
   - Consistency with GHGRS Policies: CD-2.1, CD-3.2, CD-3.3, Cd-3.4, CD-3.6, CD-3.8, CD-3.10, CD-5.1, LU-5.4, LU-5.5, LU-9.1, TR-2.8, TR-2.11, TR-2.18, TR-3.3, TR-6.7

4. Salvage building materials and architectural elements from historic structures to be demolished to allow re-use (General Plan Policy LU-16.4), if applicable;

5. Complete an evaluation of operational energy efficiency and design measures for energy-intensive industries (e.g. data centers) (General Plan Policy MS-2.8), if applicable;

6. Preparation and implementation of the Transportation Demand Management (TDM) Program at large employers (General Plan Policy TR-7.1), if applicable; and

7. Limits on drive-through and vehicle serving uses; all new uses that serve the occupants of vehicles (e.g. drive-through windows, car washes, service stations) must not disrupt pedestrian flow. (General Plan Policy LU-3.6), if applicable.

While the current General Plan designation has a maximum height, the project is not substantially changing the type of uses allowed in the General Plan designation. The project, would be allowed to increase the existing allowable density if it meets the criteria of a signature project (IP-5.10). The project is currently consistent with the General Plan policies that would allow for these type of uses. Furthermore, the project would be completed after 2020, and therefore has completed its own GHG analysis below. Based on the analysis, the project will continue to be consistent with state policies and goals for GHG reduction.

In addition, the buildings would be constructed in compliance with the San José Green Building Ordinance (Policy 6-32) and CBC requirements. In addition, the project would be designed to achieve LEED Gold certification consistent with City Policy 6-32. Bicycle parking would be provided consistent with San José requirements, though the final quantity would be determined at the development permit stage. Because the project is consistent with planned growth under the City's General Plan and would comply with Policy 6-32 and CBC requirements, the project would be consistent with mandatory criteria 1, 2, and 3.

The proposed project would be constructed consistent with the City's required green building measures. Therefore, the project would be consistent with Criteria 2. Criteria 4, 5, and 7 are not applicable to the proposed project because the project does not include a data center or other energy-intensive use, or drive-through or vehicle serving uses.

The project proposes a total of up to 307 residential units within two buildings, approximately 17,800 square feet of retail, and a new stand-alone parking structure. There is no space provided for large employers within the building. Therefore, Criteria 6 is not applicable to the project.

Voluntary Criteria

Table 3.7-1 provides a summary of the voluntary criteria and describes the proposed project's compliance with each criterion.

Table 3.7-1: Voluntary Greenhouse Gas Reduction Strategy Criteria

Policies	Description of Project Measure	Project Conformance/ Applicability
BUILT ENVIRONMENT AND RECYCLING		
Installation of solar panels or other clean energy power generation sources on development sites, especially over parking areas MS-2.7, MS-15.3, MS-16.2	Solar panels are not included as a component of the proposed project.	☐ Proposed ☒ Not Proposed or ☐ Not Applicable

Table 3.7-1: Voluntary Greenhouse Gas Reduction Strategy Criteria		
Policies	**Description of Project Measure**	**Project Conformance/ Applicability**
Use recycled water wherever feasible and cost-effective (including non-residential uses outside of the Urban Service Area) MS-17.2, MS-19.4	Recycled water is not currently available to serve the project site.	☐ Required/Proposed ☐ Not Proposed or ☒ Not Applicable
TRANSPORTATION AND LAND USE		
Limit parking above code requirements TR-8.4	The number of parking spaces proposed by the project is above the City's code requirements.	☒ Project is Parked at or below Code Requirements ☐ Project is Parked above Code Requirements or ☐ Not Applicable
Car share programs. Promote car share programs to minimize the need for parking spaces TR-8.5	Car sharing programs are not proposed as part of the project.	☐ Proposed ☒ Not Proposed or ☐ Not Applicable
Consider opportunities for reducing parking spaces (including measures such as shared parking, TDM, and parking pricing to reduce demand) TR-8.12	The number of parking spaces proposed by the project is above the code requirements.	☐ Proposed ☒ Project Does Not Propose or ☐ Not Applicable

The proposed project is consistent with the applicable mandatory GHG Reduction Strategy goals and policies intended to reduce GHG emissions. **(Less than Significant Impact)**

Envision San José 2040 General Plan

The project is consistent with planned growth anticipated under full build out of the General Plan and would meet the requirements of the City's GHG Reduction Strategy. The project would also be required to comply with City Policy 6-32. The project would provide pedestrian and bicycle connections through the site to nearby transit and services and provide bicycle parking, consistent with San José requirements. Therefore, the project is consistent with Policies CD-3.2, CD-5.1, MS-2.11, MS-14.4, and TR-3.3.

3.7.2.3 *Greenhouse Gas Emissions (Threshold Nos. 1 and 2)*

Construction

The proposed development would result in temporary increases in GHG emissions associated with construction activities including operation of construction equipment and emissions from construction workers' personal vehicles traveling to and from the project site. The project would implement the identified Standard Permit Conditions during all phases of construction to reduce dust and other particulate matter emissions as discussed in *Section 3.2.3.2, Construction Air Quality Impacts*. Construction related GHG emissions vary depending on the level of activity, length of the construction period, specific construction operations, types of equipment, and number of personnel. Because construction would be temporary and would not result in a permanent increase in emissions, the project would not interfere with the implementation of AB 32 in 2020 or SB 32 in 2030. **(Less Than Significant Impact)**

Operation

BAAQMD adopted revised CEQA Air Quality Guidelines on June 2, 2010 and then adopted a modified version of the Guidelines in May 2017. The BAAQMD CEQA Air Quality Guidelines include thresholds of significance for GHG emissions. Pursuant to the latest CEQA Air Quality Guidelines, a local government may prepare a Qualified Greenhouse Gas Reduction Strategy that is consistent with AB 32 goals. If a project is consistent with an adopted Qualified Greenhouse Gas Reduction Strategy, it can be presumed that the project would not have significant GHG emissions under CEQA.[51]

BAAQMD also developed a quantitative threshold for project- and plan-level analyses based on estimated GHG emissions, as well as per service population metrics. These thresholds are the basis for which post-2020 GHG thresholds have been developed at the project level (2024) and plan level (2040).

The BAAQMD GHG recommendations include a specific plan-and project-level GHG emission efficiency metric of 4.6 MT of CO_2e per service population (future residences and full-time workers) per year as the average efficiency to achieve the 2020 AB 32 statewide targets. GHG emissions resulting from operation of the project at maximum build out have been compared to an efficiency metric threshold consistent with state goals detailed in SB 32 EO B-30-15 and EO S-3-05 to reduce GHG emissions by 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050, respectively. Though BAAQMD has not published a quantified threshold for 2030 yet, this assessment uses a "Substantial Progress" efficiency metric of 2.6 MT CO2e/year/service population. This is calculated for 2030 based on the GHG reduction goals of SB32/EO B-30-15, taking into account the 1990 inventory and the projected 2030 statewide population and employment levels.[52] Construction of the new stand-alone parking garage and the Manzanita Building would begin in 2020 and finish in 2021. Construction of the Avalon Building would begin in 2021 and end in 2023.

[51] Bay Area Air Quality Management District. *California Environmental Quality Act Air Quality Guidelines*. May 2017.
[52] Association of Environmental Professionals. *Beyond 2020 and Newhall: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California*. October 2016.

The CalEEMod model, along with the project vehicle trip generation rates, was used to estimate daily emissions associated with operation of the proposed project. Annual emissions resulting from project operations are shown in Table 3.7-2 based on a service population of 1,005 persons[53].

Table 3.7-2: Annual Project GHG Emissions (MT of CO_2e)

Source Category	Project in 2030
Area	16
Energy Consumption	530
Mobile	1,231
Solid Waste Generation	80
Water Usage	35
Total	1,892
Project MT of CO_2e/year/service population[1]	**1.84**
Significance Threshold	2.6 in 2030
Significant?	**No**

Notes:
[1]The service population was estimated based on the number of future residences plus full-time employees. The total service population including future residences and employees was calculated at 984 persons (refer to *Appendix B* of this document).

Assuming no additional GHG reduction measures would be included in the project, the proposed project would not exceed the 2.6 MT CO_2e/year/service population threshold in 2030. Therefore, implementation of the proposed project would not result in a GHG emissions impact. **(Less Than Significant Impact)**

3.7.3 Conclusion

Development of the proposed project would have a less than significant construction and operational GHG impact. **(Less Than Significant Impact)**

[53] Illingworth & Rodkin, Inc. *Avalon West Valley Expansion Air Quality & GHG Assessment*. July 10, 2018.

3.8 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based, in part, on a Phase I Environmental Site Assessment (Phase I ESA) prepared by *AEI Consultants* in January 2018. A copy of the report is included in Appendix E of this document.

3.8.1 Overview

Hazardous materials are distributed throughout the City of San José within industrial, light industrial and commercial areas. Hazardous materials encompass a wide range of substances including petroleum products, pesticides, herbicides, metals, asbestos, and chemical compounds used in manufacturing and other uses. Hazardous materials in various forms can cause death, serious injury, long-lasting health effects and damage to the environment. As a result, numerous laws and regulations were developed to regulate the management of hazardous materials and mitigate potential impacts.

Hazardous waste generators and hazardous materials users in the City are required to comply with regulations enforced by several federal, state, and county agencies. The regulations are designed to reduce the risk associated with the human exposure to hazardous materials and minimize adverse environmental effects. State and federal construction worker health and safety regulations require protective measures during construction activities where workers may be exposed to asbestos, lead, and/or other hazardous materials.

3.8.2 Environmental Setting

3.8.2.1 *Regulatory Framework*

Envision San José 2040 General Plan

The General Plan includes the following hazards and hazardous materials policies applicable to the proposed project.

Policy EC-7.1: For development and redevelopment projects, require evaluation of the proposed site's historical and present uses to determine if any potential environmental conditions exist that could adversely impact the community or environment.

Policy EC-7.2: Identify existing soil, soil vapor, groundwater and indoor air contamination and mitigation for identified human health and environmental hazards to future users and provide as part of the environmental review process for all development and redevelopment projects. Mitigation measures for soil, soil vapor and groundwater contamination shall be designed to avoid adverse human health or environmental risk, in conformance with regional, state and federal laws, regulations, guidelines and standards.

Policy EC-7.4: On redevelopment sites, determine the presence of hazardous building materials during the environmental review process or prior to project approval. Mitigation and remediation of hazardous building materials, such as lead-based paint and asbestos containing materials, shall be implemented in accordance with State and Federal laws and regulations.

Policy EC-7.5: In development and redevelopment sites, require all sources of imported fill to have adequate documentation that it is clean and free of contamination and/or acceptable for the proposed land use considering appropriate environmental screening levels for contaminants. Disposal of groundwater from excavations on construction sites shall comply with local, regional, and State requirements.

Action EC-7.8: When an environmental review process identifies the presence of hazardous materials on a proposed development site, the City will ensure that feasible mitigation measures that will satisfactorily reduce impacts to human health and safety and to the environment are required of or incorporated into the projects. This applies to hazard materials found in the soil, groundwater, soil vapor, or in existing structures.

Action EC-7.9: Ensure coordination with the County of Santa Clara Department of Environmental Health, Regional Water Quality Control Board, Department of Toxic Substances Control or other applicable regulatory agencies, as appropriate, on projects with contaminated soil and/or groundwater or where historical or active regulatory oversight exists.

Action EC-7.10: Require review and approval of grading, erosion control and dust control plans prior to issuance of a grading permit by the Director of Public Works on sites with known soil contamination. Construction operations shall be conducted to limit the creation and dispersion of dust and sediment runoff.

Action EC-7.11: Require sampling for residential agricultural chemicals, based on the history of land use, on sites to be used for any new development or redevelopment to account for worker and community safety construction. Mitigation to meet appropriate end use such as residential or commercial/industrial shall be provided.

3.8.3 Existing Conditions

The project site is currently developed with 873 residential apartment units and three parking garages. Groundwater on-site has been encountered at a depth of approximately 49 feet bgs. Fluctuations in the groundwater level may occur due to seasonal changes, variations in rainfall, and underground drainage patterns. The direction of groundwater flow is east to northeast.

3.8.3.1 *Historic Uses of the Project Site and Surrounding Land Uses*

A land use history of the site was compiled based on aerial photographs, Sanborn Fire Insurance Maps, historical topographic maps, City directories, regulatory agency records, and previous environmental investigations.

Based on a 1939 aerial photograph, the project site was developed with two residences and used as agricultural land. By 1948, the site was developed with two additional residences. By 1969, the majority of the site was developed with the existing apartment complex. There was vacant land on the southeastern portion of the site. By 2013, the remaining apartment building to the southeast was constructed. No significant changes have occurred since 2013.

3.8.3.2 *On-Site Sources of Contamination*

Based on a database records search, the project site is listed in the HAZNET database for asbestos containing waste and waste oil and mixed oil. According to the Phase I ESA, no evidence of hazardous materials releases was observed nor were any releases reported to the regulatory agencies. As a result, the listings are not expected to represent a significant environmental concern. Since the site was previously used for agricultural purposes, there is potential for impacts to the soil due to residual agricultural chemicals.

Asbestos Containing Materials

Friable asbestos is any asbestos containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Non-friable ACMs are materials that contain a binder or hardening agent that does not allow the asbestos particles to become airborne easily. Common examples of non-friable ACMs are asphalt roofing shingles, and vinyl asbestos floor tiles. Non-friable ACMs can pose the same hazard as friable asbestos during remodeling, repairs, or other construction activities that would damage the material. Use of friable asbestos products was banned in 1978. The existing buildings on-site were constructed in 1969; therefore, it is reasonable to assume that ACMs are still present in these buildings.

Lead-Based Paint

Lead-based paint is of concern both as a source of direct exposure through ingestion of paint chips, and as a contributor to lead interior dust and exterior soil. Lead was widely used as a major ingredient in most interior and exterior oil-based paints prior to 1950. Lead compounds continued to be used as corrosion inhibitors, pigments and drying agents from the early 1950's. In 1972, the Consumer Products Safety Commission limited lead content in new paint to 0.5 percent (5,000 parts per million [ppm]) and in 1978, to 0.06 percent (600 ppm). In 1978, the Consumer Products Safety Commission banned paint and other surface coating materials containing lead. Due to the age of the existing buildings, it is reasonable to assume that lead-based paint is still present in the buildings.

Radon Sampling

Radon is a naturally-occurring, odorless, and invisible gas. Natural radon levels vary and are closely related to geologic formations. Radon may enter buildings through basement sumps or other openings. Previous random sampling prepared in 2013 and 2017 has detected elevated levels of radon in the on-site buildings. Long-term radon sampling detected radon concentrations ranging between 4.1 and 5.1 picoCuries per liter of air (pCi/L), which exceeds EPA's threshold of 4.0 pCi/L. As a result, three foundation fans were installed within three buildings in 2016, as a mitigation measure. Additional short-term sampling prepared in January 2017 detected elevated levels of radon (less than 4.0 pCi/L) in other buildings within the apartment complex. Based on the results of the January 2017 tests, three fans were installed in September 2017 at appropriate locations within four buildings. Based on the previous radon sampling results and, radon sampling within the proposed buildings is recommended.

3.8.3.3 *Off-Site Sources of Contamination*

The ESA identified 30 documented hazardous materials locations on various databases within a one mile radius of the project site. Of the 30 sites, 26 were determined to not represent a significant environmental concern for the project site because 1) no release has occurred, 2) the distance of the facility from the project site and/or the location of the release relative to groundwater flow, or 4) the site has been granted a "No Further Action" by the appropriate regulatory agency. The remaining four sites are discussed further below.

888 Saratoga Avenue

The office/commercial building located at 888 Saratoga Avenue, approximately 0.02 miles south of the project site, is listed in the San José HAZMAT database as a miscellaneous complex firms and labs facility. No other information was provided. Based on the lack of documented release, the listing is not expected to represent a significant environmental concern.

855 Saratoga Avenue

The single-family residence, which has been converted to a commercial/office land use, is listed in the Certified Unified Program Agencies (CUPA) LISTINGS database. The single-family residence is located approximately 0.03 miles west of the project site. This site is listed for producing less than 100 kilograms per month (kg/mo) of silver waste. Based on the lack of documented release, the listing is not expect to represent a significant environmental concern.

875 Saratoga Avenue

Similar to the single-family residence located at 855 Saratoga Avenue, this single-family residence has been converted to commercial/office land use. This site is located approximately 0.03 west of the project site. This structure is listed for producing less than 100 kilograms per month (kg/mo) of silver waste. Based on the lack of documented release, the listing is not expected to represent a significant environmental concern.

695 Saratoga Avenue

The retail building located at 695 Saratoga Avenue is located approximately 0.03 miles northwest of the project site. The site was previously a gas station from 1960 to 1975 and the location of the former underground storage tanks (USTs) are unknown. San José Fire Department staff indicated no hazardous materials files exist for this site. Based on the distance, gradient, and redevelopment of the site, this site is not expected to represent a significant environmental concern.

3.8.3.4 *Other Hazards*

Airports

The Norman Y. Mineta San José International Airport is located approximately 6.4 miles northeast of the project site. Based on the Airport Comprehensive Land Use Plan (CLUP), the project site is not located within the Airport Influence Area (AIA) nor is the project located within a CLUP-defined safety zone. The project is not located in the vicinity of a private airstrip.

Wildfire Hazards

The project site is located in an urbanized area that is not subject to wildland fires.

3.8.4 Hazards and Hazardous Materials Impacts

3.8.4.1 *Thresholds of Significance*

For the purposes of this EIR, a hazards and hazardous materials impact is considered significant if the project would:

1. Create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials;
2. 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;
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;
6. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area;
7. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
8. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

3.8.4.2 *Consistency with Plans*

The project site is not located within a CLUP-defined safety zone nor is it located within the AIA. The project site is, however, located within 35 feet of existing residences and within one-quarter mile (by physical distance) of the Harker School's Middle School Campus[54], West Valley Middle School, Action Day Preschool, MACC Preschool, and Pasitos Preschool. Mitigation measures and Standard Permit Conditions have been identified to reduce potential health risks associated with residual agricultural soil contamination and ACMs and/or lead-based paint. As a result, the project would be consistent with General Plan Policies EC-7.1, EC-7.2, EC-7.4, and EC-7.5.

[54] The Harker School's Middle School Campus is located at 3800 Blackford Avenue.

3.8.4.3 *Hazardous Materials Impacts from the Project (Threshold Nos. 1 – 4)*

Project Construction Impacts

Although the site is listed in the HAZNET database, no evidence of hazardous materials releases was observed or reported to the regulatory agencies. Therefore, the project site is not expected to represent a significant environmental concern.

As mentioned in *Section 3.8.3.1, Historic Uses of the Project Site and Surrounding Land Uses*, the project site was previously used as agricultural land for at least 30 years before the project site began to develop. Agricultural chemicals, such as pesticides, herbicides, and fertilizers, may have been used. Development of the project would require demolition and grading, which could result in impacts to construction workers from exposure to residual soil contamination related to agricultural operations.

Impact HAZ-1: Implementation of the proposed project could expose construction workers to residual agricultural soil contamination. **(Significant Impact)**

Mitigation and Avoidance Measures

The project applicant shall be required to implement the following mitigation measures to reduce the risk of construction workers of the site to residual soil contamination.

MM HAZ-1.1: Prior to issuance of any grading permits, the qualified hazardous materials specialist shall collect shallow soil samples within the near surface soil and tested for organochlorine pesticides and pesticide-based metals arsenic and lead to determine if contaminants from previous agricultural operations have occurred at concentrations above established construction worker safety and residential environmental screening levels. The results of the soil sampling and testing shall be provided to the City's Supervising Planner and Municipal Environmental Compliance Officer for review, approval, and/or referral.

MM HAZ-1.2: If sampling analysis shows contaminated soils are found in concentrations above established regulatory environmental screening levels, the project applicant shall enter into the Santa Clara County Department of Environmental Health's (SCCDEH) Voluntary Cleanup Program (VCP), or equivalent, to formalize regulatory oversight of the mitigation of contaminated soil to ensure the site is safe for construction workers and the public after development. The applicant must remove contaminated soil to levels acceptable to the SCCDEH (or equivalent oversight agency). It is also possible that some of the contaminated soil may be left in-place buried under hardscape and/or several feet of clean soil under the approval of the SCCDEH (or equivalent oversight agency).

A Removal Action Plan, Soil Mitigation Plan or other similarly titled report describing the remediation shall be prepared and implemented to document the removal and /or capping of contaminated soil, prior to the issuance of any

demolition, grading and/or building permits, whichever occurs earliest. A copy of these reports shall be submitted to the Supervising Environmental Planner of the City of San José Department of Planning, Building, and Code Enforcement and the Municipal Compliance Officer of the City of San José Environmental Services Department. All work and reports produced shall be performed under the regulatory oversight and approval of the SCCDEH (or equivalent oversight agency).

With implementation of MM HAZ-1.1 and MM HAZ-1.2, impacts from residual soil contamination would be reduced to a less than significant level. **(Less Than Significant Impact With Mitigation)**

Asbestos-Containing Materials and Lead-Based Paint Impacts

Due to the age of the existing structures on-site, building materials may contain asbestos and lead-based paint. When the leasing/amenity building is demolished, asbestos particles could be released and expose construction workers and nearby building occupants to harmful levels of asbestos. If the lead-based paint is still bonded to the building materials, its removal is not required prior to demolition. If the lead-based paint is flaking, peeling, or blistering, it should be removed prior to demolition. It would be necessary to follow applicable Occupational Safety and Health Administration (OSHA) regulations and any debris containing lead must be disposed appropriately. No information regarding the use of lead-based paint was identified on-site; however, if used, lead concentrations may remain in on-site soil. The project proposes to excavate the parking garage beneath the Avalon Building and the stand-alone parking garage to a depth of approximately 11 to 21 feet. Disturbance of these materials during demolition and construction of the proposed project could expose construction workers to harmful levels of lead. Demolition of the existing structures on the project site could expose construction workers or occupants of adjacent buildings to harmful levels of ACMs or lead.

The project is required to implement the following Standard Permit Conditions to reduce impacts due to the presence of ACMs and/or lead-based paint:

Standard Permit Conditions

- In conformance with state and local laws, a visual inspection/pre-demolition survey, and possible sampling, shall be conducted prior to the demolition of on-site building to determine the presence of ACMs and/or lead-based paint.
- During demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal/OSHA Lead in Construction Standard, Title 8, California Code Regulations 1532.1, including employee training, employee air monitoring, and dust control. Any debris or soil containing lead-based paint or coatings would be disposed of at landfills that meet acceptance criteria for the waste being disposed.
- All potentially friable ACMs shall be removed in accordance with NESHAP guidelines prior to building demolition or renovation that may disturb the materials. All demolition activities shall be undertaken in accordance with Cal/OSHA standards contained in Title 8 of CCR, Section 1529, to protect workers from asbestos exposure.

- A registered asbestos abatement contractor shall be retained to remove and dispose of ACMs identified in the asbestos survey performed for the site in accordance with the standards stated above.
- Materials containing more than one percent asbestos are also subject to BAAQMD regulations. Removal of materials containing more than one percent asbestos shall be completed in accordance with BAAQMD requirements and notifications.

Conformance with the identified Standard Permit Conditions would result in a less than significant impact from ACMs and lead. **(Less Than Significant Impact)**

Radon Gas Impacts

As mentioned previously, previous radon sampling from 2013 and 2017 detected up to 5.1 pCi/L of radon. Based on the results of the radon sampling, three fans were installed under four buildings to mitigate potential health risks to the residences on-site. Operations & Maintenance (O&M) of the radon mitigation systems shall comply with the O&M manual, requirements, and specifications. The project would implement the following Standard Permit Conditions to eliminate health risks from radon gas.

Standard Permit Condition

- Prior to the issuance of any grading permits, the applicant shall test for radon. Radon testing and mitigation must be performed by a state certified contractor. If radon concentrations exceed the EPA Action Levels of 4.0 picocuries per liter (pCi/L), the state certified contractor shall recommend and implement measures such as installation of vents and/or a ventilation system such as fans, or equivalent, to reduce the radon concentrations to below the EPA Action levels. The results of the test and recommendations for additional installation of the any new equipment (if needed) shall be submitted to the Supervising Environmental Planner of the City of San José Department of Planning, Building and Code Enforcement and the Municipal Compliance Officer of the City of San José Environmental Services Department for review prior to the issuance of any grading permits.

