Draft Initial Study

2655 The Alameda Mixed Use Project

Prepared by

CITY OF SANTA CLARA CALIFORNIA
1852
THE MISSION CITY

In Consultation with

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

April 2023

[insert draft MND]

TABLE OF CONTENTS

Figures

Photos

Tables

Appendices

SECTION 1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE INITIAL STUDY

The City of Santa Clara, as the Lead Agency, has prepared this Initial Study for the 2655 The Alameda Mixed Use Project in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the City of Santa Clara, California.

The project proposes to construct a four-story mixed-use development featuring ground floor retail and 39 residential units. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed project.

1.2 PUBLIC REVIEW PERIOD

Publication of this Initial Study marks the beginning of a 30-day public review and comment period. During this period, the Initial Study will be available to local, state, and federal agencies and to interested organizations and individuals for review. Written comments concerning the environmental review contained in this Initial Study during the 30-day public review period should be sent to:

City of Santa Clara
Debby Fernandez, Associate Planner
dfernandez@cityofsantaclara.com

1.3 CONSIDERATION OF THE INITIAL STUDY AND PROJECT

Following the conclusion of the public review period, the City of Santa Clara will consider the adoption of the Initial Study/Mitigated Negative Declaration (MND) for the project at a regularly scheduled meeting. The City shall consider the Initial Study/MND together with any comments received during the public review process. Upon adoption of the MND, the City may proceed with project approval actions.

1.4 NOTICE OF DETERMINATION

If the project is approved, the City of Santa Clara 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 15075(g)).

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

2655 The Alameda Mixed-Use Development

2.2 LEAD AGENCY CONTACT

Debby Fernandez, Associate Planner
DFernandez@santaclaraca.gov
1500 Warburton Ave
Santa Clara, CA 95050

2.3 PROJECT APPLICANT

Ken Rodrigues and Partners Inc.

2.4 PROJECT LOCATION

2655 The Alameda, Santa Clara, CA, See Figure 2.4-1, 2.4-2, and 2.4-3 for site location.

2.5 ASSESSOR'S PARCEL NUMBER

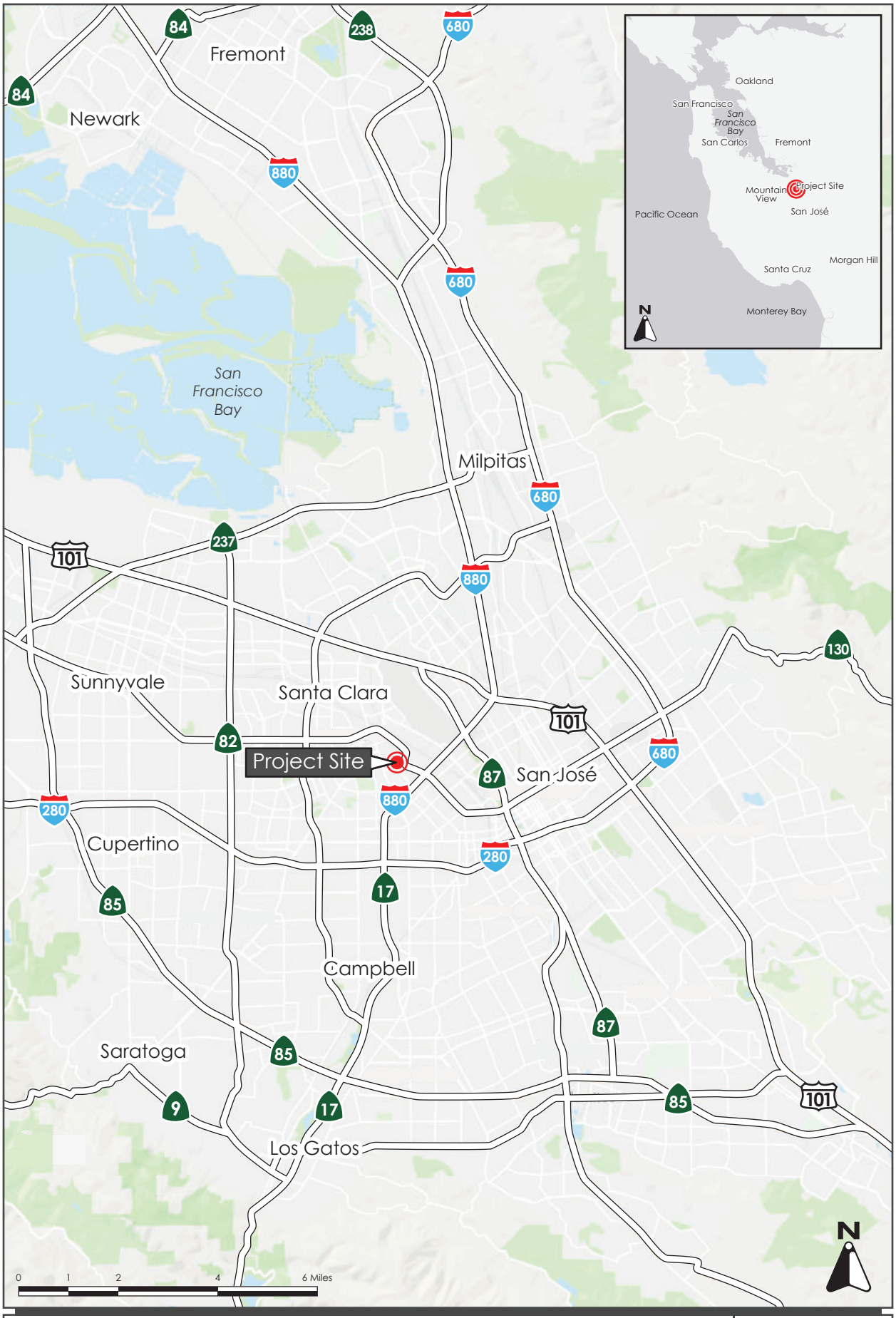
230-12-012

2.6 GENERAL PLAN DESIGNATION AND ZONING DISTRICT

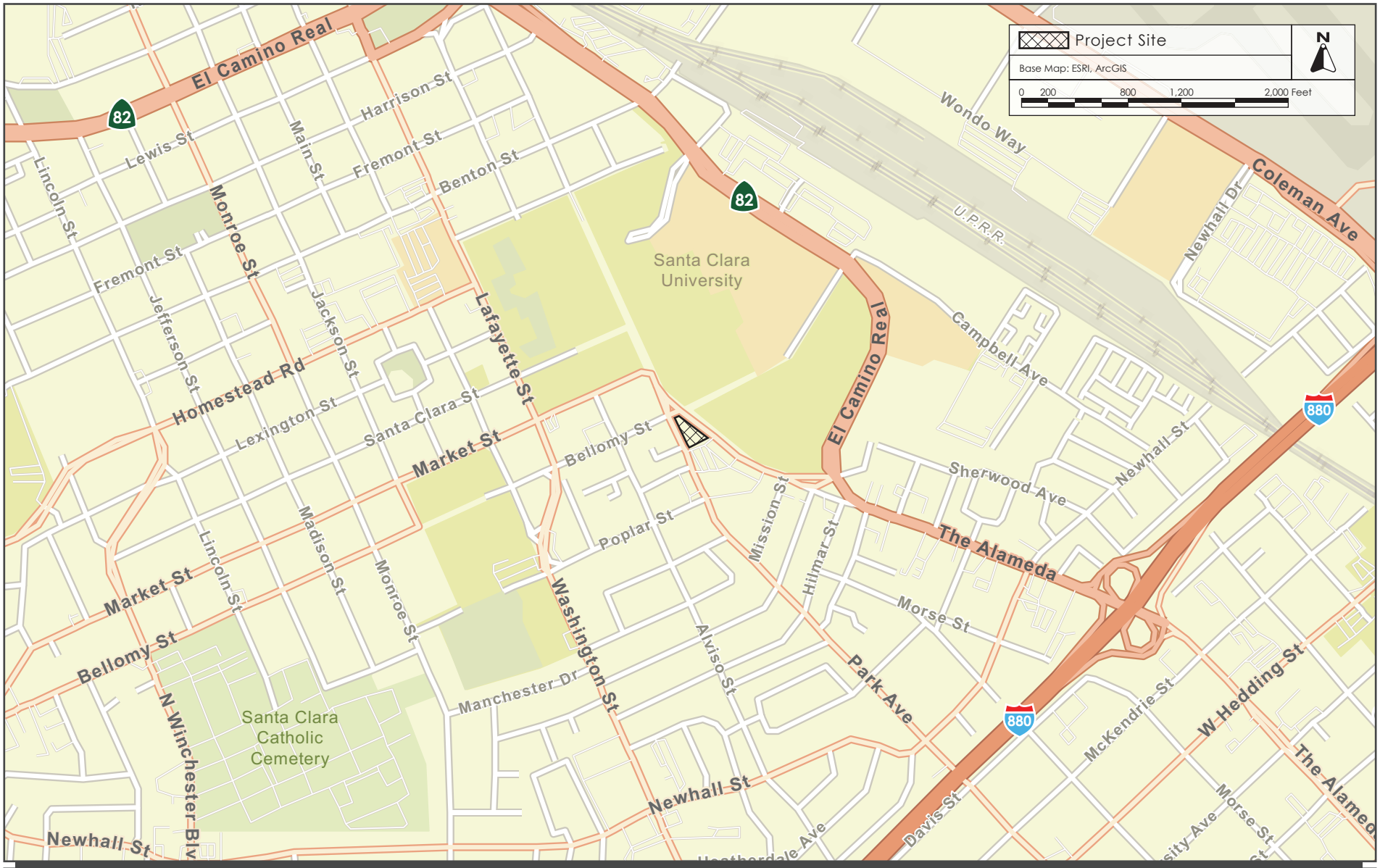
General Plan – Neighborhood Mixed Use
Zoning – Neighborhood Commercial

2.7 PROJECT-RELATED APPROVALS, AGREEMENTS, AND PERMITS

General Plan Amendment
Rezoning
Architectural Review



REGIONAL SITE LOCATION | FIGURE 2.4-1



PROJECT SITE VICINITY | FIGURE 2.4-2

AERIAL IMAGE OF PROJECT SITE | FIGURE 2.4-3

SECTION 3.0 PROJECT DESCRIPTION

3.1 EXISTING SITE

The project site is a 0.4-acre vacant parcel (APN 230-12-012) located at the corner of Park Avenue and The Alameda (2655 The Alameda) in the City of Santa Clara. The triangular shaped parcel is bordered by a parking lot on the south side of the site which serves a grocery store beyond, The Alameda to the east, and Park Avenue to the west. The site is near commercial and single-family residences to the west, and housing for the Santa Clara University on the north and east.

The project site is zoned Neighborhood Commercial. This is a limited commercial zone that allows for retail businesses to serve the surrounding residential neighborhood. The permitted uses for this designation include, retail sales or rentals, sales of personal or financial services, and incidental accessory buildings.