Implementation of the identified Standard Permit Condition would result in a less than significant radon gas impact. **(Less Than Significant Impact)**

3.8.4.4 ***Other Hazard Impacts*** *(Threshold Nos. 5 – 8)*

Operational Impacts to Nearby Schools

While the proposed project is located within one-quarter mile (by physical distance) of the Harker School's Middle School Campus, West Valley Middle School, Action Day Preschool, MACC Preschool, and Pasitos Preschool, the proposed project would not emit or handle any regulated hazardous materials. The site would not use or store hazardous materials in sufficient quantities to pose a health risk to any nearby school. The implementation of measures to reduce impacts due to ACMs and lead and MM HAZ-1.1 and MM HAZ-1.2 would ensure that potentially contaminated materials are properly handled to avoid chemical releases into the environment. For these reasons,

hazardous waste handling would have a less than significant impact on nearby schools. **(Less Than Significant Impact)**

Airport Operations

As discussed in *Section 3.8.3.4, Other Hazards*, the proposed project is not located within an AIA or within two miles of a public or private airstrip, and would not result in substantial safety hazard for people residing or working in the project area or interfere with airport operations. **(No Impact)**

Emergency Response Plans

The proposed project would not impair or interfere with implementation of an adopted emergency response plan or emergency evacuation plan. **(No Impact)**

Wildland Fires

The project site is located within an urbanized area and it is not adjacent to any wildland areas that would be susceptible to wildland fires. Implementation of the proposed project would not expose any people or structures to risk from wildland fires. **(No Impact)**

3.8.4.5 *Existing Hazardous Materials Conditions Affecting the Project Site* *(Threshold Nos. 1, 2, and 4)*

On December 17, 2015, the California Supreme Court issued an opinion in CBIA vs. BAAQMD holding that CEQA is primarily concerned with the impacts of a project on the environment and generally does not require agencies to analyze the impact of existing conditions on a project's future users or residents unless the project risks exacerbating those environmental hazards or risks that already exist. Nevertheless, the City has policies and regulations that address existing conditions affecting a proposed project, which are discussed below.

The City of San José General Plan policies have been adopted for the purpose of avoiding or mitigating environmental effects resulting from planned development within the City. General Plan Policy EC-7.2 requires the identification of existing soil, soil vapor, groundwater and indoor air contamination and mitigation for identified human health and environmental hazards to future users and provide as part of the environmental review process for all development and redevelopment projects. Mitigation measures for soil, soil vapor and groundwater contamination are required to be designed to avoid adverse human health or environmental risk, in conformance with regional, state and federal laws, regulations, guidelines and standards.

The project site was previously used as agricultural land for at least 30 years which may expose future site occupants to residual agricultural soil contamination. With implementation of the identified mitigation measures in *Section 3.8.4.3, Hazardous Materials Impacts from the Project*, impacts from residual soil contamination would be reduced to a less than significant level. There are no other documented evidence of on-site or off-site soil or groundwater contamination that could affect the health of future site occupants. As a result, the proposed project would not result in human health and environmental hazards to future site users consistent with Policy EC-7.2.

3.8.5 Conclusion

The proposed project would result in a less than significant hazardous materials impact with implementation of the identified mitigation measures. **(Less Than Significant Impact With Mitigation)**

3.9 HYDROLOGY AND WATER QUALITY

3.9.1 Environmental Setting

3.9.1.1 *Regulatory Framework*

Water Quality Overview

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality. Regulations set forth by the US EPA and the State Water Resources Control Board (SWRCB) have been developed to fulfill the requirements of this legislation. US EPA regulations include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into the waters of the U.S. (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the water quality control boards. The project site is within the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (RWQCB).

Basin Plan

The San Francisco Bay RWQCB regulates water quality in accordance with the Water Quality Control Plan or "Basin Plan". The Basin Plan lists the beneficial uses that the RWQCB has identified for local aquifers, streams, marshes, rivers, and the San Francisco Bay, as well as the water quality objectives and criteria that must be met to protect these uses. The RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements, including permits for nonpoint sources such as the urban runoff discharged by a City's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

Statewide Construction General Permit

The SWRCB has implemented a NPDES General Construction Permit for the State of California. For projects disturbing one acre or more of soil, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction. The Construction General Permit includes requirements for training, inspections, record keeping, and for projects of certain risk levels, monitoring. The general purpose of the requirements are to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

Municipal Regional Stormwater NPDES Permit (MRP)/C.3 Requirement

The San Francisco Bay RWQCB has issued a Municipal Regional Stormwater NPDES Permit (Permit Number CAS612008) (MRP) that covers the project area. Under provisions of the NPDES Municipal Permit, redevelopment projects that disturb more than 10,000 square feet are required to design and construct stormwater treatment controls to treat post-construction stormwater runoff. The MRP requires regulated projects to include Low Impact Development (LID) practices, such as pollutant source control measures and stormwater treatment features aimed to maintain or restore the site's natural hydrologic functions. The MRP also requires that stormwater treatment measures are properly installed, operated and maintained.

In addition to water quality controls, the MRP requires all new and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation or other impacts to beneficial uses of local rivers, streams, and creeks. Projects may be deemed exempt from the permit requirements if they do not meet the size threshold, drain into tidally-influenced areas or directly into the Bay, drain into hardened channels, or are infill projects in subwatersheds or catchments areas that are greater than or equal to 65 percent impervious (per the Santa Clara Valley Permittees Hydromodification Management Applicability Map).

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) in order to reduce impacts of flooding on private and public properties. The program provides subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the program, FEMA publishes Flood Insurance Rate Maps (FIRM) that identify Special Flood Hazard Areas (SFHA). An SFHA is an area that will be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100-year flood. The SFHA is the area where the NFIP floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies.

Dam Safety

Dam failure is the uncontrolled release of impounded water behind a dam. Flooding, earthquakes, blockages, landslides, lack of maintenance, improper operation, poor construction, vandalism, and terrorism can all cause a dam to fail.[55] Because dam failure that results in downstream flooding may affect life and property, dam safety is regulated at both the federal and state level. Dams under the jurisdiction of the California Division of Safety of Dams are identified in California Water Code Sections 6002, 6003, and 6004 and regulations for dams and reservoirs are included in the California Code of Regulations.

As part of its comprehensive dam safety program, the Santa Clara Valley Water District (SCVWD) routinely monitors and studies the condition of each of its 10 dams. The SCVWD also has its own Emergency Operations Center and a response team that inspects dams after significant earthquakes. These regulatory inspection programs reduce the potential for dam failure.

Santa Clara Valley Water District

The SCVWD operates as the flood control agency for Santa Clara County. Their stewardship also includes creek restoration, pollution prevention efforts, and groundwater recharge. Permits for well construction and destruction work, most exploratory boring for groundwater exploration, and projects within SCVWD property or easements are required under the SCVWD's Water Resources Protection Ordinance and District Well Ordinance.

[55] State of California. "State Hazard Mitigation Plan." Accessed: June 4, 2018. Available at: http://www.caloes.ca.gov/for-individuals-families/hazard-mitigation-planning/state-hazard-mitigation-plan.

City of San José Post-Construction Urban Runoff Management (Policy 6-29)

The City of San José's Policy No. 6-29 implements the stormwater treatment requirements of Provision C.3 of the Municipal Regional Stormwater NPDES Permit. The City's Policy No. 6-29 requires all new and redevelopment projects regardless of size and land use to implement post-construction Standard Permit Conditions and Treatment Control Measures (TCM) to the maximum extent practicable. This policy also established specific design standards for post-construction TCMs for projects that create, add, or replace 10,000 square feet or more of impervious surface area.

City of San José Hydromodification Management (Policy 8-14)

The City of San José's Policy No. 8-14 implements the stormwater treatment requirements of Provision C.3 of the Municipal Regional Stormwater NPDES Permit. Policy No. 8-14 requires all new and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation or other impacts to beneficial uses of local rivers, streams, and creeks. The policy requires these projects to be designed to control project-related hydromodification through a Hydromodification Management Plan (HMP).

Envision San José 2040 General Plan

The General Plan includes hydrology-related policies applicable to the proposed project.

Policy ER-8.1: Manage stormwater runoff in compliance with the City's Post-Construction Urban Runoff (6-29) and Hydromodification Management (8-14) Policies.

Policy ER-8.3: Ensure that private development in San José includes adequate measures to treat stormwater runoff.

Policy ER-8.5: Ensure that all development projects in San José maximize opportunities to filter, infiltrate, store and reuse or evaporate stormwater runoff onsite.

Policy EC-4.1: Design and build all new or remodeled habitable structures in accordance with the most recent California Building Code and municipal code requirements as amended and adopted by the City of San José, including provisions for expansive soil, and grading and storm water controls.

Policy EC-5.16: Implement the Post-Construction Urban Runoff Management requirements of the City's Municipal NPDES Permit to reduce urban runoff from project sites.

Action EC-7.10: Require review and approval of grading, erosion control and dust control plans prior to issuance of a grading permit by the Director of Public Works on sites with known soil contamination. Construction operations shall be conducted to limit the creation and dispersion of dust and sediment runoff.

3.9.1.2 *Existing Conditions*

Surface Water

The project site is located within the San Tomas Aquino Creek Watershed, a 45 square mile area with multiple small creek watersheds, including the Saratoga subwatershed. Stormwater runoff from the project site drains into the Saratoga Creek, which originates on the northeastern slopes of the Santa Cruz Mountains along Castle Rock Ridge and flows in a northerly direction to the San Francisco Bay[56].

The portion of the project site proposed for redevelopment is currently developed with approximately 250,595 square feet (85 percent) of impervious surfaces. There are storm drain lines located along Blackford Avenue, Saratoga Avenue, and Manzanita Drive.

Groundwater

As discussed in *Section 3.6, Geology and Soils/Mineral Resources*, groundwater has been encountered at a depth of approximately 49 feet bgs. Fluctuations in the groundwater level may occur due to seasonal changes, variations in rainfall and underground drainage patterns, and other factors. The project site is not located within a natural or facility groundwater recharge area.[57]

Flooding

Based on the Federal Emergency Management Agency's (FEMA) Flood Zone Map (Map No. 06085C0228H), the project site is located in Flood Zone D.[58] Zone D is an area of undetermined but possible flood hazard that is outside the 100-year flood plain. There are no City floodplain requirements for Zone D.

Dam Failure

Based on the SCVWD dam failure inundation hazard maps, the project site outside the Lexington Reservoir and Andersen Dam failure inundation hazard zones.[59,60]

Earthquake-Induced Waves and Mudflow Hazards

Per the General Plan FEIR (as amended), due to the project site's inland location and distance from large bodies of water (i.e., the San Francisco Bay), the site is not subject to seiche or tsunami hazards. The project site is located in a flat, urbanized area; therefore, it is not subject to mudflows.

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[56] Santa Clara Valley Urban Runoff Pollution Prevention Program. "San Tomas Aquino Watershed." Accessed: June 4, 2018. Available at: http://www.scvurppp-w2k.com/ws_sta.shtml.
[57] Santa Clara Valley Water District. *Groundwater Management Plan.* 2016.
[58] Federal Emergency Management Agency. "FEMA Flood Map Service Center: Search By Address." Accessed June 4, 2018. Available at: https://msc.fema.gov/portal/search.
[59] Santa Clara Valley Water District. *Anderson Dam EAP 2009 Flood Inundation Maps. 2009.* Accessed: June 4, 2018. Available at: https://www.valleywater.org/sites/default/files/Anderson%20Dam%20Inundation%20Maps%202016.pdf.
[60] Santa Clara Valley Water District. *Lexington Reservoir 2009 Flood Inundation Maps. 2009.* Accessed: June 4, 2018. Available at: https://www.valleywater.org/sites/default/files/Lexington%20Dam%20Inundation%20Map%202016.pdf.

Water Quality

The water quality of streams, creeks, ponds, and other surface water bodies can be greatly affected by pollution carried in contaminated surface runoff. Pollutants from unidentified sources, known as "non-point" source pollutants, are washed from streets, construction-sites, parking lots, and other exposed surfaces into storm drains. The runoff may contain contaminants such as oil and grease, plant and animal debris (e.g., leaves, dust, and animal feces), pesticides, litter, coolants, and heavy metals. In sufficient concentration, these pollutants have been found to adversely affect the aquatic habitats to which they drain.

Currently, approximately 250,595 square feet (85 percent) of the project's construction zone is covered with impervious surfaces. There are storm drain lines located along Blackford Avenue, Saratoga Avenue, and Manzanita Drive, which serve the existing development and would also serve the proposed development. The stormwater lines that serve the project site drain to Saratoga Creek. Saratoga Creek flows northward, carrying the effluent from the storm drains into San Francisco Bay. There is no overland release of stormwater directly into any water body from the project site.

Hydromodification

Based on the SCVUPPP watershed map for the City of San José, the project site is exempt from the NPDES hydromodification requirements because it drains into a hardened channel and/or tidal area.[61]

3.9.2 Hydrology and Water Quality Impacts

3.9.2.1 *Thresholds of Significance*

For the purposes of this EIR, a hydrology and water quality impact is considered significant if the project would:

1. Violate any water quality standards or waste discharge requirements;
2. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
4. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
5. 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;

[61] Santa Clara Valley Urban Runoff Pollution Prevention Program. "Classification of Subwatersheds and Catchment Areas for Determining Applicability of HMP Requirements." Accessed: June 4, 2018. Available at: http://www.scvurppp-w2k.com/HMP_app_maps/San_Jose_HMP_Map.pdf.

6. Otherwise substantially degrade water quality;
7. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
8. Place within a 100-year flood hazard area structures which would impeded or redirect flood flows;
9. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or
10. Inundation by seiche, tsunami, or mudflow.

3.9.2.2 *Consistency with Plans*

The proposed project shall comply with all applicable federal, state, and local water quality and stormwater quality control standards and permits, as well as all regulations pertaining to flood zones. Therefore, the project would be consistent with FEMA regulations, the federal CWA, the SWRCB NPDES programs for construction and post-construction, San José Council Policies 6-29 and 8-14, and General Plan Policies ER-8.1, ER-8.3, ER-8.5, EC-4.1, and EC-5.16.

3.9.2.3 ***Water Quality Impacts*** *(Threshold Nos. 1, 3, and 6)*

Construction Impacts

Ground-disturbing activities related to construction would temporarily increase the amount of debris on-site and grading activities could increase erosion and sedimentation that could be carried by runoff into the San Francisco Bay. Because the project would disturb more than one acre of land, the project would be required to comply with the general stormwater permit and prepare a SWPPP for construction activities.

Pursuant to the City's requirements, the following measures, based on RWQCB recommendations, have been included in the project as Standard Permit Conditions to reduce potential construction-related water quality impacts:

Standard Permit Conditions

- Burlap bags filled with drain rock shall be installed around storm drains to route sediment and other debris away from the drains.

- Earthmoving or other dust-producing activities would be suspended during periods of high winds.

- All exposed or disturbed soil surfaces would be watered at least twice daily to control dust as necessary.

- Stockpiles of soil or other materials that can be blown by the wind would be watered or covered.

- All trucks hauling soil, sand, and other loose materials would be covered and all trucks would be required to maintain at least two feet of freeboard.

- All paved access roads, parking areas, staging areas and residential streets adjacent to the construction sites would be swept daily (with water sweepers).

- Vegetation in disturbed areas would be replanted as quickly as possible.

- All unpaved entrances to the site shall be filled with rock to remove mud from tires prior to entering City streets. A tire wash system may also be installed at the request of the City.

The General Plan FEIR (as amended) concluded that with the regulatory programs currently in place, stormwater runoff from construction activities would have a less than significant impact on stormwater quality. With implementation of the identified construction measures and compliance with the NPDES General Construction Permit, construction of the proposed project would have a less than significant impact on water quality. **(Less Than Significant Impact)**

Post-Construction Impacts

The 6.9 acre project site is currently comprised of approximately 250,595 square feet (85 percent) of impervious surfaces. Impervious surfaces on-site would decrease by approximately 5,989 square feet (two percent) upon completion of the project, as seen in Table 3.9-1. Construction of the project would add or replace more than 10,000 square feet of impervious surfaces; therefore, the project would be required to comply with the City's Post-Construction Urban Runoff Policy 6-29 and the RWQCB MRP.

The MRP requires all of post-construction stormwater runoff to be treated by numerically sized LID treatment controls, such as biotreatment facilities, unless the project is granted Special Project LID Reduction Credits, which would allow the project to implement non-LID measures for all or a portion of the site depending on project characteristics. Runoff on-site would be treated by flow-through planters and biotreatment ponds. With implementation of a Stormwater Control Plan consistent with RWQCB and City regulatory policies pertaining to stormwater runoff, operation of the proposed project would have a less than significant water quality impact. **(Less Than Significant Impact)**

3.9.2.4 *Groundwater Impacts (Threshold No. 2)*

Depth to groundwater on-site is anticipated to be 49 feet bgs. Development of the proposed project would include trenching and grading for utilities and excavation for the underground parking garages. The project would not require excavations below 21 feet or require dewatering. The proposed project is not located within a natural of facility groundwater recharge area. In addition, development and redevelopment of new residential, commercial, or industrial uses allowed under the General Plan is not proposed to occur within any of the SCVWD's percolation facilities for groundwater recharge nor would it otherwise affect the operation of the percolation or recharge facilities. As a result, implementation of the proposed project would not interfere with groundwater recharge or cause a reduction in overall groundwater supply. **(Less Than Significant Impact)**

As discussed in *Section 3.6, Geology and Soils/Mineral Resources*, groundwater on-site has been encountered at approximately 49 feet bgs. Although the project would include excavation for the underground parking garages, the ground disturbance would not exceed 21 feet in depth. As a result,

development of the project would not interfere with groundwater flow or impact the shallow groundwater aquifer. **(Less Than Significant Impact)**

3.9.2.5 *Drainage Pattern Impacts (Threshold No. 4)*

The proposed project would not substantially alter the existing drainage pattern of the site or area through the alteration of any waterway. As a result, the project would not substantially increase erosion or increase the rate or amount of stormwater runoff. **(Less Than Significant Impact)**

3.9.2.6 *Storm Drainage Impacts (Threshold No. 5)*

Table 3.9-1 provides the breakdown of the pervious and impervious surfaces on the 6.9 acre project site under existing and project conditions.

Table 3.9-1: Pervious and Impervious Surfaces On-Site

Site Surface	Existing/Pre-Construction (sf)	%	Project/Post-Construction (sf)	%	Difference (sf)	%
Impervious						
Building Footprint	176,685	60	159,903	54	-16,782	-6
Hardscape	73,910	25	84,703	29	+10,793	+4
Subtotal	250,595	85	244,606	83	-5,989	-2
Pervious						
Pavement and Landscape	45,831	15	51,820	17	+5,989	+2
Total	296,426	100	296,426	100		

Under project conditions, impervious surfaces on-site would decrease by approximately two percent. The existing storm drain lines have sufficient capacity to support the site under current conditions. The reduction in impervious surfaces would result in a net decrease of stormwater runoff from the site. Therefore, the existing storm drain lines would have sufficient capacity to accommodate the proposed project. **(Less Than Significant Impact)**

3.9.2.7 *Seiches, Tsunamis, and Mudflows (Threshold No. 10)*

There are no bodies of water near the project site that would affect the project area in the event of a seiche or tsunami. The project area is flat and there are no mountains in proximity. As a result, development of the project site would not cause mudflows that would impact adjacent properties. **(Less Than Significant Impact)**

3.9.2.8 *Existing Flooding Conditions Affecting the Project (Threshold Nos. 7 – 9)*

On December 17, 2015, the California Supreme Court issued an opinion in CBIA vs. BAAQMD holding that CEQA is primarily concerned with the impacts of a project on the environment and generally does not require agencies to analyze the impact of existing conditions on a project's future users or residents unless the project risks exacerbating those environmental hazards or risks that already exist. Nevertheless, the City has policies and regulations that address existing conditions affecting a proposed project, which are discussed below.

General Plan Policy EC-5.1 requires evaluation of flood hazards prior to approval of development within a FEMA designated floodplain. New development shall be reviewed to ensure it is designed to provide protection from flooding with a one percent annual chance of occurrence or the 100-year flood. The project site is located in Flood Zone D; an area of undetermined but possible flood hazard. Implementation of the project would not expose people or structures to significant flood hazards in compliance with City policies.

The project site is outside of the Lexington Reservoir and Anderson Dam failure inundation zones. Future occupants of the site would not be exposed to flooding hazards.

3.9.3 Conclusion

With implementation of the identified Standard Permit Conditions, the proposed project would result in less than significant hydrology and water quality impacts. **(Less Than Significant Impact)**

3.10 LAND USE AND PLANNING/POPULATION AND HOUSING/AGRICULTURAL RESOUCRES

3.10.1 Environmental Setting

3.10.1.1 *Regulatory Framework*

Envision San José 2040 General Plan

The General Plan includes the following land use policies applicable to the proposed project.

Policy CD-1.1: Require the highest standards of architectural and site design, and apply strong design controls for all development projects, both public and private, for the enhancement and development of community character and for the proper transition between areas with different types of land uses.

Policy CD-4.9: For development subject to design review, ensure the design of new or remodeled structures is consistent or complementary with the surrounding neighborhood fabric (including but not limited to prevalent building scale, building materials, and orientation of structures to the street).

Policy CD-1.12: Use building design to reflect both the unique character of a specific site and the context of surrounding development and to support pedestrian movement throughout the building site by providing convenient means of entry from public streets and transit facilities where applicable, and by designing ground level building frontages to create an attractive pedestrian environment along building frontages. Unless it is appropriate to the site and context, franchise-style architecture is strongly discouraged.

Policy CD-1.17: Minimize the footprint and visibility of parking areas. Where parking areas are necessary, provide aesthetically pleasing and visually interesting parking garages with clearly identified pedestrian entrances and walkways. Encourage designs that encapsulate parking facilities behind active building space or screen parked vehicles from view from the public realm. Ensure that garage lighting does not impact adjacent uses, and to the extent feasible, avoid impacts of headlights on adjacent land uses.

Policy CD-1.23: Further the Community Forest Goals and Policies in this Plan by requiring new development to plant and maintain trees at appropriate locations on private property and along public street frontages. Use trees to help soften the appearance of the built environment, help provide transitions between land uses, and shade pedestrian and bicycle areas.

Policy CD-4.9: For development subject to design review, ensure the design of new or remodeled structures is consistent or complementary with the surrounding neighborhood fabric (including but not limited to prevalent building scale, building materials, and orientation of structures to the street).

Policy IP-5.10: Allow non-residential development to proceed within Urban Village areas in advance of the preparation of an Urban Village Plan. In addition, a residential, mixed-use "Signature" project may also proceed ahead of preparation of a Village Plan. A signature project clearly advances and can serve as a catalyst for the full implementation of the *Envision General Plan* Urban Village strategy. A signature project may be developed within an Urban Village designated as part of the

current Plan Horizon, or in a future Horizon Urban Village area by making use of the residential Pool capacity. A residential, mixed-use signature project may proceed within Urban Village areas in advance of the preparation of an Urban Village Plan if it fully meets the following requirements:

1. Conforms to the Land Use / Transportation Diagram. Within the Urban Village areas, signature projects are appropriate on sites with an Urban Village, residential, or commercial Land Use / Transportation Diagram designation.

2. Incorporates job growth capacity above the average density of jobs/acre planned for the developable portions of the entire Village Planning area and, for portions of a signature project that include housing, those portions incorporate housing density at or above the average density of dwelling units per acre planned for the entire Village Planning area.

3. Is located at a visible, prominent location within the Village so that it can be an example for, but not impose obstacles to, subsequent other development within the Village area.

In addition, to qualify as a signature project, the project must be in substantial conformance with the following objectives:

4. The project includes public parklands and/or privately maintained, publicly-accessible plazas or open space areas.

5. The project achieves the pedestrian friendly design guideline objectives identified within this General Plan.

6. The project is planned and designed through a process that provided a substantive opportunity for input by interested community members.

7. The project demonstrates high-quality architectural, landscape and site design features.

8. The project is consistent with the recommendations of the City's Architectural Review Committee or equivalent recommending body if the project is subject to review by such body.

Signature Project

The project is within the Saratoga Avenue Urban Village, which does not currently have an adopted Urban Village Plan. Within the designated Urban Villages, a residential mixed-use signature project may develop ahead of preparation of an Urban Village Plan if it meets the following requirements:

- Conforms to the Land Use/Transportation Diagram. Within the Urban Village areas, signature projects are appropriate on sites with an Urban Village, residential, or commercial Land Use/Transportation Diagram designation.

- Incorporates job growth capacity above the average density of jobs/acre planned for the developable portions of the entire Village Planning area and, for portions of a signature project that include housing, those portions incorporate housing density at or above the average density of dwelling units per acre planned for the entire Village Planning area.

- Is located at a visible, prominent location within the Village so that it can be an example for, but not impose obstacles to, subsequent other development within the Village area.

Santa Clara Valley Habitat Plan/Natural Community Conservation Plan

The SCVHP was approved in 2013 and covers an area of 519,506 acres, or approximately 62 percent of Santa Clara County. It was developed and adopted through a partnership between Santa Clara County, the Cities of San José, Morgan Hill, and Gilroy, SCVWD, Santa Clara VTA, USFWS, and CDFW. The SCVHP is intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in approximately 500,000 acres of southern Santa Clara County. The Santa Clara Valley Habitat Agency is responsible for implementing the plan.