3.2 PROPOSED DEVELOPMENT

The proposed project would construct a four-story mixed-use development with 39 residential units, at a density of 98 units per acre, and approximately 1,540 square feet of retail space. The project would include 33 parking spaces which would be provided in one subgrade parking level (23 spaces) and a surface parking lot (10 spaces) located within the development. The project includes common open space activity areas on the second, third and fourth floors in the form of a central courtyard-outdoor deck space. The amenity areas of the proposed project would include seating, planters, barbeque, and outdoor gathering spaces for use by future residents.

The project building would be approximately 63 feet tall. In addition to the development the project proposes a General Plan Amendment from Neighborhood Mixed Use to Very High-Density Residential which would allow for ground floor retail and a rezoning to Planned Development (PD).

3.2.1 Construction

Construction of the proposed project would take place over the course of 17 months with construction occurring from 7:00 am to 6:00 pm Monday through Friday. The excavation on-site would remove approximately 7,400 cubic yards of soil. Additionally, the proposed project would not require demolition or pile driving.

3.2.2 Landscaping

The proposed project would remove one tree from the project site and would plant 13 trees in sidewalk wells on the streets bordering the project. Additionally, the proposed project would include vegetated planters on the borders of the project site and a landscaped podium on the second floor featuring six trees.

3.2.3 Utilities

The proposed project would connect to the existing utilities located within Park Avenue and The Alameda. This would include the water and sanitary sewer lines in Park Avenue and storm drain line in The Alameda.

SECTION 4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND IMPACT DISCUSSION

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

4.1	Aesthetics	4.12	Mineral Resources
4.2	Agriculture and Forestry Resources	4.13	Noise
4.3	Air Quality	4.14	Population and Housing
4.4	Biological Resources	4.15	Public Services
4.5	Cultural Resources	4.16	Recreation
4.6	Energy	4.17	Transportation
4.7	Geology and Soils	4.18	Tribal Cultural Resources
4.8	Greenhouse Gas Emissions	4.19	Utilities and Service Systems
4.9	Hazards and Hazardous Materials	4.20	Wildfire
4.10	Hydrology and Water Quality	4.21	Mandatory Findings of Significance
4.11	Land Use and Planning		

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.
- **Impact Discussion** – This subsection 1) includes the recommended checklist questions from Appendix G of the CEQA Guidelines to assess impacts and 2) discusses the project's impact on the environmental subject as related to the checklist questions. 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 to correspond to the checklist question being answered. For example, Impact BIO-1 answers the first checklist question in the Biological Resources section. Mitigation measures are also numbered to correspond to the impact they address. For example, MM BIO-1.3 refers to the third mitigation measure for the first impact in the Biological Resources section.

4.1 AESTHETICS

4.1.1 Environmental Setting

4.1.1.1 *Regulatory Framework*

State

Senate Bill 743

Senate Bill (SB) 743 was adopted in 2013 and requires lead agencies to use alternatives to level of service (LOS) for evaluating transportation impacts, specifically vehicle miles traveled (VMT). SB 743 also included changes to CEQA that apply to transit-oriented developments, as related to aesthetics and parking impacts. Under SB 743, a project's aesthetic impacts will no longer be considered significant impacts on the environment if:

- The project is a residential, mixed-use residential, or employment center project, and
- The project is located on an infill site within a transit priority area.[1]

SB 743 also clarifies that local governments retain their ability to regulate a project's aesthetics impacts outside of the CEQA process.

Streets and Highway Code Sections 260 through 263

The California Scenic Highway Program (Streets and Highway Code, Sections 260 through 263) is managed by the California Department of Transportation (Caltrans). The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. There are no state-designated scenic highways in Santa Clara. Interstate 280 from the San Mateo County line to State Route (SR) 17, which includes segments in Santa Clara is an eligible, but not officially designated, State Scenic Highway.[2]

In Santa Clara County, the one state-designated scenic highway is SR 9 from the Santa Cruz County line to the Los Gatos City Limit. Eligible State Scenic Highways (not officially designated) include: SR 17 from the Santa Cruz County line to SR 9, SR 35 from Santa Cruz County line to SR 9,

[1] An "infill site" is defined as "a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses." A "transit priority area" is defined as "an area within 0.5 mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." A "major transit stop" means "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." Source: Office of Planning and Research. "Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA." January 20, 2016. Accessed July 6, 2022. https://www.opr.ca.gov/docs/Revised_VMT_CEQA_Guidelines_Proposal_January_20_2016.pdf.

[2] California Department of Transportation. "Scenic Highways." Accessed July 6, 2022. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

Interstate 280 from the San Mateo County line to SR 17, and the entire length of SR 152 within the County.

Local

Santa Clara General Plan

The following General Plan policies related to aesthetics are applicable to the proposed project.

Policies	Description
5.3.1-P3	Support high quality design consistent with adopted design guidelines and the City's architectural review process.
5.3.1-P10	Provide opportunities for increased landscaping and trees in the community, including requirements for new development to provide street trees and a minimum 2:1 on- or off-site replacement for trees removed as part of the proposal to help increase the urban forest and minimize the heat island effect.
5.3.1-P28	Encourage undergrounding of new utility lines and utility equipment throughout the City.
5.3.4-P8	Encourage building heights of up to five stories in large mixed-use developments along arterial street frontages, with the potential for taller buildings north of the Caltrain corridor.
5.3.4-P10	Require parking to be substantially below-grade or in structures with active uses along streets.
5.3.4-P12	Prioritize pedestrian-oriented streetscape and building design in mixed-use development, including features such as wider sidewalks, street furniture, specialty planters, signage, public art, street trees, special paving materials, decorative awnings, enhanced entrances, colors, variety of materials, and textures and distinctive building massing and articulation.

4.1.1.2 *Existing Conditions*

Project Site

The project site is located in an urbanized area and is a vacant lot that was previously occupied by a gas station. The lot is located on the southern corner of the intersection of Park Avenue and The Alameda. The site is not landscaped and contains only weeds and other grasses. The site is fenced in for security. Views of the site can be seen in Photos 1-4.

Surrounding Area

The project site is located adjacent to commercial developments, a residential neighborhood, and student residences for Santa Clara University. The surrounding commercial buildings are one to two stories and feature light colored stucco and brick and have red shingled rooftops or flat roofing with no shingles. The single-family houses to the west of the project are also one to two stories. The Santa Clara University housing buildings are four stories and feature stucco facades and red tile-shingle rooftops. Views of the surrounding area can be seen in Photos 5-8.

Photo 1

Photo 2

Photo 3

Photo 4

PHOTOS 1-4: VIEWS OF PROJECT SITE

Photo 5

Photo 6

Photo 7

Photo 8

PHOTOS 5-8: VIEWS OF SURROUNDING AREAS

4.1.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
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) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? [3] If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Impact AES-1: The project would not have a substantial adverse effect on a scenic vista. (No Impact)

According to the 2010-2035 General Plan EIR, there are no scenic vistas within the City of Santa Clara. Therefore, the proposed project would not affect any existing scenic vistas because they are not present near the project site and there would be no impact as a result of the project.

Impact AES-2: The project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. (Less than Significant Impact)

Impact AES-3: The project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. The project would not conflict with applicable zoning and other regulations governing scenic quality. (Less than Significant Impact)

Impact AES-4: The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. (Less than Significant Impact)

[3] Public views are those that are experienced from publicly accessible vantage points.

The project site is located within an urban area, that was previously developed with gas station and is considered an infill site. The project site is also located within a half mile of bus stops at the Santa Clara Transit Station served by the Route 22 (Palo Alto Transit Center – Eastridge), Route 60 (Milpitas BART – Winchester Station via SJC Airport), Route 53 (Sunnyvale Transit Center – Santa Clara Transit Center), Rapid 522 (Palo Alto Transit Center – Eastridge), and Route 59 (Steens Creek & Saratoga – Baypointe Station via Alviso) buses, three of which (22, 60, and Rapid 522) have commuter headways of 15 minutes or less. Due to the proximity to transit access, the site would be classified as within a transit priority area. Under SB 743, a project's aesthetic impacts would be less than significant if a project is a residential, mixed-use residential, or employment center project located on an infill site within a transit priority area. Therefore, because the proposed project would be located within a half mile of transit and would be classified as urban infill, the proposed project would be consistent with SB 743 and would result in less than significant aesthetic impacts.

4.2 AGRICULTURE AND FORESTRY RESOURCES

4.2.1 Environmental Setting

4.2.1.1 *Regulatory Framework*

State

Farmland Mapping and Monitoring Program

The California Department of Conservation'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 affected are present on-site or in the project area.[4]

California Land Conservation Act

The California Land Conservation Act (Williamson Act) enables local governments to enter into contracts with private landowners to restrict parcels of land to agricultural or related open space uses. In return, landowners receive lower property tax assessments. In CEQA analyses, identification of properties that are under a Williamson Act contract is used to also identify sites that may contain agricultural resources or are zoned for agricultural uses.[5]

Fire and Resource Assessment Program

The California Department of Forestry and Fire Protection (CAL FIRE) identifies forest land, timberland, and lands zoned for timberland production that can (or do) support forestry resources.[6] Programs such as CAL FIRE's Fire and Resource Assessment Program are used to identify whether forest land, timberland, or timberland production areas that could be affected are located on or adjacent to a project site.[7]

[4] California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed July 6, 2022. http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx.
[5] California Department of Conservation. Accessed July 6, 2022. "Williamson Act." http://www.conservation.ca.gov/dlrp/lca.
[6] Forest Land is land that can support 10 percent native tree cover and allows for management of forest resources (California Public Resources Code Section 12220(g)); Timberland is land not owned by the federal government or designated as experimental forest land that is available for, and capable of, growing trees to produce lumber and other products, including Christmas trees (California Public Resources Code Section 4526); and Timberland Production is land used for growing and harvesting timber and compatible uses (Government Code Section 51104(g)).
[7] California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed July 6, 2022. http://frap.fire.ca.gov/.

4.2.1.2 *Existing Conditions*

The project site is classified as Urban and Built-Up Land on the California Department of Conservation Farmland Mapping and Monitoring Program. The project site does not contain agricultural resources or timberland resources and is not under an existing Williamson Act contract.[8]

4.2.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) 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?	☐	☐	☐	☒
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
3) 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))?	☐	☐	☐	☒
4) Result in a loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
5) 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?	☐	☐	☐	☒

Impact AG-1: The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. (No Impact)

The project site is not listed as agricultural land of any type and is not identified as Farmland of Statewide Importance. The site was previously developed, and the proposed project would not convert any agricultural land to a non-agricultural use. Therefore, the proposed project would have no impact on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on

[8] County of Santa Clara. Williamson Act Properties Geodatabase. Accessed June 9, 2022. https://sccplanning.maps.arcgis.com/apps/webappviewer/index.html?id=1f39e32b4c0644b0915354c3e59778ce.

the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency.

Impact AG-2:	**The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. (No Impact)**

The project site is zoned Neighborhood Commercial. The existing zoning does not include agricultural use and the project site is not under a Williamson Act contract. Therefore, the proposed project would not conflict with an existing agricultural use or Williamson Act contract.

Impact AG-3:	**The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. (No Impact)**

The project site is zoned Neighborhood Commercial. The existing zoning does not include forest land, timberland, or timberland zoned Timberland Production. Therefore, the proposed project would not conflict with existing contract forest land, timberland, or Timberland Production zoning.

Impact AG-4:	**The project would not result in a loss of forest land or conversion of forest land to non-forest use. (No Impact)**

The project site is not listed as forest land of any type. The site was previously developed, and the proposed project would not convert this area to a non-forest use. Therefore, the proposed project would have no impact on forest land and would not result in the loss of this resource.

Impact AG-5:	**The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. (No Impact)**

The project site is in a fully urbanized area with no agricultural areas or forest land nearby. The proposed project would not result in the conversion of agricultural or forest land surrounding the project site to non-agricultural or non-forest uses. Therefore, the project would have no impact on surrounding agricultural or forest resources.

4.3 AIR QUALITY

The information in this section is based in part on the information included in the 2655 The Alameda Residential Development Construction Community Risk Assessment prepared by Illingworth and Rodkin Inc. on September 21, 2022. This study is included as Appendix A of this document.

4.3.1 Environmental Setting

4.3.1.1 *Background Information*

Criteria Pollutants

Air quality in the Bay Area is assessed related to six common air pollutants (referred to as criteria pollutants), including ground-level ozone (O_3), nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), sulfur oxides (SO_x), and lead.[9] Criteria pollutants are regulated because they result in health effects. An overview of the sources of criteria pollutants and their associated health are summarized in Table 4.3-1. The most commonly regulated criteria pollutants in the Bay Area are discussed further below.

Table 4.3-1: Health Effects of Air Pollutants

Pollutants	Sources	Primary Effects
Ozone (O_3)	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	• Aggravation of respiratory and cardiovascular diseases • Irritation of eyes • Cardiopulmonary function impairment
Nitrogen Dioxide (NO_2)	Motor vehicle exhaust, high temperature stationary combustion and atmospheric reactions	• Aggravation of respiratory illness • Reduced visibility
Fine Particulate Matter ($PM_{2.5}$) and Coarse Particulate Matter (PM_{10})	Stationary combustion of solid fuels, construction activities, industrial processes and atmospheric chemical reactions	• Reduced lung function, especially in children • Aggravation of respiratory and cardiorespiratory diseases • Increased cough and chest discomfort • Reduced visibility
Toxic Air Contaminants (TACs)	Cars and trucks, especially diesel-fueled; industrial sources, such as chrome platers; dry cleaners and service stations; building materials and products	• Cancer • Chronic eye, lung, or skin irritation • Neurological and reproductive disorders

High O_3 levels are caused by the cumulative emissions of reactive organic gases (ROG) and NO_x. These precursor pollutants react under certain meteorological conditions to form high O_3 levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to

[9] The area has attained both state and federal ambient air quality standards for CO. The project does not include substantial new emissions of sulfur dioxide or lead. These criteria pollutants are not discussed further.

reduce O_3 levels. The highest O_3 levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources.

PM is a problematic air pollutant of the Bay Area. PM is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$). Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide emissions and localized emissions.

Toxic Air Contaminants

TACs are a broad class of compounds known to have health effects. They include but are not limited to criteria pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, diesel 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 [DPM] near a freeway).

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust is a complex mixture of gases, vapors, and fine particles. Medium- and heavy-duty diesel trucks represent the bulk of DPM emissions from California highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are subsequently exhaled, but some deposit on the lung surface or are deposited in the deepest regions of the lungs (most susceptible to injury).[10] Chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the California Air Resources Board (CARB).

Sensitive Receptors

Some groups of people are more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools.

4.3.1.2 *Regulatory Framework*

Federal and State

Clean Air Act

At the federal level, the United States Environmental Protection Agency (EPA) is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The federal Clean Air Act requires the EPA to set national ambient air quality standards for the six common criteria pollutants (discussed previously), including PM, O_3, CO, SO_x, NO_x, and lead.

[10] California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed July 11, 2022. https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health.

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 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.

Risk Reduction Plan

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, the plan involves application of emission control strategies to existing diesel vehicles and equipment to reduce DPM (in additional to other pollutants). Implementation of this plan, in conjunction with stringent federal and CARB-adopted emission limits for diesel fueled vehicles and equipment (including off-road equipment), will significantly reduce emissions of DPM and NO_X.

Regional and Local

City of Santa Clara Climate Action Plan

The City of Santa Clara Climate Action Plan 2022 (2022 CAP) is the latest update to the City's CAP and is designed to meet the statewide Greenhouse Gas (GHG) reduction targets for 2030 set by Senate Bill 32. As a Qualified Climate Action Plan, the 2022 CAP allows for tiering and streamlining of GHG analyses under CEQA. The 2022 CAP identifies existing City policies and regulations as well as new measures to be implemented by development projects in the areas of building/energy use, transportation/land use, materials/ consumption, natural resources & water resources, and community resilience & wellbeing. Projects that comply with the policies and strategies outlined in the 2022 CAP would have a less than significant GHG impact.

2017 Clean Air Plan

The 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. 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 public health, the 2017 CAP describes how 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. 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.[11]

[11] BAAQMD. *Final 2017 Clean Air Plan.* April 19, 2017. http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. Jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing air quality impacts developed by BAAQMD within their CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Santa Clara General Plan

General Plan policies related to air quality that are applicable to the project include the following.

Policies	Description
5.10.2-G1	Improved air quality in Santa Clara and the region.
5.10.5-G2	Reduced greenhouse gas emissions that meet the State and regional goals and requirements to combat climate change
5.10.5-P3	Encourage implementation of technological advances that minimize public health hazards and reduce the generation of air pollutants.
5.10.5-P4	Encourage measures to reduce greenhouse gas emissions to reach 30 percent below 1990 levels by 2020.
5.10.5-P6	Require "Best Management Practices" for construction dust abatement.

4.3.1.3 *Existing Conditions*

The Bay Area is considered a non-attainment area for ground-level O_3 and $PM_{2.5}$ under both the federal Clean Air Act and state Clean Air Act. The area is also considered nonattainment for PM_{10} under the state act, but not the federal act. The area has attained both state and federal ambient air quality standards for CO. As part of an effort to attain and maintain ambient air quality standards for O_3 and PM_{10}, BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for O_3 precursor pollutants (ROG and NO_X), PM_{10}, and $PM_{2.5}$, and apply to both construction period and operational period impacts. The site is vacant and does not currently generate air quality emissions.

Sensitive Receptors

The closest sensitive receptors to the project site are the residents in the single-family houses to the west, the student housing for Santa Clara University to the east, and the Kids On Campus Preschool to the north of the project site. Additional sensitive receptors are located at further distances surrounding the site. Location of sensitive receptors can be seen in Figure 4.3-1 below.

4.3.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
2) 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?	☐	☐	☒	☐
3) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Note: Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the determinations.

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 judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. The City of Santa Clara has considered the air quality 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 $PM_{2.5}$. The BAAQMD CEQA Air Quality thresholds used in this analysis are identified in Table 4.3-2 below.

Table 4.3-2: BAAQMD Air Quality Significance Thresholds			
Pollutant	**Construction Thresholds**	**Operation Thresholds**	
	Average Daily Emissions (pounds/day)	**Average Daily Emissions (pounds/day)**	**Annual Average Emissions (tons/year)**
Criteria Air Pollutants			
ROG, NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
CO	Not Applicable	9.0 ppm (eight-hour) or 20.0 ppm (one-hour)	
Fugitive Dust	Dust Control Measures/Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources (within a 1,000-foot Zone of Influence)			
Health Hazard	**Single Source**	**Combined Cumulative Sources**	
Excess Cancer Risk	10 per one million	100 per one million	
Hazard Index	1.0	10.0	
Incremental Annual $PM_{2.5}$	0.3 $\mu g/m^3$	0.8 $\mu g/m^3$ (average)	

Source: Illingworth & Rodkin, Inc., September 21, 2022.

LOCATION OF SENSITIVE RECEPTORS NEAR THE PROJECT SITE | FIGURE 4.3-1

Impact AIR-1: The project would not conflict with or obstruct implementation of the applicable air quality plan. (Less than Significant Impact)

Plan Consistency

As demonstrated below in Table 4.3-3 and 4.3-4 below, the proposed project would not result in construction or operational criteria pollutant emissions which exceed BAAQMD CEQA Air Quality Guidelines Operational Criteria Pollutant impact thresholds. The proposed project, therefore, would not conflict with the 2017 CAP because it would result in emissions lower than the BAAQMD thresholds (shown in Table 4.3-2), is considered urban infill, and would be located near bike paths and transit with regional connections. Because the project would not exceed the BAAQMD impact thresholds, it would not result in the generation of operational-related criteria air pollutants and/or precursors that exceed the thresholds shown in Table 4.3-2. Thus, the project is not required to incorporate project-specific control measures listed in the 2017 CAP. Further, implementation of the project would not inhibit BAAQMD or partner agencies from continuing progress toward attaining state and federal air quality standards and eliminating health-risk disparities from exposure to air pollution among Bay Area communities, as described within the 2017 CAP.

Construction Period Emissions – Criteria Pollutants

Construction of the proposed project has an estimated start date of September 2023 and an estimated construction period of 17 months (approximately 375 construction days). During construction, worker trips, on-site construction operations, and truck traffic would contribute to criteria pollutants in the area of the project site. Construction emissions for the proposed project are summarized in Table 4.3-3.

Table 4.3-3 Construction Criteria Air Pollutants Emissions

Construction Emissions Per Year (Tons)				
Year	**ROG**	**NOx**	**PM10 Exhaust**	**PM2.5 Exhaust**
2023	0.01	0.09	0.01	0.00
2024-2025	0.27	0.50	0.03	0.02
Average Daily Construction Emissions Per Year (pounds/day)				
2023 (84 days)	0.25	2.21	0.12	0.09
2024-2025 (291 days)	1.87	3.43	0.18	0.15
Total Construction	2.12	5.65	0.31	0.25
Thresholds (lbs/day)	54.0	54.0	82.0	54.0
Threshold Exceeded?	**No**	**No**	**No**	**No**

Source: Illingworth and Rodkin. 2655 The Alameda Residential Development Construction Community Risk Assessment. September 21, 2022.