Farmland Mapping and Monitoring Program

The California Resources Agency's Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural land and conversion of these lands over time. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. In CEQA analyses, the FMMP classifications and published County maps are used, in part, to identify whether agricultural resources that could be effected are present on-site or in the project area.

3.10.1.2 *Existing Conditions*

Project Site

The 18.9-acre project site is located east of Saratoga Avenue, between Blackford Avenue and Manzanita Drive in San José. The site is currently developed with 873 residential apartment units and three parking garages. The site can be accessed via seven full access driveways: one on Blackford Drive, two on Saratoga Avenue, and four on Manzanita Drive. There are approximately 239 trees located on 6.9 acres of the 18.9-acre site where construction activity would take place. Figure 2.1-3 shows an aerial of the project site and surrounding land uses.

The project site is currently designated *MUN – Mixed Use Neighborhood* under the City's General Plan. The *MUN* designation is intended for development with either townhouse or small lot single-family residences. This designation supports commercial or mixed-use development integrated within the *MUN* area. Development within this designation should occur through the use of standard Zoning Districts which specific the minimum lot size. The allowable density for mixed-use development shall be determined using an allowable floor area ratio (FAR) of 0.25 to 2.0. The project site is zoned *R-M – Multiple Residence*. The purpose of the *R-M* zoning district is to reserve land for the construction, use and occupancy of higher density residential development and higher density residential commercial mixed use development. The maximum height allowed in this district is 45 feet. Development shall have a front setback of 10 feet, a side interior setback of five feet, a side corner setback of 7.5 feet, a rear interior setback of 25 feet, and a rear corner setback of 15 feet. According to the City of San Jose Municipal Code (Chapter 20.90), the required parking for multi-family dwelling units are 1.25 spaces per studio/one-bedroom unit and 1.7 spaces per two-bedroom unit.

Additionally, the project is within the Saratoga Avenue Urban Village, which does not currently have an adopted Urban Village Plan. The project is proposed as a signature project and is currently under Planning review for conformance with General Plan Policy IP-5.10.

Based on the Santa Clara County Important Farmlands 2014 Map, the project site is designated as "Urban and Built-Up Land."[62,63] There is no forest land uses on or adjacent to the project site and the site is not subject to a Williamson Act contract.

Surrounding Land Use

Development in the project area is primarily residential and commercial/retail land uses. In addition, there are several school located east of the site. Building heights within the vicinity of the project site range from one- to three-stories. Immediately north of the project site is Blackford Avenue, a two-lane, multi-directional roadway. North of Blackford Avenue is a cluster of three, two-story office buildings. Located east of the project site are single-family and multi-family residences and multiple school. South of the project site are one-story single-family residences. West of the project site is Saratoga Avenue, a six-lane, multi-directional roadway with an unsignalized left-turn lane and median. West of Saratoga Avenue are single-family residences and a commercial center. Some of these single-family residences have been converted to commercial/office land uses.

Population and Housing

The population of San José was estimated to be approximately 1,051,316 in January 2018 with an average of 3.20 persons per household.[64] The City currently has approximately 335,164 housing units and, by 2040, the City's population is projected to reach 1,445,000 with 472,000 households.[65]

3.10.2 Land Use and Planning, Population and Housing, and Agricultural Resources Impacts

3.10.2.1 *Thresholds of Significance*

For the purposes of this EIR, land use and planning, population and housing, and agricultural resources impacts are considered significant if the project would:

1. Physically divide an established community;
2. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local

[62] California Natural Resources Agency. "Santa Clara County Important Farmlands 2014." Accessed: February 26, 2018. Available at: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2014/scl14.pdf.
[63] Urban and Built-up Land is defined as land with at least six structures per 10 acres. Common examples of "Urban and Built-Up Land" are residential, institutional, industrial, commercial, landfill, golf course, airports, and other utility uses.
[64] State of California, Department of Finance. "E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2018." Accessed: June 18, 2018. Available at: http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/.
[65] Center for the Continuing Study of the California Economy. "Projections of Jobs, Populations, and Households for the City of San José." August 2008. Accessed: June 18, 2018. Available at: https://www.sanjoseca.gov/DocumentCenter/View/3326.

coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or

3. Conflict with any applicable habitat conservation plan or natural community conservation plan.
4. 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);
5. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or
6. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.
7. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
8. Conflict with existing zoning for agricultural use, or a Williamson Act contract;
9. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g));
10. Result in a loss of forest land or conversion of forest land to non-forest use; or
11. 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.

3.10.2.2 *Consistency with Plans*

The project would be pedestrian oriented and designed in accordance with applicable design standards. Residential parking within the Avalon Building would not be visible. The proposed stand-alone parking garage would be located behind the Manzanita Building amenity space and slightly visible from Manzanita Drive. Therefore, the project would be consistent with the City's General Plan Policies CD-1.12, CD-1.17, and CD-4.9.

Additionally, the proposed project would be subject to applicable SCVHP conditions and fees (refer to *Section 3.3, Biological Resources*) prior to issuance of any grading permits. As a result, the proposed project would be consistent with the SCVHP.

3.10.2.3 *Consistency with the City's General Plan and Zoning Designations (Threshold No. 2)*

The project would construct up to 307 residential units in two buildings, approximately 17,800 square feet of retail, and a total of 1,148 new parking spaces. As mentioned in *Section 2.1.3,* the project is currently designated *MUN* under the City's General Plan. This designation supports commercial or mixed-use development integrated within the *MUN* area. Development within this designation should occur through the use of standard Zoning Districts which specify the minimum lot

size. The allowable density for mixed-use development shall be determined using an allowable FAR of 0.25 to 2.0 (one to 3.5 stories).

Under the *R-M* zoning district, the maximum height allowed in this district is 45 feet. Development shall have a front setback of 10 feet, a side interior setback of five feet, a side corner setback of 7.5 feet, a rear interior setback of 25 feet, and a rear corner setback of 15 feet. The project would redeveloped 6.9 acres of an 18.9-acre project site. The proposed structures on-site (up to approximately 85 feet) would exceed the maximum height allowed in this district.

The project is within the Saratoga Avenue Urban Village, which does not currently have an adopted Urban Village Plan, and is proposed as a signature project. A signature project is defined in the General Plan as a residential mixed-use project of exceptional design which can be approved within a designated Urban Village prior to adoption of an Urban Village Plan, as long as the project meets the requirements outlined in General Plan Policy IP-5.10. Because the project would exceed the height and setback requirements of the zoning districts and would include residential land uses within an Urban Village prior to approval of an Urban Village Plan, a Planned Development Rezoning is proposed for the project. Under the Planned Development zoning, the zoning district shall be individually designed to meet the needs of the territory zoned. The project is currently undergoing Planning review for conformance with General Plan Policy IP-5.10.

The project would provide approximately 24,575 square feet of public open space at the Avalon site including plazas, a pool, a fitness area, a clubroom, and a sky lounge[66]. The project proposes approximately 129,687 square feet of public open space between the proposed Avalon and Manzanita Building and the existing Eaves Building. With the approval of the Planned Development Rezoning, the project would be required to conform to all the standards of a Signature Project. Further discussion of land use impacts below. **(Less Than Significant Impact)**

3.10.2.4 *Land Use Impacts (Threshold No. 1 and 2)*

Changes in land use are not adverse environmental impacts in and of themselves, but they may create conditions that adversely affect existing uses in the immediate vicinity. The proposed project is a residential project with approximately 17,800 square feet of retail located within the Saratoga Avenue Urban Village within an existing residential development. The project would result in the construction of 307 additional residential units within an existing multi-family apartment complex, for a total of 1,173 residential units. This area is characterized by residential and commercial land uses. Therefore, the proposed residential use would not introduce a new or incompatible land use to the area. In addition, the project site is separated from adjacent land uses by the surrounding roadways and does not include physical features that would physically divide the community. The project would be consistent with the existing characteristics and uses in the surrounding area and would have a less than significant land use compatibility impact on surrounding land uses. **(Less Than Significant Impact)**

The project site is located within the SCVHP and would require discretionary approval by the City. Please see *Section 3.3, Biological Resources,* for a complete discussion of the projects consistency with the SCVHP. **(Less Than Significant Impact)**

[66] The sky lounge is proposed on the seventh floor of the Avalon Building and would consist of a landscaped area and benches.

3.10.2.5 *Visual Intrusion (Privacy) (Threshold Nos. 1 and 2)*

Visual intrusion addresses the general concern that windows or balconies from taller buildings would provide visual access to neighboring yards and windows of private residences. There are existing multi-family residences located on the project site (approximately 45 feet east of the proposed Avalon Building and 30 feet north of the proposed Manzanita Building).

In urban built-out environments properties are in close proximity to one another and complete privacy is not typical. Nevertheless, implementation of the proposed project would be subject to the City's design review to ensure compatibility with the existing neighborhood and the project would not create a greater possibility of visual intrusion from the project site on the adjacent off-site residential properties.

The proposed Avalon Building (six- to seven-stories) would be taller than the existing three-story residences and the nearby two-story commercial/office development. The Manzanita Building would be three-stories, similar to the buildings that currently exist on-site. The proposed stand-alone parking garage would be three levels above-grade and one level below-grade. Although the proposed Avalon Building would be taller than the existing buildings on and adjacent to the site, the proposed building would be set back from the existing residences to the east by approximately 46 feet. The proposed Avalon Building would be set back from the two-story commercial/office development by approximately 90 feet and the existing off-site residences to the west by approximately 168 feet.

The proposed stand-alone parking garage would be set back from the existing residences to the north by approximately 39 feet and approximately 19 feet to the existing residences to the west. The off-site residences to the east and south are located over 30 feet from the proposed Manzanita Building and Manzanita Garage. The proposed development would not create a direct line of site to any private open-space areas or any living spaces of the off-site residences. As a result, the proposed project would have a less than significant visual intrusion impact. **(Less Than Significant Impact)**

3.10.2.6 *Agricultural and Forestry Impacts (Threshold Nos. 7 – 11)*

The project site is located within a developed area and has not been used as farmland for more than 50 years. The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses. The project would not conflict with existing zoning for agricultural operations or facilitate in the unplanned conversion of farmland elsewhere in San José to non-agricultural uses. There are no forest lands on or adjacent to the project site and, therefore, the project would not result in the loss of forest lands in San José. For these reasons, the project would not result in impacts to agricultural or forest resources. **(No Impact)**

3.10.2.7 *Population and Housing Impacts (Threshold Nos. 4 – 6)*

The City of San José currently has a higher number of employed residents than jobs (approximately 0.8 jobs per employed resident), but this trend is projected to reverse with full build-out under the General Plan.

The proposed project would result in 307 new residential units. Assuming 3.20 persons per household and 2.5 employees per 1,000 square feet of retail, the project would accommodate

approximately 982 new residents and up to 45 employees[67] in the City. The proposed residential units would comprise a small portion of the 120,000 net new dwelling units and 382,000 new jobs planned for in the General Plan. While the project would increase housing and jobs within the City, it would not result in unplanned residential growth as indicated and analyzed in the approved General Plan FEIR. Therefore, implementation of the project would not impact the jobs/housing imbalance. **(Less Than Significant Impact)**

Construction of the proposed project would result in the demolition of the Saratoga Garage and the Manzanita Garage and the leasing/amenity building and pool area directly south of the Saratoga Garage. The proposed project would not result in the displacement of people or necessitate the construction of housing elsewhere. **(Less Than Significant Impact)**

3.10.3 Conclusion

With the approval of the Planned Development Rezoning, the project would be consistent with the General Plan Land Use Designation and Zoning District requirements. **(Less Than Significant Impact)**

The proposed project would be compatible with the existing and surrounding land uses. The project would not displace existing housing nor would it impact the jobs/housing imbalance. **(Less Than Significant Impact)**

There are no forest lands on or adjacent to the project site and, therefore, the project would not result in impacts to agricultural or forest resources. **(No Impact)**

[67] The number of full-time employees is estimated at 45 based on an approximate 2.5 employees per 1,000 square feet of retail space. Illingworth & Rodkin, Inc. *Avalon West Valley Expansion Air Quality & GHG Assessment.* July 10, 2018.

3.11 NOISE AND VIBRATION

The following discussion is based, in part, on a Noise and Vibration Assessment and a Supplemental Noise Memo prepared by *Illingworth & Rodkin, Inc*. in December 2018. Copies of these reports are attached in Appendix F of this document.

3.11.1 Environmental Setting

3.11.1.1 *Regulatory Framework*

State Building Code

The State Building Code, Title 24, Part 2 of the State of California Code of Regulations establishes uniform minimum noise insulation performance standards to protect persons within new buildings which house people, including hotels, motels, dormitories, apartment houses and dwellings other than single-family dwellings. Title 24 mandates that interior noise levels attributable to exterior sources shall not exceed 45 dBA DNL or CNEL[68] in any habitable room.

Envision San José 2040 General Plan

The General Plan includes the following noise policies applicable to the proposed project. The City's noise and land use compatibility guidelines are shown in Table 3.11-1, below.

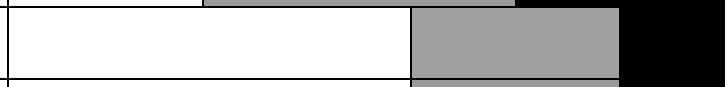
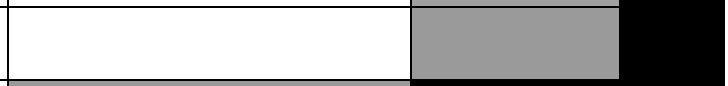
Policy EC-1.1: Locate new development in areas where noise levels are appropriate for the proposed uses. Consider Federal, State and City noise standards and guidelines as part of new development review. Applicable standards and guidelines for land uses in San José include:

Interior Noise Levels

The City's standard for interior noise levels in residences, hotels, motels, residential care facilities, and hospitals is 45 dBA DNL. Include appropriate site and building design, building construction and noise attenuation techniques in new development to meet this standard. For sites with exterior noise levels of 60 dBA or more, an acoustical analysis following protocols in the City-adopted California Building Code is required to demonstrate that development projects can meet this standard. The acoustical analysis shall base required noise attenuation techniques on expected Environmental General Plan traffic volumes to ensure land use compatibility and General Plan consistency over the life of this plan.

[68] DNL (or Ldn) stands for Day-Night Level and is a 24-hour average of noise levels, with 10 dB penalties applied to noise occurring between 10:00 PM and 7:00 AM. CNEL stands for Community Noise Equivalent Level; it is similar to the DNL except that there is an additional five (5) dB penalty applied to noise which occurs between 7:00 PM and 10:00 PM. Title 24 states that the determination of whether to apply DNL or CNEL should be consistent with the metric used in the noise element of the local general plan.

Table 3.11-1: Land Use Compatibility Guidelines for Community Noise in San José

Land Use Category	Exterior DNL Value in Decibels 55 60 65 70 75 80
1. Residential, Hotels and Motels, Hospitals and Residential Care[1]	
2. Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds	
3. Schools, Libraries, Museums, Meeting Halls, and Churches	
4. Office Buildings, Business Commercial, and Professional Offices	
5. Sports Arena, Outdoor Spectator Sports	
6. Public and Quasi-Public Auditoriums, Concert Halls, and Amphitheaters	

[1]Noise mitigation to reduce interior noise levels pursuant to Policy EC-1.1 is required.

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.

Conditionally Acceptable:
Specified land use may be permitted only after detailed analysis of the noise reduction requirements and noise mitigation features included in the design

Unacceptable:
New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies. Development would only be considered when technically feasible mitigation is identified that is also compatible with relevant design guidelines.

Exterior Noise Levels

The City's acceptable exterior noise level objective is 60 dBA DNL or less for residential and most institutional land uses. The acceptable exterior noise level objective is established for the City, except in the environs of the San José International Airport and the Downtown, as described below:

For new multi-family residential projects and for the residential component of mixed-use development, use a standard of 60 dBA DNL in usable outdoor activity areas, excluding balconies and residential stoops and porches facing existing roadways. Some common use areas that meet the 60 dBA DNL exterior standard will be available to all residents. Use noise attenuation techniques such as shielding by buildings and structures for outdoor common use areas. On sites subject to aircraft overflights or adjacent to elevated roadways, use noise attenuation techniques to achieve the 60 dBA DNL standard for noise from sources other than aircraft and elevated roadway segments.

Policy EC-1.2: Minimize the noise impacts of new development on land uses sensitive to increased noise levels by limiting noise generation and by requiring use of noise attenuation measures such as

acoustical enclosures and sound barriers, where feasible. The City considers significant noise impacts to occur if a project would:

- Cause the DNL at noise sensitive receptors to increase by five dBA DNL or more where the noise levels would remain "Normally Acceptable"; or
- Cause the DNL at noise sensitive receptors to increase by three dBA DNL or more where noise levels would equal or exceed the "Normally Acceptable" level.

Policy EC-1.3: Mitigate noise generation of new nonresidential land uses to 55 dBA DNL at the property line when located adjacent to existing or planned noise sensitive residential and public/quasi-public land uses.

Policy EC-1.6: Regulate the effects of operational noise from existing and new industrial and commercial development on adjacent uses through noise standards in the City's Municipal Code.

Policy EC-1.7: Construction operations within San José will be required to use best available noise suppression devices and techniques and limit construction hours near residential uses per the City's Municipal Code. The City considers significant construction noise impacts to occur if a project located within 500 feet of residential uses or 200 feet of commercial or office uses would:

4. Involve substantial noise generating activities (such as grading, excavation, pile driving, use of impact equipment, or building framing) continuing for more than 12 months.

For such large or complex projects, a construction noise logistics plan that specifies hours of construction, noise and vibration minimization measures, posting or notification of construction schedules, and designation of a noise disturbance coordinator who would respond to neighborhood complaints will be required to be in place prior to the start of construction and implemented during construction to reduce noise impacts on neighboring residents and other uses.

Policy EC-1.9: Require noise studies for land use proposals where known or suspected loud intermittent noise sources occur which may impact adjacent of planned land uses. For new residential development affected by noise from heavy rail, light rail, BART or other single-event noise sources, implement mitigation so that recurring maximum instantaneous noise levels do not exceed 50 dBA L_{max} in bedrooms and 55 dBA L_{max} in other rooms.

Policy EC-2.3: Require new development to minimize vibration impacts to adjacent uses during demolition and construction. For sensitive historic structures, a vibration limit of 0.08 in/sec PPV (peak particle velocity) will be used to minimize the potential for cosmetic damage to a building. A vibration limit of 0.20 in/sec PPV will be used to minimize potential for cosmetic damage at buildings of normal conventional construction.

Municipal Code

According to San José Municipal Code Chapter 20.30.700, sound pressure levels generated by any use or combination of uses on a property shall not exceed 55 dBA at any property line shared with land zoned for residential use, except upon issuance and in compliance with a Conditional Use

Permit. Chapter 20.50.300 states the sound pressure level generated by any use or combination of uses shall not exceed 70 dB at any property line shared with land zoned for industrial use, except upon issuance and in compliance with a Special Use Permit.

Chapter 20.100.450 of the Municipal Code establishes allowable hours of construction within 500 feet of a residential unit between 7:00 AM to 7:00 PM on Monday through Friday, unless otherwise expressly allowed in a Development Permit or other planning approval. The Municipal Code does not establish quantitative noise limits for demolition or construction activities occurring in the City.

3.11.2 Background Information

Noise

Noise is typically defined as unwanted sound. Acceptable levels of noise vary from land use to land use. State and federal standards have been established as guidelines for determining the compatibility of a particular land use with its noise environment.

There are several methods of characterizing sound. The most common in California is the A-weighted sound level or dBA. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called L_{eq}. The most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration. For single-event noise sources, an L_{max} measurement is used which describes the maximum A-weighted noise level during the measurement period.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can measure environmental noise levels within about plus or minus one dBA. Since the sensitivity to noise increases during the evening and at night, 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The Community Noise Equivalent Level (CNEL) is a measure of the cumulative noise exposure in a community, with a five dB penalty added to evening hours between 7:00 PM and 10:00 PM and a 10 dB addition to night-time hours between 10:00 PM and 7:00 AM. The Day/Night Average Sound Level, DNL, is the average A-weighted noise level during a 24-hour day, obtained after the addition of 10 dB to noise levels measured in the night-time between 10:00 PM and 7:00 AM.

Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the Peak Particle Velocity (PPV) and another is the Root Mean Square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration. In this section, a PPV descriptor with units of inches per second (in/sec) is used to evaluate construction generated vibration for building

damage and human complaints. Table 3.11-2 shows the general reactions of people and the effects on building that continuous vibration levels produce. As with noise, the effects of vibration on individuals is subjective due to varying tolerances.

Table 3.11-2: Effects of Vibration

PPV (in/sec)	Human Reaction	Effect on Buildings
0.01	Barely perceptible	No effect
0.04	Distinctly perceptible	Vibration unlikely to cause damage of any type to any structure
0.08	Distinctly perceptible to strongly perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.1	Strongly perceptible	Virtually no risk of damage to normal buildings
0.3	Strongly perceptible to severe	Threshold at which there is a risk of damage to older residential dwellings such as plastered walls or ceilings.
0.5	Severe – vibration considered unpleasant	Threshold at which there is a risk of damage to newer residential structures.

Source: Caltrans. *Transportation and Construction-Induced Vibration Guidance Manual*. September 2013.

Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, etc. The rattling sound can give rise to exaggerated vibration complaints, even though there is little risk of actual structural damage. In high noise environments, which are more prevalent where groundborne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows.

Construction activities can cause vibration that varies in intensity depending on several factors. The use of pile driving and vibratory compaction equipment typically generates the highest construction related groundborne vibration levels. Because of the impulsive nature of such activities, the use of the PPV descriptor has been routinely used to measure and assess groundborne vibration and almost exclusively to assess the potential of vibration to induce structural damage and the degree of annoyance for humans.

The two primary concerns with construction-induced vibration, the potential to damage a structure and the potential to interfere with the enjoyment of life are evaluated against different vibration limits. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 in/sec PPV. Human perception to vibration varies with the individual and is a function of the physical setting and the type of vibration. Persons exposed to elevated ambient vibration levels such as people in an urban environment may tolerate higher vibration levels.

Structural damage can be classified as cosmetic, such as minor cracking of building elements, or may threaten the integrity of the building. Safe vibration limits that can be applied to assess the potential for damaging a structure vary by researcher and there is no general consensus as to what amount of vibration may pose a threat for structure damage to a building. Construction-induced vibration that can be detrimental to a building is very rare and has only been observed in instances where the structure in a high state of disrepair and the construction activities occur immediately adjacent to the structure.

3.11.2.1 *Existing Conditions*

The project site is located on the east side of Saratoga Avenue and south of Blackford Avenue. A noise monitoring survey was completed the vicinity of the project site which included three long-term noise measurements (LT-1 to LT-3) and four short-term noise measurements (ST-1 to ST-4). The long-term measurement locations were selected to measure the diurnal trends in traffic noise levels on Saratoga Avenue, Blackford Avenue, and Manzanita Drive. The short-term locations were selected to represent existing or future residential locations.[69] Table 3.11-3 and Table 3.11-4 below summarizes the acoustical locations and measurements. Average noise levels on the project site ranged from 62 to 73 dBA DNL. The noise monitoring locations are shown in Figure 3.11-1 below.

Table 3.11-3: Existing Long-Term Noise Measurements (dBA DNL)

Measurement	Location	Daytime Level	Night-Time Level	Average Noise Level
LT-1	Approximately 75 feet east of the centerline of Saratoga Avenue	68-71	61-70	73
LT-2	710 Blackford Avenue, approximately 35 feet from the centerline of Blackford Avenue	59-66	49-62	65
LT-3	Southeastern corner of Manzanita Drive and Dessert Isle Drive, approximately 20 feet from the centerline	55-61	49-60	62

Table 3.11-4: Existing Short-Term Noise Measurements (dBA DNL)

Measurement	Location	Noise Levels dBA				Primary Noise Source
		L_{10}	L_{50}	L_{90}	L_{eq}	
ST-1	134 Aurora Boulevard, approximately 85 feet east of the center of Aurora Boulevard	54	51	49	52	Traffic on Aurora Avenue and Saratoga Avenue
ST-2	Northern corner of Olga Drive and Dessert Isle Drive	53	43	41	50	Traffic on Olga Drive and Dessert Isle Drive
ST-3	Pool area, south of tennis courts	53	50	47	51	Traffic on Saratoga Drive
ST-4	In the courtyard behind Building L, approximately 135 feet north of the Manzanita parking garage	53	47	46	50	Traffic on Saratoga Avenue

[69] Biwalkar, Manasi, Illingworth & Rodkin, Inc. Personal communication. October 29, 2018.

Figure 3.11-1: Noise Monitoring Locations

The nearest sensitive receptors to the construction zones would be on-site residences located approximately 45 feet east of the proposed Avalon Building and 30 feet north of the proposed Manzanita Building.