The ROG, NOx and exhaust PM emissions during construction would not exceed the established BAAQMD thresholds for environmental impact. Therefore, the proposed project would result in a less than significant criteria pollutant emissions impact during construction of the proposed project.

Operational Period Emissions – Criteria Pollutants

During operations of the proposed project, the project would generate emissions from vehicle trips and building operations. The modeled emissions for the proposed project operations are included below in Table 4.3-4.

Table 4.3-4 Operational Criteria Air Pollutants Emissions				
Year	**ROG**	**NOx**	**Total PM10**	**Total PM2.5**
Operational Year 2025	0.26	0.08	0.15	0.04
Threshold - Tons/year	10.0	10.0	150	10.0
Average Daily Emissions (lbs/day)				
Operational Year 2025	1.44	0.45	0.81	0.21
Threshold – lbs/day	54.0	54.0	82.0	54.0
Thresholds Exceeded?	**No**	**No**	**No**	**No**
Source: Illingworth and Rodkin. 2655 The Alameda Residential Development Construction Community Risk Assessment. September 21, 2022.				

Operation of the proposed project would not contribute enough trips to considerably increase emissions from operational sources in the project area. Therefore, the proposed project would result in a less than significant operational criteria pollutants impact.

Impact AIR-2: The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. (Less than Significant Impact)

The Bay Area is considered a non-attainment area for ground-level O_3 and $PM_{2.5}$ under both the federal Clean Air Act and state Clean Air Act. The proposed project would increase criteria pollutants in the Bay Area, contributing to existing violations of O_3 standards. Per the BAAQMD CEQA Air Quality Guidelines, air pollution by its nature is largely a cumulative impact. No single project is sufficient in size by itself, to result in nonattainment of ambient air quality standards. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. As discussed above, the proposed project would not result in any air criteria pollutant emissions exceeding BAAQMD's significance thresholds. As a result, the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment.

Impact AIR-3: As mitigated, the project would not expose sensitive receptors to substantial pollutant concentrations. (Less than Significant Impact with Mitigation Incorporated)

Construction Dust Emissions

During construction, the proposed project would result in dust from vehicles and other construction activities. Based on the estimates in the Community Risk Assessment, the fugitive dust emissions for the construction of the proposed project were determined to be less than 0.01 tons (equivalent to one

pound) for the entirety of the construction period. The proposed project would be required to implement BAAQMD Standard Construction Procedures to limit the dispersion of particulate matter during construction.

Condition of Approval

During any construction period of ground disturbance, the applicant shall ensure that the project contractor implement measures to control dust and exhaust. Implementation of the measures recommended by BAAQMD and listed below would reduce the air quality impacts associated with grading and new construction to a less than significant level. Additional measures are identified to reduce construction equipment exhaust emissions. The contractor shall implement the following best management practices that are required of all projects:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered 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 miles per hour (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 project construction superintendent regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall be visible to ensure compliance with applicable regulations.

With implementation of the BAAQMD recommended basic control measures, the fugitive particulate matter produced by the proposed project would result in less than significant impact.

Construction Toxic Air Contaminants

Construction of the proposed project would result in the release of emissions known to result in greater occurrences of cancer and other health conditions. The Air Quality Assessment analyzed infant and adult exposures to TACs at all the residences surrounding the project site. Infant exposure at residences was used as a worst-case assumption because child and adult exposures would be less severe. The results of the modeling conducted as a part of the Air Quality Assessment are summarized below in Table 4.3-5.

Table 4.3-5 Construction TAC Risks			
Source	**Cancer Risk**	**Annual PM 2.5**	**Hazard Index**
Maximally Effected Individual -			
Project Construction	**23.09 (infant)**	0.06	0.01
BAAQMD Threshold	10	0.3	1.0
Exceed Threshold?	**Yes**	No	No
Most Affected Residential Receptor - First Floor University Housing Across the Alameda			
Project Construction	5.44 (Infant)	0.03	0.01
BAAQMD Threshold	10	0.3	1.0
Exceed Threshold?	No	No	No
Source: Illingworth and Rodkin. 2655 The Alameda Residential Development Construction Community Risk Assessment. September 21, 2022.			

The proposed project would result in an exceedance of the BAAQMD threshold for infant cancer risk.

IMPACT AIR-3.1 The proposed project would exceed the Cancer Risk Threshold of 10 cases per million during construction of the project.

Mitigation Measures

The following measure will be required to be implemented during all phases of construction.

MM-AIR 3.1-1 All construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total shall meet U.S. EPA Tier 4 emission standards for PM (PM_{10} and $PM_{2.5}$).

If Tier 4 equipment is not available, alternatively the project will use equipment that meets U.S. EPA emission standards for Tier 3 engines and include particulate matter emissions control equivalent to CARB Level 3 verifiable diesel emission control devices that altogether achieve a 60 percent reduction in particulate matter exhaust in comparison to uncontrolled equipment; alternatively (or in combination).

Alternatively, the applicant may develop a construction operations plan demonstrating that the construction equipment used on-site would achieve a reduction in construction diesel particulate matter emissions by 60 percent or greater. Elements of the plan could include a combination of the following measures:

- Use of Tier 4 engines or alternatively fueled equipment,
- Installation of electric power lines during early construction phases to avoid use of diesel generators and compressors,
- Use of electrically-powered equipment,
- Forklifts and aerial lifts used for exterior and interior building construction shall be electric,

- Change in construction build-out plans to lengthen phases, and
- Implementation of different building techniques that result in less diesel equipment usage.
- Such a construction operations plan would be subject to review by an air quality expert and approved by the City prior to construction.

The project applicant shall submit a construction operations plan prepared by an air quality professional that outlines how the construction contractor will achieve the measures outlined above. The plan shall be submitted to the Director of Community Development for review and approval prior to issuance of any demolition, grading, and/or building permits (whichever occurs earliest).

Through implementation of MM-AIR 3.1-1, the proposed project would reduce the cancer risk associated with the proposed project to 1.83 cases per million which is below the threshold of 10 per million. Additionally, the Annual $PM_{2.5}$ would be reduced to 0.01ug/m^3 and the Hazard Index would be reduced to less than 0.01. These levels would all be below the BAAQMD thresholds. Therefore, with mitigation incorporated the proposed project would result in less than significant construction TAC impacts.

Operational Community Risk Impacts

Stationary equipment that could emit substantial TACs (e.g., emergency generators) are not proposed as part of the project. Operation of the project would, however, have long-term emissions from mobile sources (i.e., traffic). Based on CalEEMod default trip generation data, this project would generate 214 daily trips dispersed on the roadway system, with a majority of the trips being from light-duty vehicles (i.e., passenger automobiles). Passenger automobiles and trucks are not significant sources of TAC's because they are not primarily diesel vehicles. Therefore, operational emissions of TACs from the project would be negligible and would result in a less than significant impact.

Impact AIR-4:	**The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. (Less than Significant Impact)**

The proposed project would introduce a mixed-use residential and commercial development to the project site which is currently vacant. During construction of the proposed project, operation of construction vehicles may result in temporary odors related to fuel combustion, but these would be temporary and would not result in a significant impact. The mixed-use development would not produce emissions which would create unpleasant odors for residents around the project site. Therefore, the proposed project would have a less than significant impact from odors produced on-site.

4.3.3 Non-CEQA Effects

Per *California Building Industry Association v. Bay Area Air Quality Management District,* 62 Cal. 4th 369 *(BIA v. BAAQMD)*, effects of the environment on the project are not considered CEQA

impacts. The following discussion is included for informational purposes only because the City of Santa Clara has policies that address existing air quality conditions affecting a proposed project.

A Health Risk Assessment (included as part of Appendix A) was completed to determine if existing TAC sources would have cause a health risk to the new sensitive receptors (residents) that the project would create. The TAC sources near the project site, including El Camino Real and generators located on the Santa Clara University campus, were used in this health risk assessment.

Maximum increased cancer risks were calculated for the future residents of the project site using the maximum modeled TAC concentrations. A 30-year exposure period was used in calculating cancer risks assuming the residents would include women in the third trimester of pregnancy and infants/children and were assumed to be in the new housing areas for 24 hours per day for 350 days per year.

The highest concentrations of pollutants would occur at the first-floor receptor at the southeastern corner of the site. Cancer risks and annual $PM_{2.5}$ concentrations associated with El Camino Real and the nearby generators are greatest nearest to the source and decrease with distance. The surrounding sources of TAC were determined to not exceed BAAQMD thresholds and would not represent a significant source of health hazard for the new residents of the proposed project. The community risk at the project site is shown in Table 4.3-6.

Table 4.3-6 Impacts from Combined Sources to Project Site Receptors

Source	Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
El Camino Real, ADT 23,733	0.04	<0.01	<0.01
Santa Clara University (Facility ID #15397_1, Generator), MEI at 1,000 feet	0.13	<0.01	<0.01
Santa Clara University (Facility ID #15397_10, Generator), MEI at 970 feet	0.17	<0.01	<0.01
Santa Clara University (Facility ID #15397_12, Generator), MEI at 950 feet	1.05	<0.01	<0.01
Santa Clara University (Facility ID #15397_13, Generator), MEI at 980 feet	0.29	<0.01	<0.01
Santa Clara University (Facility ID #15397_14, Generator), MEI at 910 feet	0.10	<0.01	<0.01
Santa Clara University (Facility ID #15397_16, Generator), MEI at 970 feet	0.26	<0.01	<0.01
Santa Clara University (Facility ID #15397_18, Generator), MEI at 510 feet	026	<0.01	<0.01
Santa Clara University (Facility ID #15397_19, Generator), MEI at 760 feet	0.11	<0.01	<0.01
Santa Clara University (Facility ID #15397_21, Generator), MEI at 3700 feet	0.21	<0.01	<0.01
Santa Clara University (Facility ID #15397_23, Generator), MEI at 575 feet	0.13	<0.01	<0.01
BAAQMD Single Source Threshold	**10**	**0.3**	**1.0**
Exceed Threshold?	No	No	No

Cumulative Total	2.75	<0.11	<0.11
BAAQMD Cumulative Source threshold	**100**	**0.8**	**10.0**
Exceed Threshold?	No	No	No
Source: Illingworth and Rodkin. 2655 The Alameda Residential Development Construction Community Risk Assessment. September 21, 2022.			

Therefore, because the proposed project would not exceed the BAAQMD thresholds for TACs, the proposed project would be consistent with General Plan Policy 5.10.5-P3 for minimizing health hazards resulting from air pollutants in the city.

4.4 BIOLOGICAL RESOURCES

4.4.1 Environmental Setting

4.4.1.1 *Regulatory Framework*

Federal and State

Endangered Species Act

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" these 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, Sections 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, must be considered as part of the environmental review process. These may include plant species listed by the California Native Plant Society and CDFW-listed Species of Special Concern.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, capture, possession, or trade of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Hunting and poaching are also prohibited. The taking and killing of birds resulting from an activity is not prohibited by the MBTA when the underlying purpose of that activity is not to take birds.[12] Nesting birds are considered special-status species and are protected by the USFWS. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

Sensitive Habitat Regulations

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 by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and/or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

[12] United States Department of the Interior. "Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take." Accessed July 6, 2022. https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf.

Fish and Game Code Section 1602

Streambeds and banks, as well as associated riparian habitat, are regulated by the CDFW per Section 1602 of the Fish and Game Code. Work within the bed or banks of a stream or the adjacent riparian habitat requires a Streambed Alteration Agreement from the CDFW.

Santa Clara General Plan

General Plan policies relevant to the proposed project include the following:

Policies	Description
5.3.1-P10	Provide opportunities for increased landscaping and trees in the community, including requirements for new development to provide street trees and a minimum 2:1 on- or off-site replacement for trees removed as part of the proposal to help increase the urban forest and minimize the heat island effect.
5.10.1-P4	Protect all healthy cedars, redwoods, oaks, olives, bay laurel, and pepper trees of any size, and all other trees over 36 inches in circumference measured from 48 inches above-grade on private and public property, as well as in the public right-of-way.

4.4.1.2 *Existing Conditions*

The project site is located within the urbanized area of Santa Clara and does not contain natural habitats on or near the project site. Species on-site consist primarily of urban adapted animals and birds. The primary habitats provided on the project site are the weeds on-site which would provide space for small mammals. There is one tree on-site and the nearest riparian habitat is located approximately 1.5 miles east at the Guadalupe River.

4.4.2 Impact Discussion

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

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
3) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒

Impact BIO-1: **As mitigated, the project would not 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 CDFW or USFWS. (Less than Significant Impact with Mitigation Incorporated)**

The proposed project site does not contain sensitive habitat or special status species as identified in local plans, policies or regulations by the CDFW or USFWS.

Nesting Birds

The trees and shrubs near the project site could provide nesting habitat for birds, including migratory birds or raptors. Nesting birds are among the species protected under the provisions of the MBTA and California Fish and Game Code Sections 3503, 3503.5, and 2800. The project would remove the one tree from the project site. If construction occurs during the avian breeding season (February 1 through August 31), construction activities and removal of the tree during the nesting season could disturb adult birds to the point of abandonment of active nests in trees near the project site. Any loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment would constitute a significant impact under CDFW regulations.

Impact BIO-1.1: Construction activities could disrupt nesting raptors, or other birds, resulting in abandonment of nests and loss of fertile eggs.

Mitigation Measure: The following mitigation measure would be implemented during construction activities to avoid abandonment of raptor and other protected migratory bird nests:

MM-BIO 1.1-1: Construction shall be scheduled to avoid the nesting season to the extent feasible. The nesting season for most birds, including most raptors, in the San Francisco Bay Area extends from February 1st through August 31st.

If it is not possible to schedule construction and tree removal between September 1 and January 31, then 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 grading, tree removal, or other construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August).

During this survey, the ornithologist shall inspect trees and other possible nesting habitats within and immediately adjacent to the construction area for nests. If an active nest is found sufficiently close to work areas to be disturbed by construction, the qualified ornithologist, shall determine the extent of a construction-free buffer zone to be established around the nest to ensure that raptor or migratory bird nests would not be disturbed during project construction.

Implementation of MM-BIO 1.1-1 would reduce construction impacts to nesting birds to a less than significant level.

Impact BIO-2:	**The project would not 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. (No Impact)**

The project site does not contain riparian habitat or other sensitive natural communities. The weeds and grasses on-site do not provide habitat for sensitive species. Therefore, the proposed project would have no impact on riparian habitats or other sensitive natural communities.

Impact BIO-3:	**The project would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. (No Impact)**

The project site does not contain state or federally protected wetlands nor are any wetland areas adjacent to the project site. Therefore, the proposed project would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

Impact BIO-4:	**The project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. (Less than Significant Impact)**

The proposed project is located in an urbanized area that does not serve as a migratory wildlife corridor or nursery site because it does not contain habitat features which provide uses for migratory bird species. Additionally, the project site is not located near streams or rivers that serve as corridors for migratory fish nor is it located in an area identified as a migratory wildlife corridor. Therefore, the proposed project would not interfere with movement of native or migratory species by impacting migratory corridors or nursery sites.

Impact BIO-5:	**The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (Less than Significant Impact)**

The proposed project would require the removal of the single ordinance sized tree from the project site, a London plane. The proposed project would plant six new trees on-site and add 13 new street trees on the sidewalks bounding the project site. The planting of new trees would be in compliance with local policies and ordinances protecting biological resources, including General Plan Policies 5.3.1-P10, 5.10.1-P4, and City Code (SCCC) chapter 12.35 which require the replacement of ordinance sized trees on-site at specific ratios depending on the size and species of tree. The trees included in the proposed project would replace the removed tree at a greater than 1:10 ratio which exceeds the requirements of the General Plan and City Code. Therefore, the 19 trees proposed for the project would comply with the requirements of the General Plan policy and the project would not conflict with local policies or ordinances protecting biological resources.

Impact BIO-6:	**The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. (No Impact)**

The project site is not covered by a Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other conservation plan. Thus, the project would not conflict with any such plan and there would be no impact.

4.5 CULTURAL RESOURCES

The information in this section is based in part on the Archeological Sensitivity Study prepared for the proposed project by Archaeological/Historical Consultants in September 2022. This study is on file with the City of Santa Clara.

4.5.1 Environmental Setting

4.5.1.1 *Regulatory Framework*

Federal and State

National Historic Preservation Act

Federal protection is legislated by the National Historic Preservation Act of 1966 (NHPA) and the Archaeological Resource Protection Act of 1979. These laws maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA and related regulations (36 Code of Federal Regulations [CFR] Part 800) constitute the primary federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed or eligible for listing in the NRHP. Impacts to properties listed in the NRHP must be evaluated under CEQA.

The NRHP is the nation's master inventory of historic resources that are considered significant at the national, state, or local level. The minimum criteria for determining NRHP eligibility include:

- The property is at least 50 years old (properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the NRHP);
- It retains integrity of location, design, setting, materials, workmanship, feeling, and associations; and
- It possesses at least one of the following characteristics:
    - Association with events that have made a significant contribution to the broad patterns of history;
    - Association with the lives of persons significant in the past;
    - Distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant, distinguishable entity whose components may lack individual distinction; or
    - Has yielded, or may yield, information important to prehistory or history.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic Preservation and encourages protection of resources of architectural, historical, archeological, and cultural significance. The CRHR identifies historic resources for state and local

planning purposes and affords protections under CEQA. Under Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria.[13]

Historical resources eligible for listing in the CRHR must meet the significance criteria described previously and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.

The concept of integrity is essential to identifying the important physical characteristics of historical resources and, therefore, in evaluating adverse changes to them. Integrity is defined as "the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance." The processes of determining integrity are similar for both the CRHR and NRHP and use the same seven variables or aspects to define integrity that are used to evaluate a resource's eligibility for listing. These seven characteristics include 1) location, 2) design, 3) setting, 4) materials, 5) workmanship, 6) feeling, and 7) association.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act applies to both state and private lands. The act requires that upon discovery of human remains, construction or excavation activity must cease and the county coroner be notified.

Public Resources Code Sections 5097 and 5097.98

Section 15064.5 of the CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American human remains on non-federal land. These procedures are outlined in Public Resources Code Sections 5097 and 5097.98. These codes protect such remains from disturbance, vandalism, and inadvertent destruction, establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project, and establish the Native American Heritage Commission (NAHC) as the authority to resolve disputes regarding disposition of such remains.

Pursuant to Public Resources Code Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the county coroner has made the necessary findings regarding the origin and disposition of the remains. If the remains are of a Native American, the county coroner must notify the NAHC. The NAHC then notifies those persons most likely to be related to the Native American remains. The code section also stipulates the procedures that the descendants may follow for treating or disposing of the remains and associated grave goods.

[13] California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." Accessed July 11, 2022. http://www.ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf.

Local

Santa Clara General Plan

General Plan policies related to cultural resources and applicable to the project include the following.

Policy	Description
5.6.3-P1	Require that new development avoid or reduce potential impacts to archaeological, paleontological and cultural resources.
5.6.3-P4	Require that a qualified paleontologist/archaeologist monitor all grading and/or excavation if there is a potential to affect archeological or paleontological resources, including sites within 500 feet of natural water courses and the Old Quad neighborhood.
5.6.3-P5	In the event that archeological/paleontological resources are discovered, require that work be suspended until the significance of the find and recommended actions are determined by a qualified archeologist/paleontologist.
5.6.3-P6	In the event that human remains are discovered, work with the appropriate Native American representative and follow the procedures set forth in state law.

4.5.1.2 *Existing Conditions*

Archeological Sensitivity

Archaeological sites are most often found in flat locations with access to a perennial source of fresh water. Soils deposited during the Holocene era (from 11,700 years ago), especially young alluvium from the last 2,000-3,000 years, are more likely to contain buried archaeological deposits. In Santa Clara, Native American sites are most often found within 0.5 miles of major watercourses and 0.25 miles of minor watercourses.

Within the project area, the soil is Holocene alluvial fan deposits. In the early historic period, the nearest fresh water was a perennial pond located 420 feet to the east. The historical habitat of the area was wet meadow due to seasonal inundation by Saratoga Creek and Guadalupe River, which run nearby.

The project site is located on late Holocene-era fan deposit soils, on a flat slope, and has a perennial freshwater pond less than 500 feet away. As a result, the site is sensitive for buried Native American archaeological deposits based on geoarchaeological factors. In addition, there are two known Native American archaeological sites within 0.25 miles of its location, associated with the Mission Santa Clara complex and the Ohlone village which was present there prior to the Spanish arrival in California. The project area, therefore, has high sensitivity for Native American archaeological resources.

Historical Sensitivity

Immediately to the north of The Alameda was Rancho Potrero de Santa Clara. In 1851 Mission Santa Clara was handed over to the Jesuit order, who founded Santa Clara University, originally called “Santa Clara College,” on the land directly around Mission Santa Clara.

The triangular project area is approximately 0.3 miles south of the original Mission site. The 1876 Thompson and West Map shows the project area as part of the town of Santa Clara, with the 134.87-acre estate of John G. Bray (1814-1866) to the southeast. The project area was part of the J. Bray subdivision in an 1890's map.

From at least the 1880s, the project site and surrounding area was used to store and sell coal, and as a feed and flour mill. From 1892 through the closure of Pacific Manufacturing Company in 1960 it was also the site of a lumber mill and its auxiliary buildings. Sanborn Fire Insurance Maps show many structures in the project site and surrounding area, including the feed mill, coal storage, and outbuildings such as privies associated with Edward J. Baker's Santa Clara Feed Mill. At least one of Baker's buildings, the feed mill, appears to have been repurposed as a blacksmith and machine shop when the property was acquired by Pacific Manufacturing Company. This repurposed structure is visible on Sanborn Maps from 1887 to 1950.