The project site is located approximately three miles southeast of the Norman Y. Mineta San José International Airport, however, it is not located within the AIA, as defined by the Airport's CLUP. According to the City's projected 2027 noise contours for Norman Y. Mineta San José International Airport, the project site is located outside the 65 dBA noise contour.[70]

3.11.3 Noise and Vibration Impacts

3.11.3.1 *Thresholds of Significance*

For the purposes of this EIR, a noise and vibration impact is considered significant if the project would result in:

[70] Santa Clara County Airport Land Use Commission. *Norman Y. Mineta San José International Airport Comprehensive Land Use Plan*. November 2016.

1. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or local general plan or noise ordinance, or applicable standards of other agencies;
2. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
3. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
4. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
5. 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 expose people residing or working in the project area to excessive noise levels; or
6. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

The CEQA Guidelines state that a project will normally be considered to have a significant impact if noise levels conflict with adopted environmental standards or plans, or if noise levels generated by the project will substantially increase existing noise levels at noise-sensitive receivers on a permanent or temporary basis. CEQA does not define what noise level increase would be substantial. A three dBA noise level increase is considered the minimum increase that is perceptible to the human ear. Per City of San José Policy EC-1.2, project generated noise level increases of three dBA DNL or greater are considered significant where resulting exterior noise levels will exceed the normally acceptable noise level standard. Where noise levels will remain at or below the normally acceptable noise level standard with the project, a noise level increase of five dBA DNL or greater is considered significant.

City of San José Standards

The City of San José relies on the following guidelines for new development to avoid impacts above the CEQA thresholds of significance outlined above.

Construction Noise

For temporary construction-related noise to be considered significant, construction noise levels would have to exceed ambient noise levels by five dBA L_{eq} or more and exceed the normally acceptable levels of 60 dBA L_{eq} at the nearest noise-sensitive land uses or 70 dBA L_{eq} at office or commercial land uses for a period of more than 12 months.

Operational or Permanent Noise

Development allowed by the General Plan would result in increased traffic volumes along roadway throughout San José. The City of San José considers a significant noise impact to occur where existing noise sensitive land uses would be subject to permanent noise level increases of three dBA DNL or more where noise levels would equal or exceed the “Normally Acceptable” level, or five dBA DNL or more where noise levels would remain “Normally Acceptable”.

As mentioned in *Section 3.11.2.1, Existing Conditions*, based on the noise measurements, the site has an ambient noise level ranging from 62 to 73 dBA DNL. Per Table 3.11-1, this is considered to be within the "conditionally acceptable" range.

Construction Vibration

The City of San José has concluded that a significant impact would be identified if the construction of the project would expose persons to excessive vibration levels. A conservative vibration limit of 5.0 mm/sec (0.2 inches/sec), PPV has been used for buildings that are found to be structure sounds but structural damage is a major concern. For historic buildings or buildings that are documented to be structurally weakened, a conservative limit of 2.0 mm/sec (0.08 inches/sec), PPV is used to provide the highest level of protection.

3.11.3.2 *Consistency with Plans*

The project would be required to implement the identified Standard Permit Conditions during all phases of construction on-site. In addition, the project would be required to use noise attenuation techniques to reduce exterior and interior noise levels, consistent with City policies. As a result, the project would be consistent with Policy EC-1.7. With implementation of the identified mitigation measures, the project would be consistent with vibration Policy EC-2.3 and operational noise Policies EC-1.1, EC-1.2, EC-1.3, and EC-1.6.

3.11.3.3 ***Noise Impacts from the Project*** *(Threshold Nos. 1, 3, and 4)*

Operational Noise Impacts

Project Generated Traffic Noise Impacts

New trips will be added to the area as a result of the proposed project. As stated above, an increase of three dBA DNL is considered substantial in noise sensitive areas along roadways. The proposed project would have to double the existing traffic volumes in the area to increase noise levels by three dBA or more. To determine the effect of the project-generated traffic on the nearby residences, AM and PM peak hour traffic volumes for the Existing Plus Project condition were compared to Existing traffic volumes (Refer to Appendix G). Based on these calculations, project-generated traffic would increase by less than one dBA L_{eq} along the roadway network. Day-night average (DNL) noise level increase would be anticipated to be similar. This increase would not typically be noticeable and would be below the three dBA and five dBA DNL thresholds of significance. The project would have a less than significant long-term traffic noise impact. **(Less Than Significant Impact)**

Mechanical Equipment

The proposed project would include various mechanical equipment such as refrigeration systems, air condition systems, exhaust fans, and ventilation systems that could increase ambient noise levels in the immediate project vicinity. The project would include fans for air circulation within the basement parking levels of the Avalon Building and the stand-alone parking garage. The fans would be enclosed in a room and would not be audible at adjacent uses on-site. The air compressors for heating, ventilation and air conditioning (HVAC) would be located on the rooftop levels over access-ways/hallways. At this time, mechanical system specifications is unknown; therefore, the sound level

generated by rooftop equipment was based on data collected in previous studies of similar kind.[71] Residential HVAC units typically generate noise levels of 50 to 60 dBA at approximately 50 feet. The project proposes a total of 11 HVAC systems which would generate a total noise level of 60 to 70 dBA.

The rooftop equipment would be located approximately 120 feet from the nearest residences to the south of the proposed Avalon Building. At this distance, the rooftop equipment noise levels would be approximately 52 to 62 dBA L_{eq} under unshielded conditions. Assuming 24-hour per day operations, this would be equivalent to 58 to 68 dBA DNL.[72] Under shielded conditions[73], however, mechanical equipment would generate noise levels below 49 dBA L_{eq} and below 55 dBA DNL. The project would be required to comply with the following standard permit condition to ensure that equipment noise would not exceed City General Plan noise limits.

Standard Permit Condition

- Prior to issuance of building permits, the project would be required to retain a qualified acoustical consultant to review the mechanical noise equipment selected and to determine specific noise reduction measures necessary to comply with the noise limit of 55 dBA or less at residential property lines. Noise reduction measures could include, but are not limited to, selection of equipment that emits low noise levels and installation of noise barriers such as enclosures and parapet walls to block the line of sight between the noise source and nearest receptors.

As a result, noise produced by mechanical equipment during project operations would not significantly impact residences near the project site. **(Less than Significant Impact)**

Parking Garages

As proposed, the project would construct two new parking garages to replace existing parking being removed as part of the project. The Avalon Garage would have two levels of below-grade parking while the Manzanita Garage would have three levels of above-grade and one level of below-grade parking. Noise associated with parking garages includes vehicle circulation, doors closing/opening, engines starting, car alarms, and auto horns. Noise sources within the subterranean parking garage levels would not be anticipated to be audible outside of the parking garage.

To quantify the potential noise impacts of the above-grade parking garage on off-site residents, data from a previous noise study[74] of an existing four-story parking garage in downtown Petaluma was used.[75] Noise measurements were taken from typical noise-generating activities included doors closing/opening, engines starting, and auto horns. These noise sources were generated at the edge of

[71] Biwalkar, Manasi, Illingworth & Rodkin, Inc. Personal communication. September 12, 2018.
[72] Noise levels from mechanical equipment typically attenuate at a rate of six dB per double of distance.
[73] Shielding from the rooftop and surrounding structures, such as a parapet wall at the rooftop edge, would provide a noise reduction of approximately 10 to 20 dBA.
[74] Illingworth & Rodkin, Inc. *Environmental Noise Assessment Vallco Fashion Park – North Parking Garage*. October 11, 2006.
[75] The Petaluma parking garage study was conducted exclusively to study parking garage noise. Even if Petaluma as a town is very different from a big city such as San José, this study gives a basis for typical car parking noise levels which is relevant to our project here since the south garage is close to proposed Manzanita Building.

each parking level and at a parking stall located approximately 50 feet from the edge. The maximum instantaneous noise levels, measured at approximately 75 feet from the façade of the parking garages at ground level, typically ranged from 53 to 58 dBA L_{max}. Maximum noise levels were from car horns that ranged from 62 to 70 dBA.

The closest residences to the Avalon Garage are located approximately 80 feet east of the garage location (Avalon building façade). Based on available data, at a distance of 80 feet from the Avalon Garage, typical parking lot noise would range from 53 to 58 dBA with noise levels from car horns that would range from 62 to 70 dBA. The closest residences to the Manzanita Garage is approximately 30 feet, where the maximum instantaneous noise levels range from 59 to 62 dBA with occasional horn sounds ranging from 68 to 74 dBA. Existing maximum noise levels at these locations range from 59 to 64 dBA L_{max}. The calculated noise levels due to noise within the parking garage would be similar or lower to the existing noise levels and, as a result, would have a less than significant noise impact. **(Less Than Significant Impact)**

3.11.3.4 *Construction Noise Impacts (Threshold Nos. 1 – 4)*

Construction Noise

Construction of the new stand-alone parking garage and the Manzanita Building would begin in 2020 and finish in 2021. Construction of the Avalon Building would begin in 2021 and end in 2023. Construction activities on-site would consist of demolition of existing structures and pavement, site preparation, grading and excavation, trenching, building erection, and paving. Construction activities associated with the proposed development would temporarily increase noise levels in the project area and would be audible at the existing and nearby residential buildings. Construction activities on-site would be carried out in stages. During each stage of construction, there would be a different mix of equipment operating and noise levels would vary by stage based on the amount of equipment in operation and the location at which the equipment is operating.

At a distance of 50 feet, construction equipment would generate maximum noise levels ranging from 77 to 98 dBA and hourly noise levels of 74 to 91 dBA L_{eq} (as seen in Table 3.11-5). The nearest on-site sensitive receptors would be exposed to a maximum noise level of 99 dBA during the demolition phase and noise levels of 77 to 85 dBA during other phases of construction. The average hourly noise levels at the nearby residences would be 91 dBA L_{eq} during demolition and would range from 78 to 86 dBA L_{eq} during other phases of construction. For both the residential receptors and commercial receptors (to the northwest of Blackford & Saratoga Avenue intersection), construction of the proposed project would exceed the City's noise threshold of 60 dBA L_{eq} and 70 dBA L_{eq}, respectively. In addition, the ambient noise levels would be increased by five dBA or more for more than one year.

Table 3.11-5: Construction Noise Levels for Each Phase of Construction		
Construction Phase	**At 50 Feet**	
	L_{eq}, dBA	**L_{max}, dBA**
Demolition	91	98
Site Preparation	85	85
Grading/Excavation	86	85
Trenching	82	84
Building-Exterior	81	84
Building-Interior	74	77
Paving	82	84

Consistent with the Municipal Code and in accordance with the General Plan FEIR (as amended), particularly Policy EC-1.7, the proposed project will be required to comply with the Standard Permit Conditions, as discussed below during all phases of construction on the project site:

Standard Permit Conditions

- Construction activities shall be limited to the hours between 7:00 AM and 7:00 PM, Monday through Friday, unless permission is granted with a development permit or other planning approval. No construction activities are permitted on the weekends at sites within 500 feet of a residence (Municipal Code Section 20.100.450).
- Construct solid plywood fences around ground-level construction sites adjacent to operational businesses, hotels, and other noise-sensitive land uses.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- All unnecessary idling of internal combustion engines is prohibited. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes.
- Locate stationary noise-generating equipment such as air compressors or portable power generators as far as possible from sensitive receptors. Construct temporary noise barriers to screen stationary noise-generating equipment when located near adjoining sensitive land uses. Temporary noise barriers should reduce construction noise levels by five dBA.
- Utilize "quiet" air compressors and other stationary noise sources where technology exists.
- Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.
- Notify all adjacent businesses, residences, and other noise-sensitive land uses of the construction schedule, in writing, and provide a written schedule of "noisy" construction activities to the adjacent land uses and nearby residences.
- A temporary noise control blanket barrier shall be erected, if necessary, along building facades facing construction sites. This condition shall only be necessary if conflicts occur which are irresolvable by proper scheduling. Noise control blanket barriers shall be rented and quickly erected.
- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of

the noise complaint (e.g., bad muffler, etc.) and require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

With implementation of the identified Standard Permit Conditions listed above, the temporary increase in ambient noise levels in the project area would have a less than significant impact. **(Less Than Significant Impact)**

Night-Time Noise

The City's Municipal Code (Chapter 20.100.450) establishes allowable hours of construction within 500 feet of a residential unit between 7:00 AM to 7:00 PM on Monday through Friday, unless otherwise expressly allowed in a Development Permit or other planning approval. No construction activities are permitted on the weekends within 500 feet of a residence.

The project proposes extended construction hours which would include Saturday work from 9:00 AM to 5:00 PM up to twice a month and up to 10 24-hour concrete pours. A total of 29 concrete pours are anticipated. Each concrete pour is estimated to take up to eight hours and would require two to four trucks per hour to deliver the concrete to the site. The night-time concrete pours could result in a sleep disturbance to existing residences on and adjacent to the site. Figure 3.11-2 shows the locations of the night-time concrete pours, as designated by the green symbol in the figure below.

Figure 3.11-2: Locations

For the purposes of this analysis, it was assumed each concrete pour would include three trucks: a pump truck, a delivery truck connected to the pump truck, and another delivery truck waiting to be connected. The Federal Highway Administration (FHWA) software – Roadway Construction Noise Model (RCNM) was used to calculate noise generated by all three trucks. The nearest residences are located approximately 50 feet from the concrete pour locations. At a distance of 50 feet, concrete pour activities would generate noise levels of up to 79 dBA L_{eq} and 81 dBA L_{max}. Construction noise would drop off at a rate of six dBA per doubling of distance and shielding by structures would provide 10 to 20 dBA of additional noise reduction.

Based on General Plan Policy EC-1.9, mitigation is required for recurring maximum instantaneous noise levels that exceed 50 dBA L_{max} in bedrooms and 55 dBA L_{max} in other rooms. In addition, steady noises above 35 dBA and fluctuating noise levels above 45 dBA have been shown to affect sleep. Standard residential construction with windows partially open provides approximately 15 dBA of exterior-to-interior noise reduction. Standard residential construction with windows closed provides approximately 20 to 25 dBA of noise reduction in interior spaces. At an unshielded distance of 50 feet, interior noise levels within residences are estimated to be 64 dBA L_{eq} and 66 dBA L_{max} with windows partially open and 54 to 59 dBA L_{eq} and 56 to 61 dBA L_{max} with windows closed. These noise levels would result in sleep disturbance to residences.

Impact NOI-1: Concrete pours during the evening hours (7:00 PM to 7:00 AM) would exceed the City's allowable noise levels of 50 dBA L_{max} in bedrooms and 55 dBA L_{max} in other rooms. **(Significant Impact)**

Mitigation and Avoidance Measures

In addition to Standard Permit Conditions listed above, the following mitigation measures are included to reduce construction noise, limit construction hours, and minimize disruption and annoyance.

MM NOI-1.1: To reduce construction noise levels during evening hours work to nearby residences, the following mitigation measures shall be implemented by the project applicant prior to the start of any evening construction activity:

- The project applicant shall notify by mail all sensitive receptors and residences within 200 feet of the construction sites at least two weeks prior to the night-time concrete pours. In addition to mailing, notification methodology shall also include online and on-site posting. All notifications shall provide specific details on the schedule of the dates, times, duration, and proposed activities of all construction work occurring outside of the City's allowable hours of construction (7:00 AM to 7:00 PM, Monday through Friday). Notices shall provide tips on reducing noise intrusion, for example, by closing windows facing the planned construction. Any modifications made to the dates, times, and duration of the concrete pours will require new noticing.
- The project applicant shall designate a construction noise coordinator to respond to concerns of neighboring receptors about noise construction disturbance. The construction noise coordinator shall be available for

responding to any construction noise complaints during the hours that construction is to take place. A toll-free telephone number and email address shall be provided in all notices (mailed, online website, and construction site postings) for receiving questions or complaints during construction and shall also include procedures that the construction noise coordinator will do for responding to callers and email messages. Procedures for reaching the public liaison officer via telephone or in person shall be included in the above notices and also posted at the construction site(s).

- The project applicant shall implement one of the following two options to control night-time construction noise occurring between the hours of 10:00 PM and 7:00 AM to reduce the occurrence of sleep disturbance to nearby residents:

  - **Option 1:**
    - Install temporary sound walls or acoustic blankets to shield adjacent residences from all night-time concrete pours. The sound walls or acoustic blankets shall have a height of no less than three feet higher than noise-generating piece(s) or parts of equipment, a Sound Transmission Class (STC) of 27 or greater, and a surface with a solid face from top to bottom without any openings or cutouts along the face or at the base of the barrier; and
    - Offer to temporarily relocate occupants of residences that are located within 75 feet of evening construction activities by offering hotel vouchers to all affected residents. A minimum of one week notice of the offer shall be provided.

  - **Option 2:**
    - Offer to temporarily relocate occupants of residences within 200 feet of evening construction activities by offering hotel vouchers to all affected residents. A minimum of one week notice of the offer shall be provided.

MM NOI-1.2: Prior to the issuance of any grading permits, the project applicant shall submit a construction plan to the Supervising Environmental Planner for review and approval. The construction plan shall include, but is not limited to, the following information:

- A proposed construction schedule, list of equipment to be used during construction activities, and the equipment specifications.
- Contact information of the construction noise coordinator and a description of the coordinator's specified roles and responsibilities.
- An example notification template for the evening hour concrete pours that the project applicant will use.
- Confirmation of which option, identified in NOI-1.1, the project applicant shall implement.

- Notification radius and addresses of all sensitive receptors and residences within 200 feet of the construction sites.

With implementation of Mitigation Measures NOI-1.1 and NOI-1.2 and standard permit conditions listed above the proposed project would result in a less than significant night-time concrete pour noise impact. **(Less than Significant Impact With Mitigation)**

Groundborne Vibration Impacts

According to General Plan Policy EC-2.3, a vibration limit of 0.2 in/sec PPV is used to minimize damage at buildings of normal conventional construction. Construction activities on-site would include demolition of the existing buildings, preparation work, excavation of the below-grade levels, foundation work, and new building framing and finishing which may generate perceptible vibration levels. As mentioned previously, the nearest on-site sensitive receptors to the project site would be residences located approximately 45 feet east of the proposed Avalon Building and 30 feet north of the proposed Manzanita Building. No pile driving is proposed. At a distance of 30 feet, vibration levels from construction would be approximately 0.17 in/sec PPV or less and at a distance of 45 feet, vibration levels from construction would be approximately 0.11 in/sec PPV or less. Although vibration levels would be perceptible to the adjacent residences and businesses, vibration levels would be below the 0.2 in/sec PPV vibration limit, consistent with General Plan Policy EC-2.3. In addition, with the Standard Permit Conditions above, the project would be limited in hours of constructions and will have a coordinator on-site who would be responsible for responding to complaints regarding construction noise. As a result, implementation of the project would have a less than significant ground borne vibration impact. **(Less Than Significant Impact)**

3.11.3.5 *Existing Noise Conditions Affecting the Project* *(Threshold Nos. 1, 2, 5, and 6)*

On December 17, 2015, the California Supreme Court issued an opinion in CBIA vs. BAAQMD holding that CEQA is primarily concerned with the impacts of a project on the environment and generally does not require agencies to analyze the impact of existing conditions on a project's future users or residents unless the project risks exacerbating those environmental hazards or risks that already exist. Nevertheless, the City has policies and regulations that address existing conditions affecting a proposed project, which are discussed below.

The policies of the City's General Plan have been adopted for the purpose of avoiding or mitigating environmental effects resulting from planned development within the City. City Policy EC-1.1 requires new development to be located in areas where noise levels are appropriate for the proposed uses, considering federal, state and City noise standards and guidelines as a part of new development review. Within the City of San José, applicable standards and guidelines for land uses in San José include:

Future Exterior Noise Levels

Avalon Building

The project would include an outdoor pool area on level two, a roof deck on level seven of the proposed Avalon Building and publicly-accessible urban plazas along Saratoga Avenue. These outdoor areas would be exposed to noise levels from traffic on Saratoga Avenue. The pool area

would be shielded from Saratoga Avenue by the residential units of the Avalon Building. Based on the noise monitoring survey, the pool area would be exposed to a noise level of 52 dBA DNL and the roof deck would be exposed to a noise level of 67 dBA DNL. The urban plazas would be exposed to a noise level of 71 to 72 dBA DNL.

Noise levels at the roof deck would exceed the City's acceptable exterior noise threshold of 60 dBA DNL for residential use. The following Condition of Project Approval would be required to ensure the project is consistent with applicable City policies:

Conditions of Project Approval

- The project shall install a 3.5-foot high parapet walls, as measured above the base elevation of the Avalon Building rooftop use area to maintain an acceptable outdoor noise exposure of 60 dBA DNL. The parapet walls would need to be located along the perimeter of the roof deck on proposed on the seventh floor of the Avalon Building. The parapet wall shall be constructed with a solid material with no gaps in the face of the wall or at the base. Suitable materials for sound wall construction shall have a minimum surface weight of three pounds per square foot (such as a one-inch-thick wood, ½-inch laminated glass, masonry block, concrete, or metal one-inch).

With implementation of the Conditions of Project Approval, the proposed outdoor use areas would meet the City's acceptable exterior noise level threshold.

Manzanita Building

An outdoor pool and courtyard area, adjacent to Manzanita Drive, are proposed at the ground level of the Manzanita Building. Although the exterior use areas would be shielded from Saratoga Avenue by the Manzanita Building, the exterior use areas would not be shielded from traffic on Manzanita Drive. Based on the noise monitoring survey, the courtyard and pool area would be exposed to a noise level of 59 dBA DNL due to the traffic on Manzanita Drive. The proposed outdoor use areas would meet the City's acceptable exterior noise level threshold.

Future Interior Noise Levels

The future exterior noise level exposures at the proposed buildings are summarized in Table 3.11-6 below. Interior noise levels vary depending on the design of the buildings and the selected construction materials and methods. Standard residential construction provides approximately 15 dBA of exterior-to-interior noise reduction with windows partially open (for ventilation). Standard residential construction with windows closed provides approximately 20 to 25 dBA of noise reduction in interior spaces. Where exterior noise levels range from 60 to 65 dBA DNL, adequate forced-air mechanical ventilation can reduce interior noise levels to acceptable levels by allowing occupants the option of closing the windows to reduce noise. Force-air mechanical ventilation systems and sound-rated construction methods are normally required where exterior noise levels exceed 65 dBA DNL.

Table 3.11-6: Predicted Exterior Noise Levels On-Site					
Building Façade		Predicted Exterior Noise Levels at Façades (dBA DNL)			
		Commercial	Level Two of Both Buildings	Level 6 of Avalon Level 4 of Manzanita	Rooftop
Avalon	North, facing Blackford Avenue	62	61	58	-
	West, facing south	62	62	62	-
	West, facing Saratoga Avenue	71	71	69	-
	South, facing Saratoga Avenue	garage	69 (level 3)	69	67
	South	65	65	64	-
Manzanita	South	-	59		-
	West	-	49		-

Future interior noise levels at the residences in the Manzanita Building are calculated to be below 45 dBA DNL with standard construction with windows open or closed. With standard construction and windows open, the residences within the Avalon Building (facing Saratoga Avenue) would be exposed to noise levels of up to 56 dBA DNL and the residences facing Blackford Avenue would be exposed to a noise level of 46 dBA DNL. These levels would exceed the City's standard for interior noise levels. The inclusion of forced air mechanical ventilation would be sufficient to limit interior noise along the north building façade of the Avalon Building to acceptable levels. Based on the noise and vibration assessment, windows with a sound transmission class (STC)[76] 28 rating or higher would be adequate to reduce the interior noise exposure in these units to 45 dBA DNL, consistent with City's standard for interior noise levels.

Commercial-use construction, with closed windows, would provide approximately 25 dB of noise reduction from exterior noise sources. The proposed commercial use space at the ground level of the Avalon Building would be of standard commercial construction. With windows closed and air conditioning, the proposed commercial space would have interior noise levels ranging from 37 to 46 dBA $L_{eq(1\text{-}hr)}$. These levels would be in compliance with the State Building Code's acceptable interior noise level of 50 dBA $L_{eq(1\text{-}hr)}$.

In accordance with the City's General Plan FEIR (as amended) and General Plan Policy EC-1.1, the proposed project will be required, as Conditions of Project Approval, to implement the following measures.

[76] **Sound Transmission Class (STC):** A single figure rating designed to give an estimate of the sound insulation properties of a partition. Numerically, STC represents the number of decibels of speech sound reduction from one side of the partition to the other. The STC is intended for use when speech and office noise constitute the principal noise problem.

Conditions of Project Approval

- Prior to the issuance of a building permits, the applicant shall consult with the local building officials and a qualified acoustic consultant to determine a suitable form of forced-air mechanical ventilation for all Avalon Building residences, so that the windows can be kept closed to control noise.