Due to the historic use of the project site and surrounding areas, the project site has high sensitivity for historic-era archaeological deposits.

4.5.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Cause a substantial adverse change in the significance of a historical resource pursuant to 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) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Impact CUL-1: The project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. (Less than Significant Impact)

There are no historic structures on-site and no structures near the project site are classified as historically significant. Based on this information the proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5.

Impact CUL-2:	As mitigated, the project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. (Less than Significant Impact with Mitigation Incorporated)

There are no recorded archeological sites located within the boundaries of the project site. However, as stated above, the site has had multiple historical uses and the project site has high sensitivity for historical archaeological resources. Additionally, the site was occupied by Native Americans and is located near multiple archaeological resources sites. Therefore, based on the findings of the Archeological Resources Report prepared for this project, the proposed project would have a potential significant impact on archaeological resources on the project site.

IMPACT CUL-2.1 The proposed project would require excavation of the site which could impact as yet unrecorded underground prehistoric and historic archaeological resources.

Mitigation Measures

MM-CUL 2.1-1 Prior to grading of the project site, a qualified archaeological consultant will conduct subsurface sampling of the following areas on-site to determine if historical archeological resources are present:

- outbuildings that are likely to be privies, as shown on the 1887, 1891, and 1915 Sanborn maps;
- building footprints as shown on the 1887, 1891, and 1915 Sanborn maps; and
- areas that were not developed in the historic era, since prehistoric archaeological deposits (if present) are less likely to be disturbed in these areas.

Testing for historic-era resources shall extend to a depth of four feet below the current ground surface. Testing for prehistoric resources shall extend to a depth of eight feet below the current ground surface to account for rapid alluviation during the Holocene era. In the event that resources are discovered on-site the site-specific cultural resources treatment plan shall be prepared and approved by the Director of Community Development prior to issuance of any of grading permits in conformance with the steps outlined below.

Investigation – Resource Identification

Archaeologists will investigate features to determine their potential significance. Decisions will be made about which features will be subject to archaeological data recovery.

- Determination of significance of historic archaeological property types is tied directly to their historical context and relevance to research themes further discussed below. Usefulness of a property type (feature) with regard to relevant research themes determines the legal importance of that resource. Also germane to the importance of property types are

assessments of integrity, land use history, and comparison with other known similar property types. Especially relevant here are issues that cannot be addressed using data from other sources. The purpose of identifying relevant research themes is to help predict areas of special concern, given expected property types. Determination of relevance to research themes is critical to the identification of significant features in the field.

- If data recovery is determined to be appropriate, excavation will target recovery of an appropriate amount of information from archaeological deposits to determine potential of the resource to address specific research questions. If it occurs, data recovery will emphasize understanding of the archaeological deposit's structure, including features and stratification, horizontal and vertical extent, and content including the nature and quantity of artifacts.

Reporting

The findings reports will follow the outline below and will focus on particular finds encountered during the excavation. All reports will at a minimum meet the Secretary of the Interior's Standards for Archaeological Documentation. The report will be submitted to the applicant and all reviewing agencies, and will ultimately be filed with the Northwest Information Center at Sonoma State University.

The technical report on project results may address the following elements:

- executive summary;
- statement of scope, including project location and setting;
- background contexts or summaries;
- summary of previous research, historical and archaeological;
- research goals and themes;
- field and laboratory methodologies;
- descriptions of recovered materials;
- findings and interpretations, referencing research goals;
- conclusions;
- references cited; and
- appendices such as artifact catalogs, special studies, and other information relevant to the project and findings.

MM-CUL 2.1-2 Upon completion of all field work, but before completion of the Findings Report (outlined in MM CUL-2.1), a preliminary report outlining the data recovery work on the site(s) shall be submitted to the Director of Community Development for review and approval prior to issuance of building permits.

With implementation of MM-CUL 2.1-1 and MM-CUL 2.1-2 The proposed project would identify and protect all archaeological resources on-site, which would reduce the impact on these resources to a less than significant level.

Impact CUL-3:	**The project would disturb human remains, including those interred outside of dedicated cemeteries, but with mitigation, the disturbance would be minimized and the impact reduced to less-than-significant. (Less than Significant Impact with Mitigation Incorporated)**

As stated above, implementation of the proposed project may discover and disturb previously unrecorded archeological resources. This would also apply to any human remains, including those interred outside of dedicated cemeteries because the project site is in close vicinity to the mission site.

Impact CUL-3.1 Construction activities could disturb human remains on-site.

Mitigation Measure

MM-CUL 3.1-1 In the event that human remains are discovered during archaeological testing or excavation, trenching and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) immediately. Once NAHC identifies the most likely descendants, the descendants will make recommendations regarding proper burial, which will be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.

Discovery of Human Remains

Procedures for the treatment of human remains are well defined in various California laws and codes. The Heritage Commission acts as a central point of contact for notification of Native Americans, and arbitration between the Native American representative and the property owner (who is also the owner of the remains) and any associated archaeological materials. These procedures are set forth in the California Public Resources Code 5097.9, specifically 5097.98 Notification of discovery of Native American human remains, descendants, disposition of human remains and associated grave goods. NAHC guidelines have changed over time and the project proponent will follow NAHC recommendations and Public Resource Codes current at the time of the discovery.

- **Discovery.** When human remains are discovered (in either an archaeological or construction context), the project proponent will notify the Santa Clara County Coroner who will determine if the remains are or are suspected to be of Native American origin (cf. Section 7050.5c of the

Health and Safety Code). This is often done in consultation with the archaeological investigator or on occasion in consultation with a forensic or physical anthropologist. If this determination is made, the Coroner will notify the Heritage Commission.

- **Notification of Most Likely Descendent (MLD).** The Heritage Commission will notify those persons it believes are most likely descended from the deceased Native American. This is usually a single individual although for a number of reasons, the Heritage Commission may assign more than one MLD. The MLD will likely be on the original consultation list; however, this is not always the case, as some individuals have removed themselves from the general consultation list due to the number of requests for comments.
- **Inspection and Recommendations.** The MLD will have 48 hours to inspect the finds and make recommendations to the project proponent regarding the disposition of the remains. If the MLD fails to make a recommendation or the MLD and the project proponent fail to come to an agreement (with mediation provided by the NAHC) the project proponent will respectfully reinter the remains and associated artifacts in a safe place on project site.

With implementation of the above mitigation measures, the project would result in a less than significant impact on human remains.

4.6 ENERGY

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

Federal and State

Energy Star and Fuel Efficiency

At the federal level, energy standards set by the Environmental Protection Agency (EPA) apply to numerous consumer products and appliances (e.g., the EnergyStar™ program). The EPA also sets fuel efficiency standards for automobiles and other modes of transportation.

Renewables Portfolio Standard Program

In 2002, California established its Renewables Portfolio Standard 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. Governor Schwarzenegger issued Executive Order (EO) S-3-05, requiring statewide emissions reductions to 80 percent below 1990 levels by 2050. In 2008, EO S-14-08 was signed into law, requiring 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 requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030. SB 100, passed in 2018, requires 100 percent of electricity in California to be provided by 100 percent renewable and carbon-free sources by 2045.

Executive Order B-55-18 To Achieve Carbon Neutrality

In September 2018, Governor Brown issued an executive order, EO-B-55-18 "To Achieve Carbon Neutrality", setting a statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." The executive order requires CARB to "ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal." EO-B-55-18 supplements EO S-3-05 by requiring not only emissions reductions, but also that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2 from the atmosphere through sequestration.

California Building Standards Code

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.[14] Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.[15]

[14] California Building Standards Commission. "California Building Standards Code." Accessed July 11, 2022. https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo.
[15] California Energy Commission (CEC). "2019 Building Energy Efficiency Standards." Accessed July 11, 2022. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency.

California Green Building Standards Code

CALGreen establishes mandatory green building standards for buildings in California. CALGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to state environmental directives. CALGreen covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

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 pollutants and GHG emissions into a single coordinated set of requirements for vehicle 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.[16]

Local

Santa Clara General Plan

Energy-related General Plan policies applicable to the project are shown in the following table.

Policy	Description
5.10.3-P4	Encourage new development to incorporate sustainable building design, site planning and construction, including encouraging solar opportunities.
5.10.3-P5	Reduce energy consumption through sustainable construction practices, materials, and recycling.
5.10.3-P6	Promote sustainable buildings and land planning for all new development, including programs that reduce energy and water consumption in new development.

Santa Clara Reach Code

Reach Codes are local ordinances adopted by the local government that exceed and enhance the current version of state's Energy and Green Building standards codes. By adopting the City Reach Code ordinance, the City of Santa Clara utilized this opportunity to not only meet local climate action goals to reduce greenhouse gas emissions, but also to achieve greater energy savings and accelerate decarbonization through the all-electric requirements. Santa Clara Reach Code includes all-electric building electrification requirements and mandatory measures for Electrical Vehicle Charging are applicable to all new building permit applications filed with the City.

Construction and Demolition Debris Recycling Program

[16] California Air Resources Board. "The Advanced Clean Cars Program." Accessed July 11, 2022. https://www.arb.ca.gov/msprog/acc/acc.htm.

The City of Santa Clara requires applicants seeking building or demolition permits for projects greater than 5,000 square feet to recycle at least 65 percent of discards. Diversion is achieved through recycling or reuse.

4.6.1.2 *Existing Conditions*

Total energy usage in California was approximately 6,956.6 trillion British thermal units (Btu) in the year 2020, the most recent year for which this data was available.[17] Out of the 50 states, California is ranked second in total energy consumption and 49th in energy consumption per capita. The breakdown by sector was approximately 21 percent (1,507.7 trillion Btu) for residential uses, 19.6 percent (1,358.3 trillion Btu) for commercial uses, 24.6 percent (1,701.2 trillion Btu) for industrial uses, and 34 percent (2,355.5 trillion Btu) for transportation.[18] This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Electricity

Electricity in Santa Clara County in 2020 was consumed primarily by the non-residential sector (73 percent), followed by the residential sector consuming 24 percent. In 2020, a total of approximately 16,435 gigawatt hours (GWh) of electricity was consumed in Santa Clara County.[19]

Silicon Valley Power (SVP) is the City of Santa Clara's energy utility and would provide electricity service to the project site. Starting in January 2018, SVP provides residential customers with carbon-free power as their standard, default power supply. This means the power generation produces no net carbon emissions. For commercial customers, SVP offers several options for participation in green energy programs, including a carbon-free energy option.[20]

Natural Gas

PG&E provides natural gas services within the City of Santa Clara. In 2020, approximately two percent of California's natural gas supply came from in-state production, while the remaining supply was imported from other western states and Canada.[21] In 2020 California used 2,144 trillion Btu of natural gas.[22] In 2020, Santa Clara County used less than one percent of the state's total consumption of natural gas.[23]

---

[17] United States Energy Information Administration. "State Profile and Energy Estimates, 2020." Accessed July 5, 2022. https://www.eia.gov/state/?sid=CA#tabs-2.
[18] United States Energy Information Administration. "State Profile and Energy Estimates, 2020." Accessed August 8, 2022. https://www.eia.gov/state/?sid=CA#tabs-2.
[19] California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed August 8, 2022. http://ecdms.energy.ca.gov/elecbycounty.aspx.
[20] Silicon Valley Power. "Did you Know." Accessed August 8, 2022. https://www.siliconvalleypower.com/svp-and-community/about-svp/faqs.
[21] California Gas and Electric Utilities. 2020 *California Gas Report.* Accessed August 8, 2022. https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf.
[22] United States Energy Information Administration. "State Profile and Energy Estimates, 2020." Accessed August 8, 2022. https://www.eia.gov/state/?sid=CA#tabs-2.
[23] California Energy Commission. "Natural Gas Consumption by County." Accessed August 8, 2022. http://ecdms.energy.ca.gov/gasbycounty.aspx.