- Within the Avalon Building, the project shall include and install sound-rated windows with minimum STC ratings of 28 in all residential rooms facing Saratoga Avenue to maintain interior noise levels at acceptable levels of 45 dBA DNL or less. Changes to the sound-rated windows rating shall require an acoustic report prepared by a qualified acoustic consultant to determine whether the changes would continue to provide interior noise level exposure of 45 dBA DNL or less.

With implementation of the Conditions of Project Approval, the proposed project would meet the City's interior noise standards consistent with General Plan Policy EC-1.1.

Aircraft Noise

The Norman Y. Mineta San José International Airport is located approximately 6.4 miles northeast of the project site. While aircraft-related noise may be audible at the project site, noise from aircraft would not substantially increase ambient noise levels. The project site is not located within the Airport Influence Area (AIA) nor is the project located within the 65 dBA Airport Noise Contours. As a result, exterior and interior noise levels resulting from aircraft would be compatible with the proposed project and the project would be consistent with Policy EC-1.1.

3.11.4 Conclusion

With implementation of the standard permit conditions listed in *Section 3.11.3.4*, the proposed project would have a less than significant construction noise and vibration impact. **(Less Than Significant Impact)**

Operation of the proposed project would have a less than significant noise impact. **(Less Than Significant Impact)**

With implementation of Mitigation Measure NOI-1.1 and NOI-1.2, the proposed project would result in a less than significant night-time concrete pour noise impact. **(Less than Significant Impact With Mitigation)**

3.12 PUBLIC SERVICES AND RECREATION

3.12.1 Environmental Setting

Unlike utility services, public facility services are provided to the community as a whole, usually from a central location or from a defined set of nodes. The resource base for delivery of the services, including the physical service delivery mechanisms, is financed on a community-wide basis, usually from a unified or integrated financial system. The service delivery agency can be a city, county, service or other special district. Typically, new development will create an incremental increase in the demand for these services; the amount of demand will vary widely, depending on both the nature of the development (residential vs. commercial, for instance) and the type of services, as well as on the specific characteristics of the development (such as senior housing vs. multi- or single-family housing).

The impact of a particular project on public facilities and services is generally a fiscal impact. By increasing the demand for a type of service, a project could cause an eventual increase in the cost of providing the service (e.g., more personnel hours to patrol an area, additional fire equipment needed to service a tall building, etc.). That is a fiscal impact, however, not an environmental one.

CEQA does not require an analysis of fiscal impacts. CEQA analysis is required if the increased demand triggers the need for a new facility (such as a school or fire station), since the new facility would have a physical impact on the environment.

For the purposes of this EIR, a public facilities and services impact is considered significant if the project would result in substantial adverse physical impacts associated with the provision or 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, police protection, schools, parks, or other public facilities.

3.12.1.1 *Regulatory Framework*

Quimby Act

The Quimby Act (California Government Code Sections 66475-66478) was approved by the California legislature to preserve open space and parkland in the State. This legislation was in response to California's increased rate of urbanization and the need to preserve open space and provide parks and recreation facilities for California's growing communities. The Quimby Act authorizes local governments to establish ordinances requiring developers of new subdivisions to dedicate parks, pay an in-lieu fee, or perform a combination of the two.

School Impact Fees

California Government Code Section 65996 specifies that an acceptable method of offsetting a project's effect on the adequacy of school facilities is the payment of a school impact fee prior to the issuance of a building permit. Sections 65995-65998 sets forth provisions for the payment of school impact fees by new development by "mitigating impacts on school facilities that occur (as a result of the planning, use, or development of real property" (Section 65996[a]). The legislation goes on to say

that the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA (Section 65996[b]).

In accordance with California Government Code Section 65996, developers pay a school impact fee to the school district to offset the increased demands on school facilities caused by their proposed residential development project. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

City of San José Parkland Dedication Ordinance and the Park Impact Ordinance

The City of San José has adopted the Parkland Dedication Ordinance (PDO) (Municipal Code Chapter 19.38) and Park Impact Ordinance (PIO) (Municipal Code Chapter 14.25) requiring residential developers to dedicate public parkland or pay in-lieu fees, or both, to offset the demand for neighborhood parkland created by their housing developments. Each new residential project is required to conform to the PDO and/or PIO. The acreage of parkland required is based upon the Acreage Dedication Formula outlined in the PDO.[77]

Envision San José 2040 General Plan

The General Plan includes the following public services and recreation policies applicable to the proposed project.

Policy PR-1.1: Provide 3.5 acres per 1,000 population of neighborhood/community serving parkland through a combination of 1.5 acres of public park and 2.0 acres of recreational school grounds open to the public per 1,000 San José residents.

Policy PR-1.2: Provide 7.5 acres per 1,000 population of citywide/regional park and open space lands through a combination of facilities provided by the City of San José and other public land agencies.

Policy PR-1.3: Provide 500 square feet per 1,000 population of community center space.

Policy PR-1.12: Regularly update and utilize San José's Parkland Dedication Ordinance/Parkland Impact Ordinance (PDO/PIO) to implement quality facilities.

Policy PR-2.4: To ensure that residents of a new project and existing residents in the area benefit from new amenities, spend Park Dedication Ordinance (PDO) and Park Impact Ordinance (PIO) fees for neighborhood serving elements (such as playgrounds/tot-lots, basketball courts, etc.) within a ¾ mile radius of the project site that generates the funds.

Policy PR-2.5: Spend, as appropriate, PDO/PIO fees for community serving elements (such as soccer fields, community gardens, community centers, etc.) within a three-mile radius of the residential development that generates the PDO/PIO funds.

Policy PR-2.6: Locate all new residential developments over 200 units in size within 1/3 of a mile walking distance of an existing or new park, trail, open space or recreational school grounds open to

[77] Minimum Acreage Dedication = (0.003 acres) x (number of dwelling units) x (average persons per household).

the public after normal school hours or shall include one or more of these elements in its project design.

Policy PR-3.5: Develop programs, activities, events, and facilities that appeal to a broad audience, including but not limited to youth, young adults, and seniors and those of varying ethnicities, backgrounds, and abilities.

Policy ES-2.2: Construct and maintain architecturally attractive, durable, resource-efficient, and environmentally healthful library facilities to minimize operating costs, foster learning, and express in built form the significant civic functions and spaces that libraries provide for the San José community. Library design should anticipate and build in flexibility to accommodate evolving community needs and evolving methods for providing the community with access to information sources. Provide at least 0.59 square feet of space per capita in library facilities.

Policy ES-3.1: Provide rapid and timely Level of Service response time to all emergencies:

a. For police protection, use as a goal a response time of six minutes or less for 60 percent of all Priority 1 calls, and of eleven minutes or less for 60 percent of all Priority 2 calls.
b. For fire protection, use as a goal a total response time (reflex) of eight minutes and a total travel time of four minutes for 80 percent of emergency incidents.
c. Enhance service delivery through the adoption and effective use of innovative, emerging techniques, technologies, and operating models.
d. Measure service delivery to identify the degree to which services are meeting the needs of San José's community.
e. Ensure that development of police and fire service facilities and delivery of services keeps pace with development and growth in the city.

Policy ES-3.9: Implement urban design techniques that promote public and property safety in new development through safe, durable construction and publically visible and accessible spaces.

Policy ES-3.11: Ensure that adequate water supplies are available for fire-suppression throughout the City. Require development to construct and include all fire suppression infrastructure and equipment needed for their projects.

Policy PR-4.1: Collaborate with the community in the design, programming, and operation of parks and recreation facilities to ensure that these facilities meet their needs.

Policy PR-4.4: Reinforce the cultural character of new and existing neighborhoods by reflecting local materials, design forms, and landscape character in the development of neighborhood serving parks

3.12.1.2 *Existing Conditions*

Fire Protection Services

Fire protection services for the project site are provided by the San José Fire Department (SJFD). SJFD responds to all fire, hazardous materials spills, and medical emergencies (including injury accidents) in the City. Emergency response is provided by 33 fire stations, 30 engine companies, nine

truck companies, three squad units, and numerous specialty teams and vehicles.[78] The closest station is Station No. 14, located at 1201 San Tomas Aquino Road, approximately 0.8 miles south of the project site.

The General Plan identifies a service goal of a total response time of eight minutes and a total travel time of four minutes or less for 80 percent of emergency incidents.

Police Protection Services

Police protection services for the project site are provided by the San José Police Department (SJPD). Officers are dispatched from police headquarters, located at 201 West Mission Street. The police headquarters is located approximately 6.4 miles northeast of the project site.

The General Plan identifies a service goal of six minutes or less for 60 percent of all Priority 1 (emergency) calls and 11 minutes or less for 60 percent all Priority 2 (nonemergency) calls.

Schools

The project site is located within the Moreland School District and the Campbell Union High School District. The proposed project would be served by the public schools listed below in Table 3.12-1.

Table 3.12-1: Local Public Schools

School	Location	Distance from Site
Easterbrook Discovery Elementary (K-8)	4835 Doyle Road	1.0 mile southwest
Prospect High School	18900 Prospect Road	2.5 miles southwest

There are several private schools located east of the site which are: the Harker School's Middle School Campus, West Valley Middle School, Action Day Preschool, MACC Preschool, and Pasitos Preschool.

Parks/Recreation

The City's Department of Parks, Recreation, and Neighborhood Services is responsible for development, operation, and maintenance of all City park facilities. The City operates and maintains approximately 190 neighborhood-serving parks and nine regional parks.[79] In addition, the City has 51 community centers and over 57 miles of trails. The nearest parks to the project site are Starbird Park and John Mise Park. Starbird Park and John Mise Park are located approximately 0.6 miles southeast and 0.7 miles northwest, respectively.

Libraries

The San José Public Library is the largest public library system between San Francisco and Los Angeles. The San José Public Library consists of one main library (Dr. Martin Luther King Jr.

[78] City of San José. "City of San José Annual Report on City Services 2016-17." Accessed: February 8, 2018. Available at: http://www.sanjoseca.gov/DocumentCenter/View/73885.
[79] City of San José. "Fast Facts." Accessed: February 8, 2018. Accessed: February 8, 2018. Available at: http://www.sanjoseca.gov/DocumentCenter/View/65881.

Library) and 23 branch libraries.[80] The nearest library to the project site is West Valley Branch Library, located at 1243 San Tomas Aquino Road, located approximately 0.6 miles south of the project site.

3.12.2 Public Services and Recreation Impacts

3.12.2.1 *Thresholds of Significance*

For the purposes of this EIR, a public services and recreation impact is considered significant if the impacts are associated with:

1. The provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
    - Fire protection
    - Police protection
    - Schools
    - Parks
    - Other public facilities.
2. An increase in 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; or
3. Include recreational facilities or require the construction of expansion of recreational facilities which might have an adverse physical effect on the environment.

3.12.2.2 *Consistency with Plans*

The project would include on-site amenities for residents including a clubroom, a fitness area, and a pool to support the City's recreational service goals and would be required to comply with the City's Park Dedication Ordinance and Park Impact Ordinance. The project would also be built to current code and safety standards. The project proposes a combined total of 129,687 square feet of public open space. Therefore, the project is consistent with General Plan Policies PR-1.1, PR-1.2, PR-1.3, PR-1.6, PR-1.12, PR-2.4, PR-2.5, PR-2.6, PR-3.4, PR-3.5, ES-3.9, and ES-3.11.

3.12.2.3 ***Fire and Police Protection Services*** *(Threshold No. 1)*

As proposed, the project would demolish two parking garages, the leasing/amenity building and pool area directly south of the Saratoga Garage. The project would construct up to 307 residential units over two buildings, approximately 17,800 square feet of retail, and a total of 1,148 new parking spaces. Implementation of the project would allow for more residences on-site than current conditions, which would increase demand for fire and police response and related emergency services. The General Plan FEIR (as amended) concluded that, with full build out of General Plan, no new fire stations would be required other than those already planned. In regards to police services, build out of the General Plan would result in the need for additional police facilities, but is not

[80] San José Public Library. "Locations & Hours." Accessed: June 26, 2018. Available at: https://www.sjpl.org/locations.

anticipated to have significant, adverse environmental impacts. The project, by itself, would not require additional police services.

Although the project would place more people on-site compared to existing conditions, the project would be constructed in accordance with current building codes and would be required to be maintained in accordance with applicable City policies identified in the General Plan FEIR (as amended) to avoid unsafe building conditions and promote public safety. As a result, implementation of the project would result in a less than significant impact on police and fire protection services. **(Less Than Significant Impact)**

3.12.2.4 *Schools (Threshold No. 1)*

According to the General Plan FEIR (as amended), build out of the General Plan would generate up to 980 new students in the Moreland School District (which includes Easterbrook Discovery Elementary) and up to 3,751 new students in the Campbell Union High School District (which includes Prospect High School). Based on an average student generation rate of 0.2302 elementary students per unit and 0.0955 middle school students per unit in the Moreland School District[81], the proposed project is estimated to generate approximately 71 elementary students and 29 middle school students.[82] Based on an average student generation rate of 0.08 high school students per unit, the proposed project would generate approximately 25 high school students.[83,84]

Table 3.12-2: School Capacity and Enrollment

School	Current Capacity	Current Enrollment
Easterbrook Discovery Elementary (K-8)	930	907
Prospect High School	1,395[85]	1,474[86]

While Prospect High School is operating over capacity, the additional students generated from the project would be minimal. With implementation of the project, Easterbrook Discovery Elementary would exceed current capacity (930 students) by up to 73 students[87]. State law (Government Code Section 65996) specifies an acceptable method of offsetting a project's effect under CEQA on the adequacy of school facilities as the payment of a school impact fee prior to issuance of a building permit. The affected school district(s) are responsible for implementing the specific methods for mitigating school effects under the Government Code, including setting the school impact fee amount consistent with state law. The school impact fees and the school districts' methods of

[81] The current student enrollment and capacity numbers and student generation rates were provided by personal communication with Patti Ernsberger. Ernsberger, Patti. Assistant Superintendent of Business and Support Services for the Moreland School District. Personal Communication. February 12, 2018.
[82] 0.2302 elementary students per unit x 307 units = 71 elementary students. 0.0955 middle school students per unit x 307 units = 29 middle school students.
[83] Selzler, Toni. Campbell Union High School District Business Services Secretary. Personal communication. September 2010.
[84] 0.08 high school students per unit x 307 units = 25 high school students.
[85] Dolinka Group, LLC. "Residential Development School Fee Justification Study. Accessed: June 4, 2018. Available at: https://1.cdn.edl.io/tnX2QaErnrYlsZJoaBej5vl1r8yt1uY8EY8s5oRG6rDlJyKp.pdf.
[86] U.S. News & World Report. "Prospect High." Accessed: June 4, 2018. Available at: https://www.usnews.com/education/best-high-schools/california/districts/campbell-union-high/prospect-high-1887.
[87] 96 elementary and middle school students + 907 current enrollment = 1003 students – 930 current capacity = 73 students

implementing measures specified by Government Code Section 65996 would partially offset project-related increases in student enrollment. The following Standard Permit Condition is included in the project to reduce impacts to public school facilities.

Standard Permit Condition

- The project shall pay school impact fees pursuant to Government Code Section 65996.

The payment of public school impact fees would allow the local school district to provide sufficient services for students generated by the project. **(Less Than Significant Impact)**

3.12.2.5 *Parks and Recreational Facilities (Threshold Nos. 1 – 3)*

The City of San José has a Parkland Dedication Ordinance (PDO) which requires new housing projects to provide 3.0 acres of neighborhood/community serving parkland per 1,000 population, provide recreational facilities on-site, and/or pay an in-lieu fee. Residential growth from the build out of the Envision San José 2040 General Plan is expected to result in a City population of over 1.3 million people by 2035, which would increase the demand for park and recreational facilities and create an overall need for an additional 2,187.4 acres of parkland.[88] The following Standard Permit Condition is included in the project to reduce impacts to park and recreational facilities.

Standard Permit Condition

- The project shall pay the applicable Parkland Dedication Ordinance (PDO) and Park Impact Ordinance (PIO) fees. The project's PDO/PIO fees would be used for neighborhood serving elements (such as playgrounds/tot-lots and basketball courts) within 0.75 miles of the project site, and/or community serving elements (such as soccer fields and community gardens) within a three-mile radius of the project site, consistent with General Plan Policies PR-2.4 and PR-2.5.

In addition to complying with the City's PDO/PIO, the project proposes on-site amenities including a club room, a fitness area, and a pool which could reduce the use of public parks in the City. The proposed project would be required to comply with the PDO and PIO requirements; therefore, the project would not result in significant impacts to park and recreational facilities in San José. **(Less Than Significant Impact)**

3.12.2.6 *Libraries (Threshold No. 1)*

Full build out of the General Plan would provide approximately 0.68 square feet of library space per capita for the anticipated increase in resident population by 2035, which is above the City's service goal of 0.59 square feet of library space per capita (General Plan Policy ES-2.2). The project would generate approximately 982 new residents[89] and up to 45 employees[90], which would incrementally

[88] City of San José. Envision San José 2040 General Plan FPEIR. November 2011. Page 633 (and see Table 3.9-5).
[89] Based on an average of 3.20 persons per household.
[90] The number of full-time employees is estimated at 45 based on an approximate 2.5 employees per 1,000 square feet of retail space. Illingworth & Rodkin, Inc. *Avalon West Valley Expansion Air Quality & GHG Assessment.* July 10, 2018.

increase the demand on neighborhood libraries. The proposed project would not require new or expanded library facilities beyond what is already planned in the City to meet service goals or result in a significant impact to library facilities. **(Less Than Significant Impact)**

3.12.3 Conclusion

With implementation of the identified Standard Permit Conditions (i.e., payment of school impact feeds and compliance with the City's PDO/PIO), the proposed project would not result in significant adverse impacts on public services in the City or require the construction of new facilities to serve the resident population of the City. **(Less Than Significant Impact)**

3.13 TRANSPORTATION/TRAFFIC

The following discussion is based upon a Transportation Impact Analysis prepared by *Hexagon Transportation Consultants* in October 2018 and a Supplemental Memo prepared in November 2018. The reports can be found in Appendix G of this EIR.

3.13.1 Environmental Setting

3.13.1.1 *Regulatory Framework*

Regional Transportation Planning

The MTC is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Santa Clara County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted *Plan Bay Area 2040* in July 2017, which includes the region's Sustainable Communities Strategy (integrating transportation, land use, and housing to meet GHG reduction targets set by CARB) and Regional Transportation Plan (including a regional transportation investment strategy for revenues from federal, state, regional and local sources over the next 24 years).

Congestion Management Program

The Santa Clara Valley Transportation Authority (VTA) oversees the Congestion Management Program (CMP), a program aimed at reducing regional traffic congestion. The relevant state legislation requires that all urbanized counties in California prepare a CMP in order to obtain each county's share of the increased gas tax revenues. The CMP legislation requires that each CMP contain the following five mandatory elements: 1) a system definition and traffic level of service standard element; 2) a transit service and standards element; 3) a trip reduction and transportation demand management element; 4) a land use impact analysis program element; and 5) a capital improvement element. The Santa Clara County CMP includes the five mandated elements and three additional elements, including: a county-wide transportation model and data base element, an annual monitoring and conformance element, and a deficiency plan element. The VTA has review responsibility for proposed development projects that are expected to affect CMP designated intersections.

City Council Policy 5-3[91]

As established in City Council Policy 5-3 "Transportation Impact Policy" (2005), the City of San José uses the same level of service (LOS) method as the CMP, although the City's standard is LOS D rather than LOS E.[92] According to this policy and GP Policy TR-5.3, an intersection impact would be satisfactorily mitigated if the implementation of measures would restore level of service to existing conditions or better, unless the mitigation measures would have an unacceptable impact on

[91] The City of San Jose adopted and implemented a new transportation policy (Council Policy 5-1) after initiation of the proposed project. Due to the timing of the analysis for this Initial Study, the City determined that the project would be assessed under Policy 5-3, which was the adopted policy at the time the project began.

[92] City Council Policy 5-3 is applicable to the proposed project, since the project was on file with the City prior to March 29, 2018. All applications for projects submitted to the City subsequent to March 29, 2018 are subject to the vehicle miles travelled (VMT) policy.

the neighborhood or on other transportation facilities (such as pedestrian, bicycle, and transit facilities).[93]

The City's Transportation Impact Policy (also referred to as the Level of Service Policy) protects pedestrian and bicycle facilities from undue encroachment by automobiles. In accordance with the Level of Service Policy and CMP, a traffic impact analysis is only required when a project would result in 100 or more peak hour trips.

San José Bike Plan 2020

The San José Bike Plan 2020 also known as the Bicycle Master Plan, defines the City's vision to make bicycling an integral part of daily life in San José. The plan recommends policies, projects, and programs to realize this vision and create a San José community where bicycling is convenient, safe, and commonplace. The Bicycle Master Plan defines a 500-mile network of bikeways that focuses on connecting off-street bikeways with on-street bikeways.

Envision San José 2040 General Plan

The General Plan includes the following transportation policies applicable to the proposed project.

Policy TR-1.1: Accommodate and encourage use of non-automobile transportation modes to achieve San José's mobility goals and reduce vehicle trip generation and vehicle miles traveled (VMT).

Policy TR-1.2: Consider impacts on overall mobility and all travel modes when evaluating transportation impacts of new developments or infrastructure projects.

Policy TR-1.4: Through the entitlement process for new development, fund needed transportation improvements for all transportation modes, giving first consideration to improvement of bicycling, walking and transit facilities. Encourage investments that reduce vehicle travel demand.

Policy TR-5.3: The minimum overall roadway performance during peak travel periods should be level of service "D" except for designated areas.

Policy TR-8.6: Allow reduced parking requirements for mixed-use developments and for developments providing shared parking or a comprehensive TDM program, or developments located near major transit hubs or within Villages and Corridors and other growth areas.

Policy TR-8.9: Consider adjacent on-street and City-owned off-street parking spaces in assessing need for additional parking required for a given land use or new development.

Policy TR-9.1: Enhance, expand and maintain facilities for walking and bicycling, particularly to connect with and ensure access to transit and to provide a safe and complete alternative transportation network that facilitates non-automobile trips.

[93] Examples of unacceptable impacts include reducing the width of a sidewalk or bicycle lane below the city standard or creating unsafe pedestrian operating conditions.

Policy CD-2.3: Enhance pedestrian activity by incorporating appropriate design techniques and regulating uses in private developments, particularly in Downtown, Urban Villages, Corridors, Main Streets, and other locations where appropriate.

a. Include attractive and interesting pedestrian-oriented streetscape features such as street furniture, pedestrian scale lighting, pedestrian oriented way-finding signage, clocks, fountains, landscaping, and street trees that provide shade, with improvements to sidewalks and other pedestrian ways.

b. Strongly discourage drive-up services and other commercial uses oriented to occupants of vehicles in pedestrian-oriented areas. Uses that serve the vehicle, such as car washes and service stations, may be considered appropriate in these areas when they do not disrupt pedestrian flow, are not concentrated in one area, do not break up the building mass of the streetscape, are consistent with other policies in this Plan, and are compatible with the planned uses of the area.

c. Provide pedestrian connections as outlined in the Urban Community Design Connections Goal and Policies.

d. Locate retail and other active uses at the street level.

e. Create easily identifiable and accessible building entrances located on street frontages or paseos.

f. Accommodate the physical needs of elderly populations and persons with disabilities.

g. Integrate existing or proposed transit stops into project designs.

Policy CD-3.4: Encourage pedestrian cross-access connections between adjacent properties and require pedestrian and bicycle connections to streets and other public spaces, with particular attention and priority given to providing convenient access to transit facilities. Provide pedestrian and vehicular connections with cross-access easements within and between new and existing developments to encourage walking and minimize interruptions by parking areas and curb cuts.

3.13.1.2 *Existing Conditions*

The discussion below summarizes the existing conditions for the major transportation facilities in the vicinity of the site, including the roadway network, transit service, and bicycle and pedestrian facilities. In addition, the existing levels of service of the study intersections and freeway segments within the vicinity of the site are discussed below.

Roadway Network

Regional Access

Regional access to the project site is provided via Interstate 280 (I-280).

I-280 is an eight-lane, generally east-west freeway that extends from I-80 in San Francisco to Highway 101 (US 101) in San José. I-280 provides access to the project site via freeway ramps at Saratoga Avenue.

Local Access

Local access to the project site is provided via Saratoga Avenue, Blackford Avenue, Moorpark Avenue, and Manzanita Drive.

Saratoga Avenue is a north-south designated main street[94] that extends from Scott Boulevard in San José to Saratoga Sunnyvale Road in Los Gatos. In the project vicinity, Saratoga Avenue has six lanes with a raised median and left-turn pockets at intersections. The project site can be accessed from Saratoga Avenue via Blackford Avenue and Manzanita Drive and the existing driveway on Saratoga Avenue.

Moorpark Avenue is an east-west designated City connector street that extends from Lawrence Expressway to Kingman Avenue. Access to the project site is provided by Saratoga Avenue and local north-south streets that run between Moorpark Avenue and Blackford Avenue.

Blackford Avenue is an east-west, two-lane residential street that extends eastward from Live Oak Way to Boynton Avenue. Access to the project site is provided by an existing driveway on Blackford Avenue.

Manzanita Drive is an east-west, two-lane street that extends from Pinewood Drive to Daffodil Way. Access to the project site is provided via an existing driveway on Manzanita Drive.

Existing Pedestrian, Bicycle, and Transit Facilities

Pedestrian Facilities

Pedestrian facilities consist of sidewalks and crosswalks along the streets in the vicinity of the project site. There are crosswalks with pedestrian signal heads and push buttons located at all signalized intersections near the project site, except for the north leg of the Saratoga Avenue and Blackford intersection. Overall, the existing network of sidewalks and crosswalks in the immediate vicinity of the project site has good connectivity and provides pedestrians with safe routes to the project site and transit stops.

The signalized intersection of Saratoga Avenue and Blackford Avenue does not meet the current ADA design standards; however, the existing ramps complied with the ADA design standards at the time they were constructed.

[94] Main streets are roadways located within areas of increased density of commercial and residential development, which serve as a primary small-scale commercial center for the surrounding neighborhood.

Bicycle Facilities

Bicycle facilities are comprised of paths (Class I), lanes (Class II), and routes (Class III). Bicycle lanes are lanes on roadways designed for bicycle use by striping, pavement legends, and signs. The following roadways have Class II striped bike lanes:

- Moorpark Avenue between Lawrence Expressway and Thorton Way.
- Williams Road between Moorpark Avenue and Winchester Boulevard.

Although there are no designated striped bike lanes or shared bike routes on streets in the immediate vicinity of the site, Blackford Avenue, Manzanita Drive, and the surrounding residential streets have relatively low traffic volumes and are conducive to bicycle travel.

Transit Facilities

Existing transit service in the project area is provided by the VTA. Two local bus routes (Routes 57 and 58) serve the project area, as described in Table 3.13-1 below.

Table 3.13-1: VTA Bus Service in the Project Area

Route	Route Description	Daily Headway (min)
57	West Valley College to Great America via Saratoga Avenue	30
58	West Valley College to Alviso via Saratoga Avenue	30

The nearest bus stops are located along Saratoga Avenue at Blackford Avenue and at Manzanita Drive. Because there are only two bus routes serving the project area, the project site is not well served by transit.

3.13.1.3 *Methodology*

Traffic conditions at all study intersections and freeway segments were analyzed for the weekday AM and PM Peak Hours. The AM Peak Hour is defined as 7:00 AM and 9:00 AM and the PM Peak Hour is defined as 4:00 PM to 6:00 PM. The peak hours represent the periods of greatest traffic congestion on a typical weekday. Traffic conditions were evaluated for the following scenarios to determine if the level of service (LOS) of the local intersections in the project area would be adversely affected by project generated traffic:

Scenario 1: Existing Conditions

Scenario 2: Existing Plus Project Conditions

Scenario 3: Background Conditions

Scenario 4: Background Plus Project Conditions

Scenario 5: Cumulative Conditions (See *Section 4.0, Cumulative Impacts*)

Data for the transportation impact analysis were obtained from new traffic counts, the Cities of San José and Santa Clara, the Congestion Management Plan (CMP) Annual Monitoring Report, and field observations. The traffic study analyzed AM and PM Peak Hour traffic conditions for six San José signalized study intersections, one San José unsignalized study intersection, and one Santa Clara signalized study intersection. In addition, nine freeway segments were analyzed. The study intersections are listed below. The locations of the study intersections are shown on Figure 3.13-1.

City of San José Signalized Study Intersections

1. Lawrence Expressway and Mitty Way
2. Saratoga Avenue and Blackford Avenue
3. Saratoga Avenue and Moorpark Avenue
4. Saratoga Avenue and I-280 Southbound Ramps
5. Saratoga Avenue and I-280 Northbound Ramps
6. Saratoga Avenue and Stevens Creek Boulevard

City of Santa Clara Signalized Study Intersection

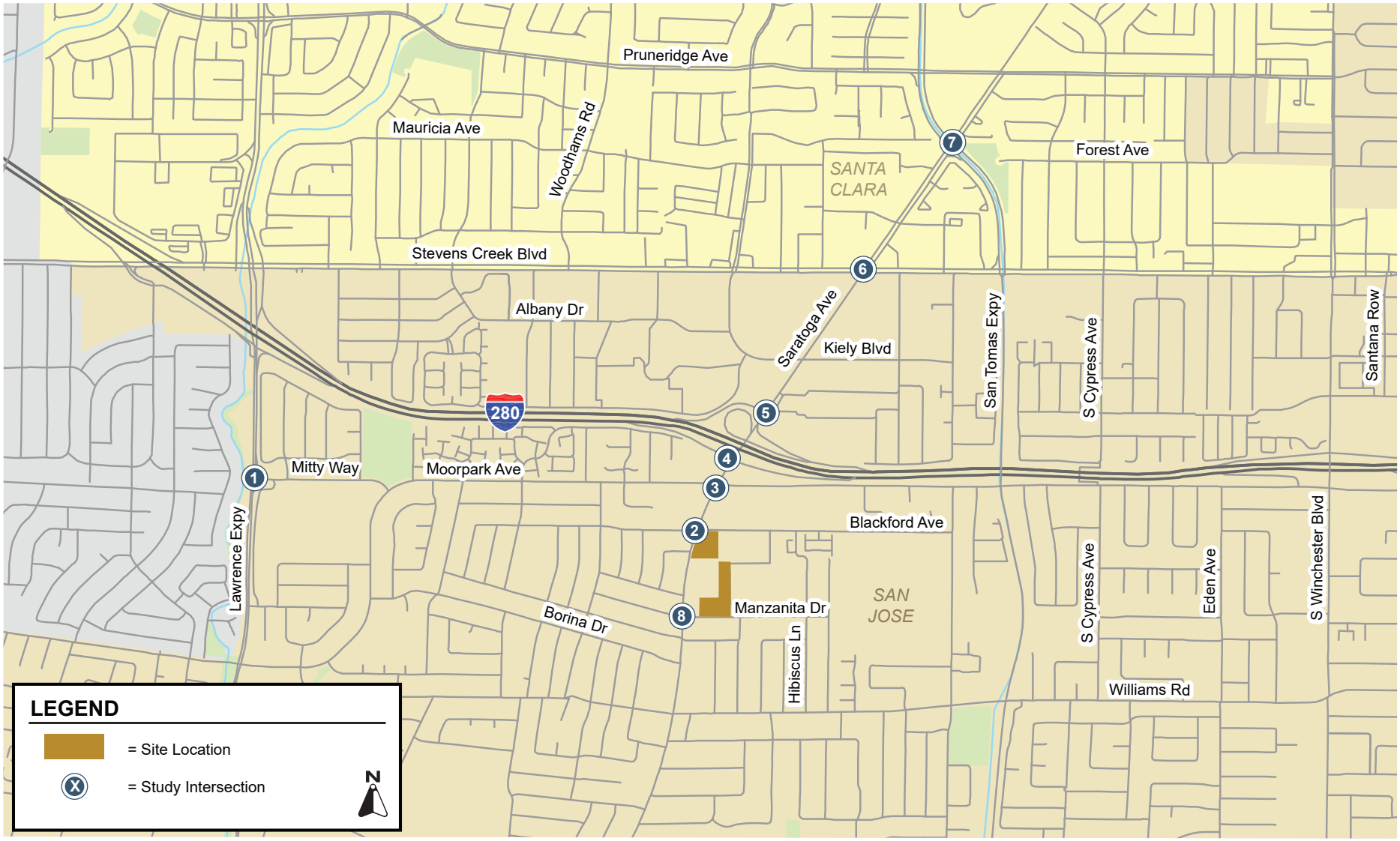
7. San Tomas Expressway and Saratoga Avenue

City of San José Unsignalized Study Intersection

8. Saratoga Avenue and Manzanita Drive

Signalized Intersections

Traffic conditions at the study intersections were evaluated using level of service (LOS). LOS is a qualitative description of operating conditions ranging from LOS A, or free-flowing conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. Intersection LOS was evaluated using TRAFFIX software, which is based on the Highway Capacity Manual (HCM) 2000 method for signalized intersections. The correlation between average delay and LOS is shown in Table 3.13-2.



Source: Hexagon Transportation Consultants Inc.

SITE LOCATION AND STUDY INTERSECTIONS | FIGURE 3.13-1

Table 3.13-2: Intersection Level of Service Definitions Based on Delay		
Level of Service	**Description**	**Average Control Delay per Vehicle**[95]
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	10.0 or less
B+ B B-	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 12.0 12.1 to 18.0 18.1 to 20.0
C+ C C-	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 23.0 23.1 to 32.0 32.1 to 35.0
D+ D D-	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 39.0 39.1 to 51.0 51.1 to 55.0
E+ E E-	Operations with high delay indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.1 to 60.0 60.1 to 75.0 75.1 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	Greater than 80.0

Source: Transportation Research Board, 2000 Highway Capacity Manual (Washington, D.C., 2000) p10-16
VTA Traffic Level of Service Analysis Guidelines (June 2003), Table 2.

3.13.1.4 *Existing Intersection Operations*

Under existing conditions, the Lawrence Expressway/Mitty Way intersection operates at an unacceptable LOS during the AM Peak Hour. All other study intersections currently operate at acceptable LOS during both the AM and PM Peak Hours as shown in Table 3.13-3.

Table 3.13-3: Signalized Study Intersections – Existing Conditions				
No.	**Intersection**	**Peak Hour**	**Existing**	
			Delay	**LOS**
1	Lawrence Expressway and Mitty Way (SJ)	AM PM	**79.4** 12.8	**E-** B
2	Saratoga Avenue and Blackford Avenue (SJ)	AM PM	33.7 33.0	C- C-
3	Saratoga Avenue and Moorpark Avenue (SJ, CMP)	AM PM	40.0 41.7	D D
4	Saratoga Avenue and I-280 Southbound Ramp (SJ, CMP)	AM PM	44.1 35.3	D D+
5	Saratoga Avenue and I-280 Northbound Ramp (SJ, CMP)	AM PM	28.9 22.9	C C+
6	Saratoga Avenue and Stevens Creek Boulevard (SJ, CMP)	AM PM	34.9 39.2	C- D

[95] Measured in seconds.

Table 3.13-3: Signalized Study Intersections – Existing Conditions				
No.	**Intersection**	**Peak Hour**	**Existing**	
			Delay	**LOS**
7	San Tomas Expressway and Saratoga Avenue (SC, CMP)	AM PM	55.5 62.2	E+ E

Notes: (CMP) VTA Congestion Management Program
(SJ) City of San José
(SC) City of San Clara
Bold indicates unacceptable LOS

3.13.1.5 *Existing Freeway Operations*

Analysis of the existing freeway operations concluded that all the study freeway segments currently operate at an unacceptable LOS F during at least one peak hour and in at least one direction. The LOS of the directional freeway segments are summarized in Table 3.13-4 below.

Table 3.13-4: Study Freeway Segments Level of Service – Existing Conditions					
Freeway	**Segment**	**Direction**	**Peak Hour**	**Mixed-Flow LOS**	**HOV Lane LOS**
I-280	De Anza Boulevard to Wolfe Road	EB	AM PM	C **F**	C **F**
		WB	AM PM	**F** D	E B
I-280	Wolfe Road to Lawrence Expressway	EB	AM PM	C **F**	B D
		WB	AM PM	**F** C	**F** B
I-280	Lawrence Expressway to Saratoga Avenue	EB	AM PM	D **F**	B E
		WB	AM PM	**F** D	**F** B
I-280	Saratoga Avenue to Winchester Boulevard	EB	AM PM	D **F**	B **F**
		WB	AM PM	**F** D	**F** B
I-280	Winchester Boulevard to I-880	EB	AM PM	C **F**	B **F**
		WB	AM PM	**F** D	**F** C
I-280	I-880 to Meridian Avenue	EB	AM PM	C **F**	B **F**
		WB	AM PM	**F** C	**F** A
I-880	I-280 to Stevens Creek Boulevard	NB	AM PM	**F** A	--
		SB	AM PM	C C	--
		NB	AM PM	**F** **F**	--

Table 3.13-4: Study Freeway Segments Level of Service – Existing Conditions					
Freeway	**Segment**	**Direction**	**Peak Hour**	**Mixed-Flow LOS**	**HOV Lane LOS**
I-880	Stevens Creek Boulevard to North Bascom Avenue	SB	AM PM	**F** D	--
SR 17	Hamilton Avenue to I-280	NB	AM PM	**F** C	--
		SB	AM PM	D E	--

Note: Bold indicate unacceptable LOS.
Source: Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2016.

3.13.1.6 *Background Intersection Operations*

Background conditions are based on existing traffic volumes plus the estimated traffic from approved, but not yet constructed, developments. This analysis assumes that the roadway network under background conditions would be the same as the existing roadway network. Analysis of the background intersection operations concluded that the Lawrence Expressway/Mitty Way intersection would operate at an unacceptable LOS during the AM Peak Hour. All other intersections would operate at an acceptable LOS. The results of the intersection LOS under background conditions are summarized in Table 3.13-5 below.

Table 3.13-5: Signalized Study Intersections – Background Conditions				
No.	**Intersection**	**Peak Hour**	**Background**	
			Delay	**LOS**
1	Lawrence Expressway and Mitty Way (SJ)	AM PM	**104.4** 12.9	**F** B
2	Saratoga Avenue and Blackford Avenue (SJ)	AM PM	33.4 32.4	C- C-
3	Saratoga Avenue and Moorpark Avenue (SJ, CMP)	AM PM	41.1 42.6	D D
4	Saratoga Avenue and I-280 Southbound Ramp (SJ, CMP)	AM PM	46.3 35.5	D D+
5	Saratoga Avenue and I-280 Northbound Ramp (SJ, CMP)	AM PM	28.5 22.5	C C+
6	Saratoga Avenue and Stevens Creek Boulevard (SJ, CMP)	AM PM	36.5 41.5	D+ D
7	San Tomas Expressway and Saratoga Avenue (SC, CMP)	AM PM	67.7 79.1	E E-

Notes: (CMP) VTA Congestion Management Program
(SJ) City of San José
(SC) City of San Clara
Bold indicates unacceptable LOS

3.13.2 Transportation/Traffic Impacts

3.13.2.1 *Thresholds of Significance*

For the purposes of this EIR, a transportation/traffic impact is considered significant if the project would:

1. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
2. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
3. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
4. Substantially increase hazards due to a design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
5. Result in inadequate emergency access; or
6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities or otherwise decrease the performance of safety of such facilities.

3.13.2.2 *Consistency with Plans*

The Lawrence Expressway/Mitty Way intersection currently operates at an unacceptable LOS. Although this intersection would continue to operate at an unacceptable LOS under background, existing plus project, and background plus project conditions. The addition of project traffic would not result in a substantial increase in delay at the Lawrence Expressway/Mitty Way intersection. The project proposes a mixed-use development within the Saratoga Avenue Urban Village and is proposed as a signature project. The project is currently under Planning review for conformance with General Plan Policy IP-5.10. The project would place jobs, housing, and retail in proximity to existing transit, jobs, housing, and services, consistent with the General Plan. Therefore, the project is consistent with General Plan Policies TR-1.1, TR-1.2, TR-1.4, TR-5.3, TR-8.4, TR-8.6, TR-8.9, TR-9.1, CD-2.3, CD-3.4, and CD-3.6.

3.13.2.3 *Impact Criteria*

Cities of San José and Santa Clara Signalized Intersections

Based on City of San José criteria, a project would cause a significant impact at a signalized intersection if the additional project traffic caused one of the following:

- Cause the level of service at any local intersection to degrade from an acceptable LOS D or better under background conditions to an unacceptable LOS E or F under background plus project conditions; or

- At any local intersection that is already an unacceptable LOS E or F under background conditions, cause the critical-movement delay at the intersection to increase by four or more seconds and the volume-to-capacity ratio (V/C) to increase by .01 or more.

The acceptable LOS standard for the City of Santa Clara is LOS D, which is equivalent to the LOS standard established by the City of San José.

CMP Intersections

Based on CMP criteria, a project fails to meet the CMP or Santa Clara County Expressway intersection standard if the additional project traffic caused one of the following:

- Cause the level of service at any CMP/County intersection to degrade from an acceptable LOS E or better under existing or background conditions to an unacceptable LOS F under existing plus project or background plus project conditions; or
- At any CMP/County intersection that is already an unacceptable LOS F under existing or background conditions, cause the critical-movement delay at the intersection to increase by four or more seconds and the volume-to-capacity ratio (V/C) to increase by .01 or more.

CMP – Freeway Segments

Based on CMP criteria, a project would cause a significant impact to a freeway segment if the additional project traffic caused one of the following:

- Cause the level of service on any freeway segment to degrade from an acceptable LOS E or better under existing or background conditions to an unacceptable LOS F under existing plus project or background plus project conditions; or
- Add more than one percent of the existing freeway capacity to any freeway segment operating at LOS F under existing or background conditions.

3.13.2.4 *Trip Generation Estimates*

Traffic trips generated by the project were estimated using the rates for "Multi-family Housing, Mid-Rise" (Land Use Code 221) and "Shopping Center" (Land Use Code 820) published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition (2017). An internal trip reduction between residential and retail uses (15 percent), based on VTA's TIA Guidelines, was applied. A typical pass-by trip reduction of 25 percent for the proposed retail development was applied to the retail component of the project. It is estimated that 15 percent of the retail-generated trips would originate from within the existing Eaves Community which was applied to the project trip generation estimates.

A summary of the project trip generation estimates is shown in Table 3.13-6 below.

Table 3.13-6: Project Trip Generation Estimates							
Land Use	**Daily Trips**	**AM Peak Hour**			**PM Peak Hour**		
		In	**Out**	**Total**	**In**	**Out**	**Total**
Proposed Land Uses							
Apartments	1,670	29	82	111	82	53	135
Residential & Retail Reduction (15%)[1]	<101>	<1>	<2>	<3>	<5>	<5>	<10>
Retail	672	11	6	17	33	35	68
Residential & Retail Reduction (15%)[1]	<101>	<2>	<1>	<3>	<5>	<5>	<10>
Retail Pass-By Trip Reduction (25%)[2]	<143>	<2>	<1>	<3>	<7>	<8>	<15>
Existing Land Uses							
Apartments							
Existing Community Reduction (15%)[3]	<101>	<2>	<1>	<3>	<5>	<5>	<10>
Net New Trips:	**1,896**	**33**	**83**	**116**	**93**	**65**	**158**

Notes: [1]A 15 percent residential/retail mixed-use trip reduction was applied to the project per the 2014 Santa Clara VTA TIA Guidelines.
[2]A typical 25 percent pass-by trip reduction was applied to the retail component of the project.
[3]An additional 15 percent trip reduction was applied to the retail component of the project since some of the existing residences would utilize the new retail use.

3.13.2.5 *Existing Plus Project Intersection Operations (Threshold Nos. 1 and 2)*

The LOS of the study intersections was calculated under project conditions by adding the new project trips from the proposed development to the existing conditions. Analysis of the existing plus project intersection operations concluded that the Lawrence Expressway/Mitty Way intersection would continue to operate at an unacceptable LOS during the AM Peak Hour. All other signalized study intersections would operate at an acceptable LOS during both AM and PM Peak Hours.

The results of the intersection LOS under existing plus project conditions are summarized in Table 3.13-7. This analysis assumes that the roadway network under existing plus project conditions would be the same as the existing roadway network.

Table 3.13-7: Study Intersections Level of Service – Existing Plus Project Conditions						
No.	**Intersection**	**Peak Hour**	**Existing**		**Existing Plus Project**	
			Delay	**LOS**	**Delay**	**LOS**
1	Lawrence Expressway and Mitty Way (SJ)	AM	**79.4**	**E-**	**81.2**	**F**
		PM	12.8	B	12.9	B
2	Saratoga Avenue and Blackford Avenue (SJ)	AM	33.7	C-	35.3	D+
		PM	33.0	C-	35.0	C-
3	Saratoga Avenue and Moorpark Avenue (SJ, CMP)	AM	40.0	D	39.9	D
		PM	41.7	D	42.0	D
4	Saratoga Avenue and I-280 Southbound Ramp (SJ, CMP)	AM	44.1	D	45.0	D
		PM	35.3	D+	35.9	D+
5	Saratoga Avenue and I-280 Northbound Ramp (SJ, CMP)	AM	28.9	C	29.1	C
		PM	22.9	C+	23.1	C
6	Saratoga Avenue and Stevens Creek Boulevard (SJ, CMP)	AM	34.9	C-	34.9	C-
		PM	39.2	D	39.3	D

Table 3.13-7: Study Intersections Level of Service – Existing Plus Project Conditions						
No.	**Intersection**	**Peak Hour**	**Existing**		**Existing Plus Project**	
			Delay	**LOS**	**Delay**	**LOS**
7	San Tomas Expressway and Saratoga Avenue (SC, CMP)	AM PM	55.5 62.2	E+ E	55.8 62.3	E+ E

Notes: (CMP) VTA Congestion Management Program
(SJ) City of San José
(SC) City of San Clara
Bold indicates unacceptable LOS

3.13.2.6 *Existing Plus Project Freeway Segment Operations (Threshold Nos. 1 and 2)*

Traffic volumes on the study freeway segments were estimated by adding project trips to the freeway segment volumes obtained from the *2016 CMP Monitoring Report*. Analysis of the existing plus project freeway operations concluded that the proposed project would not increase traffic volumes by one percent or more on any of the study freeway segments currently operating at LOS F. No study freeway segments currently operating at LOS E or better would worsen to LOS F as a result of the project. Based on the CMP freeway impact criteria, none of the study freeway segments would be significantly impacted by the project (refer to *Table 9* of *Appendix G*). **(Less Than Significant Impact)**

3.13.2.7 *Background Plus Project Intersection Operations (Threshold Nos. 1 and 2)*

The LOS of the study intersections was calculated under background plus project conditions by adding the new project trips from the proposed development to the background conditions. This analysis assumes that the roadway network under existing plus project conditions would be the same as the existing roadway network. Analysis of the background plus project intersection operations concluded that the Lawrence Expressway/Mitty Way intersection would continue to operate at an unacceptable LOS F during the AM Peak Hour. All other signalized study intersections would operate at an acceptable LOS during both AM and PM Peak Hours.

The results of the intersection LOS under background plus project conditions are summarized in Table 3.13-8.

Table 3.13-8: Study Intersections Level of Service – Background Plus Project Conditions								
No.	**Intersection**	**Peak Hour**	**Background**		**Background Plus Project**			
			Delay	**LOS**	**Delay**	**LOS**	**Critical Delay**	**V/C**
1	Lawrence Expressway and Mitty Way (SJ)	AM PM	**104.4** 12.9	**F** B	**106.3** 13.0	**F** B	2.2 0.0	0.005 0.000
2	Saratoga Avenue and Blackford Avenue (SJ)	AM PM	33.4 32.4	C- C-	35.1 34.7	D+ C-	2.2 16.2	0.030 0.010
3	Saratoga Avenue and Moorpark Avenue (SJ, CMP)	AM PM	41.1 42.6	D D	41.0 42.9	D D	-0.1 0.6	0.010 0.016
4	Saratoga Avenue and I-280 Southbound Ramp (SJ, CMP)	AM PM	46.3 35.5	D D+	47.3 36.1	D D+	2.8 0.5	0.010 0.012

Table 3.13-8: Study Intersections Level of Service – Background Plus Project Conditions								
No.	**Intersection**	**Peak Hour**	**Background**		**Background Plus Project**			
			Delay	**LOS**	**Delay**	**LOS**	**Critical Delay**	**V/C**
5	Saratoga Avenue and I-280 Northbound Ramp (SJ, CMP)	AM	28.5	C	28.7	C	0.0	0.009
		PM	22.5	C+	22.7	C+	0.4	0.008
6	Saratoga Avenue and Stevens Creek Boulevard (SJ, CMP)	AM	36.5	D+	36.5	D+	0.0	0.001
		PM	41.5	D	41.5	D	0.1	0.003
7	San Tomas Expressway and Saratoga Avenue (SC, CMP)	AM	67.7	E	67.9	E	0.2	0.001
		PM	79.1	E-	79.3	E-	0.2	0.001

Notes: (CMP) VTA Congestion Management Program
(SJ) City of San José
(SC) City of San Clara
Bold indicates unacceptable LOS

Although the Lawrence Expressway/Mitty Way intersection would continue to operate at an unacceptable LOS during the AM Peak Hour, the proposed project would not cause the intersection's critical-movement delay to increase by more than four seconds and the V/C to increase by more than 0.01 compared to background conditions. As a result, implementation of the proposed project would result in a less than significant traffic impact under background plus project conditions. **(Less Than Significant Impact)**

3.13.2.8 *Pedestrian/Bicycle Facilities and Transit Operations (Threshold Nos. a and f)*

Pedestrian and Bicycle Facilities

Pedestrian Access

As mentioned previously, crosswalks with pedestrian signal heads and push buttons are located at all the signalized intersections in the study area. Overall, the existing network of sidewalks and crosswalks provide pedestrians with good connectivity and would provide new residents with safe pedestrian routes to transit services and other services in the area. The project proposes to widen the sidewalks along the project frontages on Saratoga Avenue and Blackford Avenue.