Fuel for Motor Vehicles

In 2019, 15.4 billion gallons of gasoline were sold in California.[24] The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles) in the United States has steadily increased from about 13.1 miles per gallon (mpg) in the mid-1970s to 25.4 mpg in 2020.[25] 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 miles per gallon by the year 2020, was updated in April 2022 to require all cars and light duty trucks achieve an overall industry average fuel economy of 49 mpg by model year 2026. [26,27]

The project site does not currently consume energy resources because it is vacant.

4.6.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Impact EN-1: The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. (Less than Significant Impact)

Construction Impacts

Construction requires efficiency in processes and resource use to optimize construction operations and ensure that the building process isn't wasteful. This means that the energy consumption and use of materials on a construction site would be as minimal as possible and would not be wasteful and inefficient for the duration of the construction process. The project would also be mandated to comply with the City's requirements to recycle or salvage a minimum of 65 percent of nonhazardous

[24] California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed August 8, 2022. https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist.
[25] United States Environmental Protection Agency. "The 2021 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." November 2021. https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1010U68.pdf.
[26] United States Department of Energy. *Energy Independence & Security Act of 2007.* Accessed July 20, 2022. http://www.afdc.energy.gov/laws/eisa.
[27] United States Department of Transportation. USDOT Announces New Vehicle Fuel Economy Standards for Model Year 2024-2026." Accessed July 20, 2022. https://www.nhtsa.gov/press-releases/usdot-announces-new-vehicle-fuel-economy-standards-model-year-2024-2026

construction and demolition waste for reuse, minimizing energy impacts from the creation of production of new construction materials. Therefore, construction of the proposed project would not result in excessive or unnecessary consumption of energy resources.

Operational Impacts

The proposed project would construct a mixed-use residential building which would increase energy consumption on-site. There would be no demand for natural gas on the project site because the development would be required to comply with the City's Reach Code which prohibits natural gas in new residential construction. The proposed project would be built according to California Building Code (CBC) and CALGreen Standards.

Additionally, the proposed project is requesting a General Plan Amendment for the project site which would increase the density of the site beyond build out assumed in the General Plan. This means that the number of residents on-site would exceed the expected energy consumption estimated in the General Plan. The 39 residential units and 1,500 square feet of ground floor retail would use approximately 141,331 MW/year of electricity.[28] The proposed project would convert the project site from Neighborhood Mixed Use to Very High-Density Mixed Use. This would allow for an increase in the number of units allowed on-site from 14 units maximum (at 20-36 units/acre) to the 39 units included in the proposed project (at 50-100 units/acre). This would only result in increased energy consumption from 25 residential units over the existing General Plan designation or 61,791 MW/year. This increase is far less than the Citywide yearly energy consumption of 16,435 GWh per year. Additionally, the proposed project would be compliant with Title 24 energy regulations and would include efficient appliances which would ensure energy use on-site is as efficient as possible. Therefore, the proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project operations.

Impact EN-2:	**The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (Less than Significant Impact)**

The project would not result in a substantial energy increase and would implement energy efficiency standards consistent with the CBC and CALGreen. Therefore, the project would comply with state and local plans for renewable energy and energy efficiency.

[28] CalEEMod. Appendix D. October 2017. Accessed July 19, 2022.
39 units x 282.15kWhr/du = 11003.85 kWhrs x 8760 hrs/year = 96,393 MW/year
1500 square feet x 3.42 kWhr/sqft = 5,130 kWhrs x 8760 hrs/year = 44,938 MW/year

4.7 GEOLOGY AND SOILS

The information in this section is based in part on the Geotechnical Design Report prepared by Tetra Tech on May 26, 2022. This study is included as Appendix B as part of this document.

4.7.1 Environmental Setting

4.7.1.1 *Regulatory Framework*

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed following the 1971 San Fernando earthquake. The act regulates development in California near known active faults due to hazards associated with surface fault ruptures. Alquist-Priolo maps are distributed to affected cities, counties, and state agencies for their use in planning and controlling new construction. Areas within an Alquist-Priolo Earthquake Fault Zone require special studies to evaluate the potential for surface rupture to ensure that no structures intended for human occupancy are constructed across an active fault.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed in 1990 following the 1989 Loma Prieta earthquake. The SHMA directs the California Geological Survey (CGS) to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. CGS has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, landslides, and ground shaking, including the central San Francisco Bay Area. The SHMA requires that agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the seismic hazard is present and identify measures to reduce earthquake-related hazards.

California Building Standards Code

The CBC prescribes standards for constructing safe buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires that a site-specific geotechnical investigation report be prepared for most development projects to evaluate seismic and geologic conditions such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years.

California Division of Occupational Safety and Health Regulations

Excavation, shoring, and trenching activities during construction are subject to occupational safety standards for stabilization by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) under Title 8 of the California Code of Regulations and Excavation Rules. These regulations minimize the potential for instability and collapse that could injure construction workers on the site.

Public Resources Code Section 5097.5

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 materials are valued for the information they yield about the history of the earth and its past ecological settings. 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 would disturb or destroy a unique paleontological resource or site or unique geologic feature.

Local

Santa Clara General Plan

General Plan geology and soils-related policies applicable to the project include the following.

Policies	Description
5.10.5-P5	Regulate development, including remodeling or structural rehabilitation, to ensure adequate mitigation of safety hazards, including flooding, seismic, erosion, liquefaction and subsidence dangers.
5.10.5-P6	Require that new development is designed to meet current safety standards and implement appropriate building codes to reduce risks associated with geologic conditions.
5.10.5-P7	Implement all recommendations and design solutions identified in project soils reports to reduce potential adverse effects associated with unstable soils or seismic hazards.

4.7.1.2 *Existing Conditions*

The City of Santa Clara is located in the Santa Clara Valley, a relatively flat alluvial basin, bounded by the Santa Cruz Mountains to the southwest and west, the Diablo Mountain Range to the east, and San Francisco Bay to the north. The topography of the Santa Clara Valley rises from sea level at the south end of San Francisco Bay to elevations of more than 2,000 feet to the east. The average grade of the valley floor ranges from nearly horizontal to about two percent generally down to the northwest. Grades are steeper on the surrounding hillsides.

The project site is underlain by Urbanland-Hangerone complex, 0 to 2 percent slopes, drained which consists of some fill soils along with native soil structures. These soils are poorly drained and upper layers consist primarily of clay and have high potential for shrink swell action.[29] The geotechnical report also determined that the specific soils on-site have the potential for expansion.

The Northern California region is known to be seismically active. Earthquakes occurring within approximately 60 miles of the project site are generally capable of generating ground shaking of a strength which would affect structures. The closest active faults to the site include the Monte Vista-Shannon fault located approximately 6.6 miles southwest of the site, the Hayward-Rodgers Creek fault located approximately 8.9 miles north of the site, and the Calaveras fault approximately 9.8

[29] United States Department of Agriculture. Web Soil Survey. Accessed July 20, 2022.

miles to the northeast. The North San Andreas fault is the most significant fault in the area in terms of highest possible earthquake magnitude and is located approximately 10.6 miles southwest of the site.

The project site is level and is not at risk of landslides or other land subsidence. The City does not contain any faults zoned under the Alquist-Priolo Earthquake Fault Zoning Act.[30] The risk of surface fault rupture in the City is considered low. Additionally, according to the Santa Clara General Plan, the project site is located in a region characterized by a moderate to high ground shaking hazard and, due to the location of the site within a liquefaction zone, however, based on liquefaction testing conducted as a part of the geotechnical investigation, the site would only experience a small amount of seismic related ground failure resulting from liquefaction or other settlement.[31]

Groundwater depth on the project site was determined to be four feet below the ground surface (bgs) based on the geotechnical report for the project site, which based the depth of water off well borings, historic groundwater levels, and department of conservation mapping efforts.[32]

4.7.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
– Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?	☐	☐	☒	☐
– Strong seismic ground shaking?	☐	☐	☒	☐
– Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐
– Landslides?	☐	☐	☐	☒
2) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☒	☐

[30] City of Santa Clara. 2010-2035 General Plan Integrate EIR. Page 183. January 2011.
[31] City of Santa Clara. 2010-2035 General Plan Integrate EIR. Page 184-186. January 2011.
Tetra tech. Geotechnical Design Report. May 26, 2022.
[32] Tetra tech. Geotechnical Design Report. May 26, 2022.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
4) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
6) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☒	☐	☐

Impact GEO-1: **As mitigated, the project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides. (Less than Significant Impact with Mitigation Incorporated)**

The proposed project is not located within an Alquist-Priolo Earthquake Fault Zoning Map area where fault rupture may occur. Therefore, the proposed project would not cause risk of loss, injury, or death involving rupture of a known earthquake fault. The project site and surrounding area are also relatively flat; therefore, development on-site would not expose adjacent or nearby properties to landslide related hazards.

The proposed project would be constructed on soils within a mapped liquefaction hazard zone and with shrink swell potential. While no active faults are known to cross the project site, the project would experience intense ground shaking in the event of a large earthquake. Therefore, seismic-related ground failure may occur.

Impact GEO-1.1: Buildings constructed on-site could experience settlement in the event of strong ground shaking as a result of an earthquake or other geologic events.

Mitigation Measures

MM-GEO 1.1-1: To avoid or minimize potential damage from seismic shaking and other geologic events, and consistent with General Plan Policy 5.10.5-P6, the project would be built using standard engineering and seismic safety design techniques. Building design and construction at the site shall be completed in conformance with the recommendations of a design-level geotechnical investigation, which will be included in a geotechnical report to the City. The

report shall be reviewed and approved by the City of Santa Clara's Building Division as part of the building permit review and issuance process. The building shall meet the requirements of applicable Building and Fire Codes, including the 2022 California Building Code, as adopted or updated by the City. The project shall be designed to withstand potential geologic hazards identified on the site, including liquefaction and shrink swell capacity of soils, and the project shall be designed to reduce the risk to life or property to the extent feasible and in compliance with the Building Code.