Easterbrook Discovery Elementary School is located within one mile southwest of the project site. Harker Middle School, a private school, is located approximately 2,000 feet east of the project site on Blackford Avenue. Safe and direct pedestrian access to both schools is provided via a network of sidewalks surrounding the roadway network and crosswalks on Saratoga Avenue at Williams Road and Doyle Road. These routes contain adequate sidewalks. It is recommended that the project applicant work with these schools to implement a Safe Routes to Schools Program, if one does not already exist.

Bicycle Facilities

There are no designated striped bike lanes or shared bike routes on streets within the immediate vicinity of the project site, including Saratoga Avenue, Blackford Avenue, Manzanita Drive, and the surrounding residential streets. There are existing bike lanes on Moorpark Avenue and Williams Road.

The San José 2020 Bike Plan identifies planned improvements to the bicycle network within the City and provides policies and goals that are intended to promote and encourage the use of multi-modal travel options. Within the project vicinity, bike lanes are planned for Boynton Avenue (between Moorpark Avenue and Payne Avenue). In addition, the City has developed an improvement plan for Saratoga Avenue. This improvement plan includes bike lanes on Saratoga Avenue between Stevens Creek Boulevard and Blackford Avenue. The planned improvements to the bicycle network would provide the project site with improved connections to the surrounding pedestrian and bicycle facilities as outlined in the General Plan goals and policies.

The proposed project would not result in unsafe conditions for pedestrian and bicyclists. **(Less Than Significant Impact)**

Transit Operations

There are two VTA bus routes (Routes 57 and 58) located along Saratoga Avenue that serve the project area. It is estimated that the project would generate a small increase in transit riders which can be accommodated by the current ridership capacity. Therefore, the proposed project would result in a less than significant impact on transit operations. **(Less Than Significant Impact)**

3.13.2.9 *Other Transportation Issues (Threshold Nos. c – e)*

Airport Operations

As discussed in *Section 3.8.3.4, Other Hazards*, the Norman Y. Mineta San José International Airport is located approximately 6.4 miles northeast of the project site. The proposed development would not cause changes to air traffic patterns nor would it result in substantial safety risks.

Federal Aviation Regulations, Part 77, "Objects Affecting Navigable Airspace" sets forth standards and review requirements for protecting the airspace for safe aircraft operation, particularly by restricting the height of potential structures and minimizing other potential hazards (such as reflective surfaces, flashing lights, and electronic interference) to aircrafts in flight. Under Federal Aviation Regulations FAR Part 77, the Federal Aviation Administration (FAA) must be notified of certain proposed structures within an extended zone defined by a set of imaginary surfaces radiating out for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above ground. The proposed project would not be within the FAR Part 77 zone nor would it have a height of 200 feet. **(No Impact)**

Site Design and Vehicular Access

Based on the proposed site design, the project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses. Currently, the site can be accessed via 14 full access driveways: seven on Blackford Drive, two on Saratoga Avenue, and five on Manzanita Drive. Vehicular access to the Avalon Building would be provided via one existing full access driveway on Blackford Avenue and one existing right-turn only driveway on Saratoga Avenue. The other existing driveway along Saratoga Avenue would be removed. The three driveways that would remain on Blackford Avenue and one driveway on Saratoga Avenue would provide access to the surface parking and parking garages. The proposed

stand-alone parking garage would be accessed via one existing full access driveway on Manzanita Drive. The remaining four driveways on Manzanita Drive would be removed.

There are no roadway curves or proposed landscaping that would obstruct the vision of drivers exiting the site. Street parking near the driveways along Saratoga Avenue and Manzanita Drive could obstruct the view of drivers exiting the site if cars are parked adjacent to the driveway. Red curbs should be implemented adjacent to the project driveways to ensure adequate site distance.

Avalon Building

The City's standard width for two-way drive aisles is 26 feet wide where 90-degree parking is provided. This allows sufficient room for vehicles to back out of parking spaces. Based on the site plan, all two-way drive aisles would be 26 feet wide, consistent with the City's standard width. There is one dead-end drive aisle shown on both levels of the below-grade parking garage of the Avalon Building. Space to turn around is provided at the dead-end drive aisle on the second level, but not the first. The dead-end drive aisles would not be problematic if the residential parking is assigned parking. Based on a review of the site plan, the project driveways are shown to be 26 feet wide, measured at the throat. Per the City's Department of Transportation (DOT) Geometric Design Guidelines, the typical width for a two-way driveway that serves multi-family residential development is 26 feet wide. The proposed driveway widths would meet the City's guideline.

Manzanita Parking Garage

The project would provide 90-degree parking spaces within the Manzanita Parking Garage. Based on the site plan, all two-way drive aisles would be 26 feet wide, consistent with the City's standard width. Based on a review of the site plan, the project driveway is shown to be 26 feet wide, measured at the throat. Per the City's Department of Transportation (DOT) Geometric Design Guidelines, the typical width for a two-way driveway that serves multi-family residential development is 26 feet wide. The proposed driveway widths would meet the City's guideline. The site plan shows efficient vehicular circulation throughout the Manzanita Garage; however, there are several spaces within the garage that have little to no buffer space. It is recommended that these spaces be designated as compact spaces and assigned to residents with compact vehicles.

The proposed project would have a less than significant impact on site design and vehicular access. **(Less Than Significant Impact)**

Emergency Vehicle Access

The fire code requires driveways to provide 32 feet of clearance for fire access. SJFD requires all portions of the buildings be within 150 feet of a fire department access road and requires a minimum of six feet clearance from the property line along all sides of the buildings. All areas of the proposed buildings would be within 150 feet of Blackford Avenue, Saratoga Avenue, Manzanita Drive, and the fire department access road. Additionally, all sides of the proposed buildings would have a setback of more than 6 feet from the property line. As such, the proposed project would have a less than significant emergency vehicle access impact. **(Less Than Significant Impact)**

3.13.2.10 *Operational Transportation Issues Not Covered Under CEQA*

Parking

Vehicle Parking

As proposed, the project would demolish the Saratoga and Manzanita parking garages (a total of 618 parking stalls) and construct a two-level parking garage below the Avalon Building and a new stand-alone garage. The project proposes 24 studio units, 147 one-bedroom units, 129 two-bedroom units, and up to 17,800 square feet of retail space.[96] According to the City of San Jose Municipal Code (Chapter 20.90), the required parking for multi-family dwelling units are 1.25 spaces per studio/one-bedroom unit and 1.7 spaces per two-bedroom unit. For retail located within an Urban Village designation, the required parking would be one space per 400 square feet of retail. To meet the City's standard parking requirements, the project would be required to provide 386 off-street parking spaces for the Avalon Building (38 for retail use and 348 for residential use), 86 off-street parking spaces for the Manzanita Building, and 1,173 off-street parking spaces for the existing residences.

Because the project is located within a designated Urban Village, and if the project meets the City's bicycle parking requirement, the residential parking requirement would be eligible for a 20 percent reduction in off-street vehicle parking. With the reduction, the project would be required to provide a total of 386 vehicle parking spaces for the new development. Of the 386 parking spaces, 279 spaces would be for the Avalon Building, 38 spaces would be for the retail space, and 69 spaces would be for the Manzanita Building. The proposed project would be required to provide 938 spaces to the existing residences. A total of 1,324 parking spaces would be required to serve the residential and retail space on-site.

As proposed, the project would provide a total of 1,520 spaces for existing and future residents, and the proposed retail, therefore, the project is consistent with the off-street parking requirement (with the 20 percent reduction included).

Bicycle Parking

Based on the City's Municipal Code, the project would be required to provide 68 bicycle parking spaces for the Avalon Building (six for retail use and 62 for residential use) and 14 bicycle parking spaces for the Manzanita Building. The proposed project would be required to meet the City's bicycle parking requirement.

3.13.3 Conclusion

Although the Lawrence Expressway/Mitty Way intersection would continue to operate at an unacceptable LOS during the AM Peak Hour under existing plus project and background plus project conditions, the proposed project would not cause a substantial increase in the intersection's delay. Implementation of the project would have less than significant transportation impacts. **(Less Than Significant Impact)**

[96] Please note that the number of proposed residential units has increased by seven units since completion of the Transportation Analysis. The increase in residential units would not result in substantial changes to the parking analysis. Nevertheless, the proposed project would be required to comply with the City's parking requirements.

3.14 UTILITIES AND SERVICE SYSTEMS

3.14.1 Environmental Setting

3.14.1.1 *Regulatory Framework*

Urban Water Management Plan

Pursuant to The State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events. The City of Santa Clara adopted its most recent UWMP in November 2016.

Wastewater

The San Francisco Bay Regional Water Quality Board (RWQCB) includes regulatory requirements that each wastewater collection system agency shall, at a minimum, develop goals for the City's Sewer System Management Plan to provide adequate capacity to convey peak flows.

Assembly Bill 939 and Senate Bill 1016

The California Integrated Waste Management Act of 1989, or Assembly Bill 939 (AB 939), established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures.

Assembly Bill 341

Assembly Bill 341 (AB 341) sets forth the requirements of the statewide mandatory commercial recycling program in the Public Resources Code. All businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units in California are required to recycle. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Senate Bill 1383

Senate Bill (SB) 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025.

California Green Building Standards Code

In January 2010, the State of California adopted the California Green Building Standards Code that establishes mandatory green building standards for all buildings in California. The code covers five

categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality. These standards include a mandatory set of guidelines, as well as more rigorous voluntary measures, for new construction projects to achieve specific green building performance levels:

- Reducing indoor water use by 20 percent;
- Reducing wastewater by 20 percent;
- Recycling and/or salvaging 50 percent of nonhazardous construction and demolition debris; and
- Providing readily accessible areas for recycling by occupant.

San José Zero Waste Strategic Plan/Green Vision

The Green Vision provides a comprehensive approach to achieve sustainability through new technology and innovation. The Zero Waste Strategic Plan outlines policies to help the City foster a healthier community and achieve its Green Vision goals, including 75 percent diversion by 2013 and zero waste by 2022. The Green Vision also includes ambitious goals for economic growth, environmental sustainability and an enhanced quality of life for San José residents and businesses.

San José Construction & Demolition Diversion Program

More than 30 percent of landfill waste is construction and demolition (C&D) debris. The City's Construction & Demolition Diversion (CDD) Program ensures that at least 75 percent of this waste is recovered and diverted from landfills.

Private Sector Green Building Policy

The City of San José's Green Building Policy for private sector new construction encourages building owners, architects, developers, and contractors to incorporate meaningful sustainable building goals early in building design process. This policy establishes baseline green building standards for private sector new construction and provides a framework for the implementation of these standards. It is also intended to enhance the public health, safety and welfare of San José residents, workers, and visitors by fostering practices in the design, construction, and maintenance of buildings that will minimize the use and waste of energy, water and other resources in the City of San José.

Envision San José 2040 General Plan

The General Plan includes the following utilities and service system policies applicable to the proposed project.

Policy MS-1.4: Foster awareness in San José's business and residential communities of the economic and environmental benefits of green building practices. Encourage design and construction of environmentally responsible commercial and residential buildings that are also operated and maintained to reduce waste, conserve water, and meet other environmental objectives.

Policy MS-3.2: Promote use of green building technology or techniques that can help to reduce the depletion of the City's potable water supply as building codes permit.

Policy MS-3.3: Promote the use of drought tolerant plants and landscaping materials for nonresidential and residential uses.

Policy IN-3.10: Incorporate appropriate stormwater treatment measures in development projects to achieve stormwater quality and quantity standards and objectives in compliance with the City's National Pollutant Discharge Elimination System (NPDES).

3.14.2 Existing Conditions

Water Services

Water service is provided to the City of San José by three water retailers, San José Water Company, the City of San José Municipal Water System, and the Great Oaks Water Company. Water services to the project site would be supplied by the San José Water Company (SJWC) and there are currently no recycled water lines in the immediate site vicinity.[97]

Sanitary Sewer/Wastewater Treatment

Wastewater from the City is treated at the San José/Santa Clara Regional Wastewater Facility (the Facility) which is administered and operated by the City Department of Environmental Services. The Facility provides primary, secondary, and tertiary treatment of wastewater and has the capacity to treat 167 million gallons of wastewater a day. The Facility treats an average of 110 million gallons of wastewater per day and serves 1.4 million residents.[98] The Facility is currently operating under a 120 million gallon per day dry weather effluent flow constraint. This requirement is based upon the SWRCB and the RWQCB concerns over the effects of additional freshwater discharges on the saltwater marsh habitat and pollutant loading to the Bay from the Facility. Approximately 10 percent of the plant's effluent is recycled for non-potable uses. The remainder is discharged into the Bay after treatment.

The General Plan FEIR states that average wastewater flow rates are approximately 70 to 80 percent of domestic water use and 85 to 95 percent of business use (assuming no internal recycling or reuse programs). For the purposes of this analysis, wastewater flow rates are assumed to be 80 percent of the total on-site water use. The project site currently generates 124,667 gpd of wastewater. As mentioned previously, there is an existing six-inch VCP sanitary sewer main on Manzanita Drive and an existing 27-inch RCP (cured-in-place) sanitary sewer main on Blackford Avenue, which serves the existing project site.

Stormwater Drainage

The City of San José owns and maintains the municipal stormwater drainage system which serves the project site. The lines that serve the project site drain into Saratoga Creek which flows north, carrying the effluent from the storm drains into San Francisco Bay. There is no overland release of stormwater directly into any water body from the project site.

[97] South Bay Water Recycling. "Recycled Water Pipeline System." Accessed: February 28, 2018. Available at: https://www.sanjoseca.gov/DocumentCenter/View/4692.
[98] City of San José. "San José-Santa Clara Regional Wastewater Facility." Accessed: February 21, 2018. Available at: http://www.sanjoseca.gov/?nid=1663.

Currently, the project site is approximately 250,595 square feet (85 percent) covered with impervious surfaces. There is an existing 21-inch RCP storm drain that connects to an existing 24-inch RCP storm drain main along the Blackford Avenue project frontage and an existing 24-inch RCP storm drain main along the Saratoga Avenue project frontage, which serves the existing project site. There is also an existing 12-inch concrete (non-reinforced) storm drain main along Manzanita Drive, which may be extended to the project frontage and serve the proposed project site if necessary.

Solid Waste

Santa Clara County's Integrated Waste Management Plan (IWMP) was approved by the California Integrated Waste Management Board (CIWMB) in 1996 and was reviewed in 2004 and 2007. Each jurisdiction in the county has a diversion requirement of 50 percent for the year 2000 and each year thereafter. According to the IWMP, the County has adequate disposal capacity beyond 2022. The total permitted landfill capacity of the five operating landfills in the City is approximately 5.3 million tons per year.

All residential solid waste in San José is landfilled at Newby Island Sanitary Landfill (NISL). The City has an existing contract with NISL through December 31, 2020 with the option to extend the contract for as long as the landfill is open. The estimated closure date for NISL is 2039.[99] The City has an annual disposal allocation for 395,000 tons per year. As of May 2017, NISL had approximately 16.9 million cubic yards of capacity remaining.[100]

The existing development on-site is estimated to generate approximately 4,636 pounds per day.[101,102]

3.14.3 Utilities and Service Systems Impacts

3.14.3.1 *Thresholds of Significance*

For the purposes of this EIR, a utilities and service systems impact is considered significant if the project would:

1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
2. Require or result in the construction of new waste or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
3. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
4. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed;

[99] Kelapanda, Achaya. Environmental Manager, Newby Island Sanitary Landfill. Personal communication. May 17, 2018.
[100] Ibid.
[101] CalRecycle. "Estimated Solid Waste Generation Rates." Accessed: February 22, 2018. Available at: https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates.
[102] Solid waste generation was estimated at a rate of 5.31 pounds per dwelling unit per day for multi-family residential use.

5. 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;
6. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; or
7. Comply with federal, state, and local statutes and regulations related to solid waste.

3.14.3.2 *Consistency with Plans*

The proposed project would comply with the City's Zero Waste Strategic Plan and CALGreen and NPDES MRP/C.3 requirements. As a result, the project would be consistent with General Plan Policies MS-1.4, MS-3.2, MS-3.3, and IN-3.10.

3.14.3.3 ***Water Impacts*** *(Threshold Nos. 2 and 4)*

The existing parking garage, leasing/amenity building and pool area have negligible water demand. Therefore, for a conservative estimate, existing water demand is assumed to be zero gallons per day (gpd). The proposed project would generate an increased water demand of approximately 95,175 gallons per day (gpd).[103]

The General Plan EIR determined that the three water suppliers for the City could serve planned growth under the City's General Plan until 2025. Water demand could exceed water supply with implementation of the General Plan during dry and multiple dry years after 2025. The General Plan has specific policies to reduce water consumption including expansion of the recycled water system and implementation of water conservation measures. The General Plan FEIR (as amended) concluded that with implementation of existing regulations and adopted General Plan policies, full build out under the General Plan would not exceed the available water supply. In addition, the project would comply with CALGreen requirements and the City's Private Sector Green Building Policy. As a result, implementation of the proposed project would have a less than significant impact on the City's water supply. **(Less Than Significant Impact)**

3.14.3.4 ***Sanitary Sewer/Wastewater Impacts*** *(Threshold Nos. 1, 2, and 5)*

Implementation of the project would increase wastewater generation by approximately 80,899 gpd.[104] The City currently has approximately 38.8 mgd of excess wastewater treatment capacity. Based on a sanitary sewer hydraulic analysis prepared for the City's General Plan FEIR, full build out under the General Plan would increase average dry weather flows by approximately 30.8 mgd. The proposed project is consistent with the development assumptions in the General Plan. Since development allowed under the General Plan would not exceed the City's allocated capacity at the Facility, implementation of the proposed project would have a less than significant impact on wastewater treatment capacity. **(Less Than Significant Impact)**

[103] Illingworth & Rodkin, Inc. *Avalon West Valley Expansion Air Quality & GHG Assessment.* Attachment 2. Page 99 of pdf. July 10, 2018.
[104] Assumes wastewater is equal to 85 percent of total potable water use on-site.

3.14.3.5 ***Storm Drainage Impacts*** *(Threshold No. 3)*

Currently, the proposed project construction zone is covered with approximately 250,595 square feet (85 percent) of impervious surfaces. Construction of the project would decrease impervious surfaces on-site by approximately 5,989 square feet (two percent). Runoff on-site would be treated by flow-through planters and biotreatment ponds as proposed by the project. Because the project would disturb more than 10,000 square feet of impervious area, the project would be required to comply with the City's Post-Construction Urban Runoff Policy 6-29 and the NPDES MRP/C.3 requirement. Although the project would result in a decrease in stormwater runoff, the project would be required to comply with the NPDES MRP/C.3 requirements and all applicable plans, policies, and regulations for stormwater treatment including retention and regulated release, which would result in a decrease in stormwater runoff. Therefore, the project would not exceed the capacity of the existing storm drain lines and would have a less than significant impact on the City's storm drainage system. **(Less Than Significant Impact)**

3.14.3.6 ***Solid Waste Impacts*** *(Threshold Nos. 6 and 7)*

The project would increase the total solid waste generated compared to existing conditions. Implementation of the project would generate approximately 1,630 pounds of solid waste per day from the 307 residential units and 45 pounds of solid waste per day for the proposed retail.[105,106]

Given NISL's remaining capacity (16.9 million cubic yards), the City's contract with NISL, the amount of waste the City disposes at NISL, and the amount of waste the project is estimated to generate, there is sufficient capacity at NISL to serve the project.

The General Plan FEIR (as amended) concluded that implementation of the General Plan would not exceed the capacity of existing landfills serving the City of San José. The estimated increases in solid waste generation from planned development would be avoided through implementation of the City's Zero Waste Strategic Plan.[107] The Zero Waste Strategic Plan in combination with existing regulations and programs, would ensure that full build out of the General Plan would not result in significant impacts on solid waste disposal capacity. **(Less Than Significant Impact)**

3.14.4 Conclusion

Implementation of the proposed project would not require new utility lines or facilities to be constructed and would not exceed the capacity of existing utility and service systems. **(Less Than Significant Impact)**

[105] CalRecycle. "Estimated Solid Waste Generation Rates." Accessed: February 22, 2018. Available at: https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates.
[106] Solid waste generation was estimated at a rate of 5.31 pounds per dwelling unit per day for multi-family residential use and 2.5 pounds per 1,000 square foot per day for commercial retail.
[107] The Zero Waste Strategic Plan outlines policies to help the City of San José foster a healthier community and achieve its Green Vision goals, including 75 percent diversion by 2013 and zero waste by 2022.

SECTION 4.0 CUMULATIVE IMPACTS

4.1 CUMULATIVE ANALYSIS

Cumulative impacts, as defined by CEQA, refer to two or more individual effects which, when combined, compound or increase other environmental impacts. Cumulative impacts may result from individually minor, but collectively significant effects taking place over a period of time. CEQA Guideline Section 15130 states that an EIR should discuss cumulative impacts "when the project's incremental effect is cumulatively considerable." The discussion does not need to be in as great a detail as is necessary for project impacts, but is to be "guided by the standards of practicality and reasonableness." The purpose of the cumulative analysis is to allow decision makers to better understand the impacts that might result from approval of past, present, and reasonably foreseeable future projects, in conjunction with the proposed project addressed in this EIR.

The CEQA Guidelines advise that a discussion of cumulative impacts should reflect both their severity and the likelihood of their occurrence. To accomplish these two objectives, the analysis should include either a list of past, present, and probable future projects or a summary of projections from an adopted general plan or similar document. The analysis must then determine whether the project's contribution to any cumulatively significant impact is cumulatively considerable, as defined by CEQA Guideline Section 15065(a)(3).

The cumulative discussion for each environmental issue addresses two aspects of cumulative impacts: 1) would the effects of all of the pending development listed result in a cumulatively significant impact on the resources in question? And, if that cumulative impact is likely to be significant, 2) would the contributions to that impact from the proposed project make a cumulatively considerable contribution to those cumulative impacts?

The following pending and approved projects in the project vicinity are evaluated in the cumulative analysis:

- Garden City Mixed-Use[108]
- 4300 Stevens Creek Boulevard Mixed-Use
- 609 Saratoga Avenue Commercial Use
- North San José Phase II
- City Place (in Santa Clara)

4.1.1 Cumulative Air Quality Impacts

Cumulative Community Risk Impacts

BAAQMD recommends a 1,000-foot radius for assessing community risks and hazards from TAC mobile and stationary sources. There are three stationary sources and one mobile source of air pollutants within 1,000 feet of the proposed Avalon and Manzanita Buildings. The following tables

[108] The Garden City Mixed-Use project was withdrawn as of June 2018. The project is, however, still included in the cumulative analysis as the technical studies were initiated prior to the project's withdrawal. Given the proximity of the projects, the cumulative analysis is conservative in its conclusions of potential cumulative effects.

summarize the cumulative impacts from existing nearby sources combined with construction of the Avalon and Manzanita Buildings. Please refer to Appendix B of this document for more information regarding the construction emissions modeling and the list of inputs used.

Table 4.1-1: Impacts from Combined TAC Sources at the Proposed Manzanita Building

Source	Maximum Cancer Risk (per million)	Maximum Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)	Maximum Hazard Index
Unmitigated Avalon Building Construction[1]	8.7 (infant)[2]	0.04	<0.01
Saratoga Avenue (north-south) at 270 feet east	1.5	0.20	<0.01
Plant #G12254 (Gas Station) at 1,000 feet	0.16	N/A	<0.01
Plant #G9351 (Gas Station) at 1,000 feet	0.13	N/A	<0.01
Plant #G10399 (Gas Station) at 1,000 feet	0.07	N/A	<0.01
Cumulative Total	10.6	0.24	<0.05
BAAQMD Threshold – Cumulative Sources	100	0.8	10.0
Threshold Exceeded?	***No***	***No***	***No***

Note: [1] The Avalon Building is included in this analysis since construction of the Avalon Building would occur during the first few years of operation of the Manzanita Building.
[2] The Avalon Building construction cancer risk level in this table is for the future MEI in the Manzanita Building. The Avalon Building construction cancer risk level reported earlier in Table 3.2-6 is for the existing neighboring residential MEI.
Source: Illingworth & Rodkin, Avalon West Valley Expansion Air Quality & GHG Assessment June 2018.

Table 4.1-2: Impacts from Combined TAC Sources at the Proposed Avalon Building

Source	Maximum Cancer Risk (per million)	Maximum Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)	Maximum Hazard Index
Saratoga Avenue (north-south) at 35 feet east	1.7	0.17	<0.01
Plant #G12254 (Gas Station) at 460 feet	0.56	N/A	<0.01
Plant #G9351 (Gas Station) at 730 feet	0.21	N/A	<0.01
Plant #G10399 (Gas Station) at 700 feet	0.11	N/A	<0.01
Cumulative Total	2.6	0.2	<0.04
BAAQMD Threshold – Cumulative Sources	100	0.8	10.0
Threshold Exceeded?	***No***	***No***	***No***

Source: Illingworth & Rodkin, Avalon West Valley Expansion Air Quality & GHG Assessment June 2018.

Impacts from the combined sources of TACs would be below the BAAQMD significance thresholds and, as a result, the cumulative effect of project construction combined with existing sources of TACs would not be cumulatively considerable nor would it result in a health risk to sensitive receptors. **(Less Than Significant Cumulative Impact)**

Cumulative Impact on the Construction MEI

The locations of the maximum exposed individuals (MEI) have been identified in Figure 3.2-1. The cumulative impacts on the construction MEI have been summarized in Table 4.1-3 below.

Table 4.1-3: Impacts from Combined Sources at Construction MEI for Cancer Risk and $PM_{2.5}$[1]

Source	Maximum Cancer Risk (per million)	Maximum Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)	Maximum Hazard Index
Project Construction (total) Unmitigated Mitigated	 87.8 7.0	 0.60 0.12	 0.06 <0.01
Saratoga Avenue (north-south) 32,000 ADT	2.2	0.11	<0.01
Plant #G12254 (Gas Station)	0.2	N/A	<0.01
Plant #G9351 (Gas Station)	0.1	N/A	<0.01
Plant #G10399 (Gas Station)	0.1	N/A	<0.01
Cumulative Total Unmitigated Mitigated	 90.4 9.6	 0.71 0.23	 0.1 <0.05
BAAQMD Threshold – Cumulative Sources	100	0.8	10.0
Threshold Exceeded?	***No***	***No***	***No***

Note: [1] The cancer risk levels for Saratoga Ave and the Stationary Sources presented in this table are for the entire project's existing neighboring residential MEIs. The cancer risk levels for Saratoga Ave and the Stationary Sources reported previously in Tables 4.1-2 and 4.1-3 are for the future MEIs in the Manzanita and Avalon Buildings.
Source: Illingworth & Rodkin, Avalon West Valley Expansion Air Quality & GHG Assessment June 2018.

Impacts from the combined sources of TACs at the construction MEIs would be below the BAAQMD significance thresholds and, as a result, the effect of project construction combined with existing sources of TACs would not be cumulatively considerable nor would it result in a health risk to sensitive receptors.

4.1.2 Cumulative Transportation Impacts

Traffic volumes under cumulative conditions were estimated by adding the trips from proposed but not yet approved (pending) development projects within the City of San José and Santa Clara to background condition traffic volumes. Cumulative plus project conditions are the cumulative no project condition plus project generated traffic.

Significance Thresholds – City of San José

A project would have a significant cumulative LOS impact if it would:

- Cause the level of service at any local intersection to degrade from an acceptable LOS D or better under background conditions to an unacceptable LOS E or F under cumulative plus project conditions; or

- For any local intersection that is already an unacceptable LOS E or F under background conditions, cause the critical-movement delay at the intersection to increase by four or more seconds and the V/C to increase by one percent (0.01) or more[109].

A single project's contribution to a cumulative intersection impact is deemed considerable in the City of San José if the project traffic contributes 25 percent or more to the increase in total traffic volume from background traffic conditions to cumulative traffic conditions. A significant cumulative impact is deemed mitigated to a less than significant level by the City of San José if the measures implemented would restore the intersection LOS to background conditions or better.

Significance Thresholds – City of Santa Clara

The project is said to create a significant adverse impact on traffic conditions at a signalized intersection in the City of Santa Clara if for either peak hour:

- The level of service at the intersection degrades from an acceptable level (LOS D or better at all city-controlled intersections and LOS E or better at all expressway intersections) under cumulative no project conditions to an unacceptable level (LOS E or F at city-controlled intersections and LOS F at expressway intersections) under cumulative conditions, or
- The level of service at the intersection is an unacceptable level (LOS E or F at city-controlled intersections and LOS F at expressway intersections) under cumulative no project conditions and the addition of project trips causes the average critical delay to increase by four or more seconds and the V/C to increase by one percent or more.

An exception to this threshold applies when the addition of project traffic reduces the amount of average stopped delay for critical movements (i.e., the critical movement is negative). In this case, the threshold of significance is an increase in the critical V/C of 0.01 or more. A significant cumulative impact is deemed mitigated to a less than significant level by the City of Santa Clara if the measures implemented would restore the intersection levels of operation to cumulative no-project conditions or better.

4.1.2.1 *Changes to the Roadway Network*

This analysis assumes the transportation network under cumulative plus project conditions would be the same as the transportation network under background conditions.

4.1.2.2 *Cumulative Intersection Level of Service Impacts*

The results of the cumulative plus project conditions analysis are summarized in Table 4.1-4 below. Consistent with the methodologies for each City, for San José intersections the cumulative plus project conditions were compared to background conditions, and for Santa Clara intersections the cumulative plus project conditions were compared to cumulative conditions. Because San José compared cumulative plus project to background, only background numbers are provided, the same is true for Santa Clara intersections which are compared to cumulative conditions.

[109] An exception to this threshold applies when the addition of project traffic reduces the amount of average stopped delay for critical movements (i.e., the critical movement is negative). In this case, the threshold of significance is an increase in the critical V/C of 0.01 or more.

Table 4.1-4: Study Intersections Level of Service – Cumulative Conditions

No	Intersection	Peak Hour	Background		Cumulative		Cumulative Plus Project				
			Delay	LOS	Delay	LOS	Delay	LOS	Δ in Critical Delay	Δ in Critical V/C	%[3]
1	Lawrence Expressway and Mitty Way (SJ)	AM PM	**104.4** 12.9	**F** B	--[2] --[2]		**111.1** 13.0	**F** B	**8.0** 0.2	**0.019** 0.011	14
2	Saratoga Avenue and Blackford Avenue (SJ)	AM PM	33.4 32.4	C- C-	--2 --2		34.8 33.8	C- C-	2.0 1.0	0.046 0.034	
3	Saratoga Avenue and Moorpark Avenue (SJ, CMP)	AM PM	41.1 42.6	D D	--2 --2		41.6 43.4	D D	0.7 1.3	0.035 0.040	
4	Saratoga Avenue and I-280 Southbound Ramp (SJ, CMP)	AM PM	46.3 35.5	D D+	--2 --2		53.3 37.6	D- D+	16.7 3.1	0.052 0.053	
5	Saratoga Avenue and I-280 Northbound Ramp (SJ, CMP)	AM PM	28.5 22.5	C C+	--2 --2		27.9 21.8	C C+	0.3 -0.9	0.025 0.040	
6	Saratoga Avenue and Stevens Creek Boulevard (SJ, CMP)	AM PM	36.5 41.5	D+ D	--2 --2		38.1 43.6	D+ D	2.0 3.8	0.061 0.088	
7	San Tomas Expressway and Saratoga Avenue (SC, CMP)	AM PM	--1 --1		84.9 82.7	F F	85.3 82.8	F F	0.6 0.3	0.001 0.001	

Notes: (CMP) VTA Congestion Management Program
(SJ) City of San José
(SC) City of San Clara
Bold indicates unacceptable LOS
[1]For San José intersections, a significant cumulative impact compares cumulative plus project traffic conditions against background traffic conditions.
[2]For Santa Clara intersections, a significant cumulative impact compares cumulative plus project traffic conditions against cumulative no project conditions.
[3] % of Project Contribution

Results of the LOS analysis under cumulative conditions show that the cumulative project trips would collectively result in a significant adverse traffic impact at the Lawrence Expressway/Mitty Way intersection. The project's contribution to the total volume from background traffic conditions to cumulative conditions (14 percent) would not contribute more than 25 percent of the increase delay at any of the impacted study intersections. As a result, the proposed project would not have a cumulatively considerable impact on any City of San José and Santa Clara intersections. **(Less Than Significant Cumulative Impact)**

4.1.3 Other Cumulative Impacts

Hazardous Materials

Hazardous materials contamination is typically a localized issue. The proposed project has identified specific mitigation measures to address residual agricultural soil contamination on-site, as well as asbestos and lead-based paint from the buildings on-site. The existing and proposed land use do not pose a risk from the use or storage of hazardous materials. Future redevelopment within the project area and intensification of growth throughout the City of San José could expose existing soil and/or groundwater contamination which would need to be remediated.

The most likely impact to nearby sensitive receptors and construction workers from cumulative projects in the immediate area would be exposure during removal and off-haul of soil and other potential contaminates. Nevertheless, truck routes would be established by the City to avoid residential and other sensitive areas and all applicable regulatory requirements would need to be implemented. Therefore, redevelopment of the site would not result in a cumulatively significant hazardous materials impact. **(Less Than Significant Cumulative Impact)**

Utilities and Public Services

The project's use of energy, water, the sanitary sewer system, and landfills, as well as police and fire protection services and local community services (schools, parks, libraries, etc.) was accounted for in General Plan as part of the planned growth of the City. When applicable, the General Plan identified the need for increased services and infrastructure to support the planned growth of the City. The project, by itself, will have a less than significant impact on these resources and services. The proposed project, combined with future growth throughout the City of San Jose, would significantly increase the use/need for these resources and services, but would not result in a significant cumulative impact. As a result, the project's contribution to the increased use of in any of these resource areas would not be considerable. **(Less Than Significant Cumulative Impact)**

Greenhouse Gas Emissions

As discussed in *Section 3.7.2.3, Greenhouse Gas Emissions*, build out of the General Plan would have a significant and unavoidable GHG emissions impact beyond 2020 and the City adopted overriding considerations for development assumed under the General Plan. The proposed development on-site, by itself, would have a less than significant GHG emissions impact. Due to the global nature of GHG emissions, a significant project level impact is equivalent to a significant cumulative impact. Because the project would have a less than significant project level impact, the project's contribution to GHG emissions would not be considerable. **(Less Than Significant Cumulative Impact)**

Biological Resources

The proposed project not would result in significant biological resources impacts. The biological resources impacts would result solely from construction of the proposed project. These impacts are temporary and would be reduced to a less than significant level with implementation of the proposed mitigation measures. Because of the temporary nature of these impacts and the fact that the impacts would be mitigated, there would be no long-term cumulative effect. As a result, the projects

contribution to a cumulatively significant biological resources impact would not be considerable. **(Less Than Significant Cumulative Impact)**

Noise and Vibration

The nearest pending/approved project is located at 609 Saratoga Avenue, approximately 0.2 miles northwest of the project site. While construction of the project could overlap with construction of the proposed project, construction noise would be temporary and Mitigation Measures NOI-1.1 and NOI-1.2, and Standard Permit Conditions would be implemented to reduce construction noise. Therefore, construction of the project is not anticipated to result in a significant cumulative construction noise impact. **(Less Than Significant Cumulative Impact)**

Other Resources Areas

All other resource areas, including aesthetics, geology and soils, hydrology and water quality, cultural resources and land use would have a less than significant impact, or no impact. The proposed project would not result in a potentially significant impact to these resources as discussed in their respective sections. As a result, the project is not expected to result in a cumulatively considerable impact to these resources. **(Less Than Significant Cumulative Impact)**

SECTION 5.0 GROWTH-INDUCING IMPACTS

For the purposes of this project, a growth inducing impact is considered significant if the project would:

- Cumulatively exceed official regional or local population projections;
- Directly induce substantial growth or concentration of population. The determination of significance shall consider the following factors: the degree to which the project would cause growth (i.e., new housing or employment generators) or accelerate development in an undeveloped area that exceeds planned levels in local land use plans; or
- Indirectly induce substantial growth or concentration of population (i.e., introduction of an unplanned infrastructure project or expansion of a critical public facility (road or sewer line) necessitated by new development, either of which could result in the potential for new development not accounted for in local Envision San José 2040 General Plans).

The project proposes development on underutilized parcels within the larger project site which is considered an infill site in the City of San José. The site is surrounded by existing infrastructure and both existing and planned development. Development of the proposed project would not require upgrades to the existing sanitary sewer and/or storm drain lines that directly serve the project site. In addition, the project does not include expansion of the existing infrastructure that would facilitate growth in the project area or other areas of the City.

The proposed project would place new retail space and new residences adjacent to existing retail, housing, and commercial/office development. Assuming 3.20 persons per household and 2.5 employees per 1,000 square feet of retail, the project would accommodate approximately 982 new residents and up to 45 employees[110] The proposed project would be compatible with the neighboring land uses and would not pressure adjacent properties to redevelop with new or different land uses, in a manner inconsistent with the General Plan.

There is currently a shortage of available jobs relative to available housing within the City of San José. This jobs/housing imbalance is expected to reverse with full build out of the General Plan as mentioned in *Section 3.10*. The proposed development would result in a small increase in jobs and a net increase in housing Citywide and would not impact the overall jobs/housing imbalance within the City.

Therefore, the project would not have a significant growth inducing impact.

[110] The number of full-time employees is estimated at 45 based on an approximate 2.5 employees per 1,000 square feet of retail space. Illingworth & Rodkin, Inc. *Avalon West Valley Expansion Air Quality & GHG Assessment.* July 10, 2018.

SECTION 6.0 SIGNIFICANT AND IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA and the CEQA Guidelines require that an EIR address "significant irreversible environmental changes which would be involved in the proposed project, should it be implemented." [§15126(c)]

Future development on-site would involve the use of non-renewable resources both during construction phases and future operations/use of the site. Construction would include the use of building materials, including materials such as petroleum-based products and metals that cannot reasonably be re-created. Construction also involves significant consumption of energy, usually petroleum-based fuels that deplete supplies of non-renewable resources. Upon completion of new construction on-site, occupants will use non-renewable fuels to heat and light the buildings. The proposed project will also result in the increased consumption of water.

The City of San José encourages the use of building materials that include recycled materials and makes information available on those building materials to developers. The new buildings would be built to current codes, which require insulation and design to minimize wasteful energy consumption. The proposed development would be constructed to LEED Gold certification standards, consistent with the requirements of the City of San José Green Building Ordinance. In addition, the site provides job opportunities and residences that are reasonably proximate to transportation networks than housing farther away in the south county and other counties to the north. The proposed project would, therefore, facilitate a more efficient use of resources over the lifetime of the project.

SECTION 7.0 SIGNIFICANT AND UNAVOIDABLE IMPACTS

A significant unavoidable impact is an impact that cannot be mitigated to a less than significant level if the project is implemented as it is proposed. The proposed project would not result in any significant unavoidable impacts. All other significant impacts of the proposed project would be reduced to a less than significant level with the implementation of mitigation measures identified in this EIR

SECTION 8.0 ALTERNATIVES

8.1 OVERVIEW

CEQA requires that an EIR identify and evaluate alternatives to a project as it is proposed. Two key provisions from the CEQA Guidelines pertaining to the discussion of alternatives are included below:

> **Section 15126.6(a). Consideration and Discussion of Alternatives to the Proposed Project.** 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 decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.
>
> **Section 15126.6(b). Purpose.** Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), 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 the project objectives, or be more costly.

Other elements of the Guidelines discuss that alternatives should include enough information to allow a meaningful evaluation and comparison with the proposed project. The CEQA Guidelines state that if an alternative would cause one or more additional impacts, compared to the proposed project, the discussion should identify the additional impact, but in less detail than the significant effects of the proposed project.

The three critical factors to consider in selecting and evaluating alternatives are: (1) the significant impacts from the proposed project that could be reduced or avoided by an alternative, (2) consistency with the project's objectives, and (3) the feasibility of the alternatives available. Each of these factors is discussed below.

8.2 SIGNIFICANT IMPACTS FROM THE PROJECT

Alternatives may also be considered if they would further reduce impacts that are already less than significant because of required or proposed mitigation. Impacts that would be significant, and for which the project includes mitigation to reduce them to less than significant levels include:

- Impact AIR-1: Construction activities associated with the proposed project would expose infants near the construction zones and in proximity to the project site to temporary TAC emissions in excess of acceptable thresholds and would expose sensitive receptors to $PM_{2.5}$

emissions in excess of acceptable thresholds. (Less Than Significant with Mitigation Measures AIR-1.1 and AIR-1.2).

- Impact BIO-1: Construction activities associated with the proposed project could result in the loss of fertile eggs or nest abandonment. (Less Than Significant With Mitigation Measure BIO-1.1).
- Impact HAZ-1: Implementation of the proposed project could expose construction workers to residual agricultural soil contamination. (Less Than Significant With Mitigation Measures HAZ-1.1 and HAZ-1.2).
- Impact NOI-1: Concrete pours during the evening hours (7:00 PM to 7:00 AM) would exceed the City's allowable noise levels of 50 dBA L_{max} in bedrooms and 55 dBA L_{max} in other rooms. (Less Than Significant Impact With Mitigation Measures NOI-1.1)

As mentioned above, the CEQA Guidelines advise that the alternatives analysis in an EIR should be limited to alternatives that would avoid or substantially lessen any of the significant effects of the project, and would achieve most of the project objectives.

8.3 PROJECT OBJECTIVES

While CEQA does not require that alternatives be capable of meeting all of the project objectives, their ability to meet most of the objectives is considered relevant to their consideration. The stated objectives of the proposed project are to:

1. Redevelop the project site to allow for the creation of a mixed-use signature project in the Saratoga Ave Urban Village, through a Planned Development Zoning and Planned Development Permit processes.

2. Support San José General Plan policies, such as Policies H-3.1 and H-3.2, regarding intensification of new housing units in Urban Villages.

3. Meet high sustainability and green building standards by designing the development to meet U.S. Green Building Code, LEED and Cal-Green standards for new construction.

4. Construct oriented, ground level retail space along Saratoga Avenue and Blackford Avenue. This retail space must be sized appropriately, and have appropriate signage, visibility, access, and internal building infrastructure to attract desirable retailers to the building.

5. Provide on-site retail opportunities to property residents and surrounding neighbors, and support growth in employment and commercial activity by locating limited retail and other commercial uses within the project.

6. Provide an economically sustainable number of units that will allow the project proponent to invest in enhancing of the character of the neighborhood by providing common open space areas including plazas, courtyards, and seating areas.

7. Increase the housing density at this key Urban Village site, which features easy access to transportation corridors, bus corridor stops, commercial services, and jobs.

8. Repair and upgrade the automobile parking facilities on site to replace aging, unattractive, and dilapidated parking garages with new and modern facilities.

9. Update the site's overall automobile parking ratio to more accurately reflect the demand from today's renter demographic. At the same time, create new opportunities for bicycle parking and car share spaces to encourage alternate modes of transportation.

10. Create a sustainable community by designing public spaces to encourage alternative forms of transportation, such as walking, bicycling, and public transportation.

11. Assist the City of San José to satisfy its Regional Housing Needs Allocation for market rate housing units.

An EIR is required to include a "No Project" alternative that "compares the impacts of approving the proposed project with the impacts of not approving the proposed project."[111]

There is no rule requiring an EIR to explore off-site project alternatives in every case. As stated in the Guidelines: "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." (Guidelines, § 15126.6, subd. (a), italics added.) As this implies, "an agency may evaluate on-site alternatives, off-site alternatives, or both." (*Mira Mar, supra*, 119 Cal.App.4th at p. 491.) The Guidelines thus do not require analysis of off-site alternatives in every case. Nor does any statutory provision in CEQA "expressly require a discussion of alternative project locations." (119 Cal.App.4th at p. 491 citing §§ 21001, subd. (g), 21002.1, subd. (a), 21061.)

In considering an alternative location in an EIR, the CEQA Guidelines advise that the key question is "whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location".[112] The proposed project is the intensification of residential development (with retail) on a site with existing residential development. It is also located within the Saratoga Avenue Urban Village in San José. It is unlikely that another site within the Saratoga Avenue Village could be found that would allow for the proposed development while maintaining the existing residential development on-site. Furthermore, it is not likely that an alternative location anywhere in San José would substantially lessen the identified impacts. As a result, no site alternative was addressed.

8.4 ALTERNATIVE ANALYSIS

8.4.1 No Project – No Development Alternative

The CEQA Guidelines [§15126(d)4] require that an EIR specifically discuss a "No Project" alternative, which shall address both "the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project is not approved, based on current plans and consistent with available infrastructure and community services." The No Project – No Development

[111] CEQA Guidelines Section 15126.6(e)(1)
[112] CEQA Guidelines Section 15126.6(f)(2)(A)\

Alternative would retain the existing residential site as is. If the project site were to remain as is, there would be no new impacts. However, this alternative would not meet any of the project objectives.

8.4.2 Existing Zoning Alternative

The project site is currently designated *Mixed Use Neighborhood* in the General Plan, which allows for a maximum FAR of 2.0 (3.5 stories) and is currently zoned *R-M Multiple Residence*. The purpose of the R-M zoning district is to reserve land for the construction, use and occupancy of higher density residential development and higher density residential commercial mixed use development. This alternative would allow for construction of residential and mixed-use development, based on an allowable height of 45 feet (3.5 stories). Under the Existing Zoning Alternative, the proposed project would include construction of the Manzanita Building (approximately 45 feet tall) with 55 residential units consistent with the proposed project. Construction of the Avalon Building as proposed would not be allowed, however, as it exceeds the 45-foot height limit. If the Avalon Building were to be constructed under the Existing Zoning Alternative, the building would retain the ground floor retail and include up to 84 residential units[113], resulting in a loss of 168 residential units compared to the proposed project. Since the number of residential units in the Avalon Building would be reduced by more than half under this alternative, only a reduction in parking would occur. One level of sub-grade parking would be proposed.

The less than significant construction-related TAC and noise impacts would be lessened with this smaller project due to a shorter construction timeframe and reduction in total excavation required for the below-grade parking. In addition, while not a significant impact, this alternative would reduce vehicles trips to and from the site. Since less units are proposed and one level of sub-grade parking would be removed from the project, construction noise and ground-disturbing activities (grading of the site) would be reduced. The Existing Zoning Alternative would not, however, avoid the biological, cultural and hazardous material resources, and noise impacts resulting from construction. The basic objectives related to the provision of high-density, transit-oriented uses addressing the region's housing would not be met due to the reduced number of residential units. This alternative would also not meet the City's objectives to intensify development within the Saratoga Urban Village.

8.4.3 Reduced Density Alternative

As previously mentioned, the significant impacts resulting from the proposed project are all related to construction activities. The reduced density alternative would be smaller than the proposed project, but larger than the existing zoning alternative. Because the project is a mix of residential and commercial land uses, there is a substantive number of possible development scenarios. As such, it is not possible to define them all. Nevertheless, any development scenario with a smaller project of any size would involve a shorter construction timeframe and less heavy equipment on-site, which would lessen the construction TAC and noise impacts as compared to the proposed project. Impacts from ground disturbance and tree removal would be comparable to the proposed project. Therefore, a

[113] Based on the 45 foot height limit under the existing zoning alternative, the Avalon Building would be allowed to construct the retail component (first floor) and two floors with residential units. Assuming 42 units on each floor, the Avalon building would have 84 units in total.

smaller project of any size would not fully reduce all construction impacts. The Reduced Density Alternative would meet most of the project objectives.

8.4.4 Environmentally Superior Alternative

The CEQA Guidelines state that an EIR shall identify an environmentally superior alternative. If the environmentally superior alternative is the "No Project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (Section 15126.6(e)(2)).
The environmentally superior alternative would be the No Project - No Development Alternative, which would avoid all project impacts; however, this alternative would not meet any project objectives.

The Existing Zoning Alternative would lessen the severity of both of the already less than significant construction-related TAC and construction noise impacts. This alternative would result in the construction of 84 residential units within the Avalon Building and 55 residential units within the Manzanita Building, which is less than half the number of currently proposed units. This alternative would lessen construction-related TAC and noise impacts due to a shorter construction timeframe. In addition, one level of below-grade parking would be removed due to the reduction in the number of proposed units. The Existing Zoning Alternative would be the environmentally superior alternative to the proposed project.

SECTION 9.0 REFERENCES

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SECTION 10.0 LEAD AGENCY AND CONSULTANTS

10.1 LEAD AGENCY

City of San José
Department of Planning, Building, and Code Enforcement

Rosalynn Hughey, *Director*
David Keyon, *Supervising Environmental Planner*
Thai-Chau Le, *Planner*

10.2 CONSULTANTS

David J. Powers & Associates, Inc.
Environmental Consultants and Planners

Shannon George, *Principal Project Manager*
Pooja Nagrath, *Project Manager*
Fiona Phung, *Associate Project Manager*
Zach Dill, *Graphic Artist*

AEI Consultants
Hazmat Consultants

Holman and Associates
Cultural Consultants

Hexagon Transportation Consultants
Transportation Consultants

Illingworth & Rodkin, Inc.
Air Quality and Noise Consultants