With implementation of the identified mitigation measure, project impacts would be reduced to a less than significant level.

Impact GEO-2: The project would not result in substantial soil erosion or the loss of topsoil. (Less than Significant Impact)

The proposed project would excavate and grade a site less than one acre in size. Therefore, the proposed project would not be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) under the National Pollutant Discharge Elimination System (NPDES). To prevent erosion and limit the loss of soil from the site, the proposed project would be required to comply with grading and excavation requirements in the Santa Clara City Building Code. In addition, the project would be required to comply with the following standard conditions of approval:

Conditions of Approval

- All excavation and grading work would be scheduled in dry weather months or construction sites would be weatherized[33] to withstand or avoid erosion.
- Stockpiles and excavated soils would be covered during construction with secured tarps or plastic sheeting.
- Vegetation in disturbed areas would be replanted as quickly as possible after construction.

Through the implementation of the identified conditions of approval to reduce construction-related water quality impacts, the proposed project would have a less than significant impact on soil erosion and loss of topsoil.

Impact GEO-3: The project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. (Less than Significant Impact)

As stated in Impact GEO-1.1 the proposed project would be constructed on soils at risk of liquefaction during seismic events. Due to the relatively flat topography and the absence of free face slopes, lateral spreading, landslides, subsidence, or collapse during seismic shaking are not hazards at the site. The proposed project would be constructed in compliance with a site-specific geotechnical report, SCCC, and the CBC requiring the project to analyze and remediate site-specific soil

[33] Weatherized refers to measures that would protect exposed soils from rain and stormwater runoff.

conditions. Therefore, the proposed project would not result in a risk of instability and would have a less than significant impact.

Impact GEO-4:	**The project would not be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property. (Less than Significant Impact)**

Based on the analysis provided in the Geotechnical Report, soils in the project site have shrink swell properties which may cause damage to structures. The proposed project would comply with General Plan Policy 5.10.5-P6 and the CBC, which requires preparation of a design level geotechnical study to provide evaluation of the likelihood of damage resulting from expansive soils and identify building design requirements to avoid impacts associated with these soils. Therefore, the proposed project would have a less than significant impact on risks to life or property resulting from expansive soils.

Impact GEO-5:	**The project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. (No Impact)**

The proposed project would be connected to the existing sewage utility system provided by the City of Santa Clara. Therefore, the proposed project would not require the use of septic tanks or alternative wastewater disposal systems and would have no impact.

Impact GEO-6:	**As mitigated, the project would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. (Less than Significant Impact with Mitigation Incorporated)**

The project site is underlain by geologic units of Holocene age, which are generally not considered sensitive for paleontological resources because biological remains younger than 10,000 years are not usually considered fossils. Thus, these sediments have low potential to yield fossil resources or to contain significant nonrenewable paleontological resources. More recent sediments, however, may overlie older Pleistocene sediments with high potential to contain paleontological resources. These older sediments, often found at depths of greater than 10 feet bgs, have yielded the fossil remains of plants and extinct terrestrial Pleistocene vertebrates. The proposed project would include subsurface structures, which would extend to a depth of 12 feet bgs. Therefore, the project could encounter previously unknown resources on-site and may result in the destruction of these resources resulting in a significant impact.

Impact GEO-6.1: Construction activities could disturb paleontological resources in older Pleistocene sediments at depth under the project site.

Mitigation Measure: The proposed project would implement the following mitigation measure to reduce impacts on these resources.

MM-GEO 6.1-1: If vertebrate fossils are discovered during construction, all work on the site shall stop immediately, the Director of Community Development or the Director's designee shall be notified, and a qualified professional paleontologist shall assess the nature and importance of the find and recommend appropriate treatment. Treatment may include, but is not limited to, 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 implementing the recommendations of the qualified paleontologist. A report of all findings shall be submitted to the Director of Community Development or the Director's designee.

Through compliance with the above Mitigation Measure, the proposed project would avoid impacting of paleontological resources or unique geological features. Therefore, the proposed project would have a less than significant impact through directly or indirectly destroying a unique paleontological resource or site or unique geological feature.

4.8 GREENHOUSE GAS EMISSIONS

4.8.1 Environmental Setting

4.8.1.1 *Background Information*

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. In GHG emission inventories, the weight of each gas is multiplied by its global warming potential (GWP) and is measured in units of CO_2 equivalents (CO_2e). The most common GHGs are carbon dioxide (CO_2) and water vapor but there are also several others, most importantly methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO_2 and N_2O are byproducts of fossil fuel combustion.
- N_2O is associated with agricultural operations such as fertilization of crops.
- CH_4 is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations.
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents, but their production has been stopped by international treaty.
- HFCs are now used as a substitute for CFCs in refrigeration and cooling.
- PFCs and SF_6 emissions are commonly created by industries such as aluminum production and semiconductor manufacturing.

An expanding body of scientific research supports the theory that global climate change is currently causing changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

4.8.1.2 *Regulatory Framework*

State

Assembly Bill 32

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

In 2016, 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 CO_2E ($MMTCO_2e$). 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. 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 the 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 2050. Plan Bay Area 2050 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).

Regional and Local

2017 Clean Air Plan

To protect the climate, the 2017 CAP (prepared by BAAQMD) 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.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing GHG impacts developed by BAAQMD within the CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Santa Clara General Plan

General Plan policies related to GHG emissions from the project include the following.

Policies	Description
5.3.1-P10	Provide opportunities for increased landscaping and trees in the community, including requirements for new development to provide street trees and a minimum 2:1 on- or off-

	site replacement for trees removed as part of the proposal to help increase the urban forest and minimize the heat island effect.
5.8.5-P1	Require new development and City employees to implement transportation demand management programs that can include site-design measures, including preferred carpool and vanpool parking, enhanced pedestrian access, bicycle storage and recreational facilities.
5.8.5-P5	Encourage transportation demand management programs that provide incentives for the use of alternative travel modes to reduce the use of single-occupant vehicles.

City of Santa Clara Climate Action Plan

The City of Santa Clara Climate Action Plan 2022 (2022 CAP) is the latest update to the City's CAP and is designed to meet the statewide GHG reduction targets for 2030 set by Senate Bill 32. As a Qualified Climate Action Plan, the 2022 CAP allows for tiering and streamlining of GHG analyses under CEQA. The 2022 CAP identifies existing City policies and regulations as well as new measures to be implemented by development projects in the areas of building/energy use, transportation/land use, materials/ consumption, natural resources & water resources, and community resilience & wellbeing. Projects that comply with the policies and strategies outlined in the 2022 CAP would have a less than significant GHG impact.

Silicon Valley Power

Silicon Valley Power (SVP) is the City of Santa Clara's energy utility and would provide electricity service to the project site. Starting in January 2018, SVP provides residential customers with carbon-free power as their standard, default power supply. This means the power generation produces no net carbon emissions. For commercial customers, SVP offers several options for participation in green energy programs, including a carbon-free energy option.[34]

4.8.1.3 *Existing Conditions*

Unlike emissions of criteria and toxic air pollutants, which have regional and local impacts, emissions of GHGs have a broader, global impact. Global warming is a process whereby GHGs accumulating in the upper atmosphere contribute to an increase in the temperature of the earth and changes in weather patterns.

The site is currently undeveloped and does not contribute to GHG emissions.

[34] Silicon Valley Power. "Green Power for your Home." Accessed July 11, 2022. https://www.siliconvalleypower.com/sustainability/santa-clara-green-power/green-power-for-your-home.

4.8.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
2) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?	☐	☐	☒	☐

Impact GHG-1: The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. **(Less than Significant Impact)**

Construction Emissions

GHG emissions associated with construction were computed to be 258 MT of CO_2e for the total construction period.[35] These are the emissions from on-site operation of construction equipment, vendor and hauling truck trips, and worker trips. Neither the City nor BAAQMD have an adopted threshold of significance for construction-related GHG emissions, though BAAQMD recommends quantifying emissions and disclosing that GHG emissions would occur during construction. Construction of the project would be temporary and would not result in a permanent increase in emissions. Therefore, the project would not interfere with the implementation of SB 32 or AB 32.

Operational Emissions

The BAAQMD thresholds for GHG Emissions established on April 20, 2022 include the following project design elements for Land Use projects:

- The project will not include natural gas appliances or natural gas plumbing.
- The project will not result in wasteful, inefficient, or unnecessary energy usage.
- Achieve a reduction in project-generated VMT below the regional average consistent with the California Climate Change Scoping Plan or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA.
- Achieve compliance with off-street electrical vehicle requirements in the most recently adopted version of CALGreen Tier 2.

The proposed project would comply with the Santa Clara Reach Code and would not include natural gas appliances and would include energy efficient appliances. The proposed project would include standard electronics and appliances associated with the residential and commercial uses on-site,

[35] Illingworth and Rodkin. 2655 The Alameda Residential Development Construction Community Risk Assessment. September 21, 2022.

consistent with the requirements of the Reach Code, CBC, and CALGreen, and would not result in wasteful, inefficient, or unnecessary energy usage. The proposed project would be considered an infill project with proximity to transit and would be consistent with the Senate Bill 743 VMT targets for new development. Finally, the proposed project would be consistent with CALGreen for off-street electrical vehicle requirements. Therefore, the proposed project would not result in GHG emissions associated with operations of the project.

Impact GHG-2:	**The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. (Less than Significant Impact)**

The proposed project would be required to comply with the City of Santa Clara 2022 CAP. The proposed project would be required to be constructed with full electrification to be compatible with the City's Reach Code. Additionally, the proposed project is within 0.5 miles of transit with 15-minute headways, and regional transportation connections. The proposed project would have low VMT (see Section 4.17) and would be accessible by bicycle facilities situated near the project site. The project includes water sustainable landscaping and would plant trees along the public right of way for additional shading on sidewalks around the project site. The proposed project would also comply with salvaging requirements during construction. All of these features would allow the project to reduce GHG emissions in compliance with the 2022 CAP and would contribute to overall GHG reductions for the life of the project.

The proposed project would not conflict or otherwise interfere with the statewide GHG reduction measures identified in CARB's Scoping Plan nor would the project conflict with SB 375 goals. Specifically, the proposed buildings would be constructed in conformance with CALGreen and the Title 24 Building Code, which requires high-efficiency water fixtures, water-efficient irrigation systems, and compliance with current energy efficiency standards. Therefore, the proposed project would result in a less than significant impact.

4.9 HAZARDS AND HAZARDOUS MATERIALS

The information in this Section is based in part on the Phase 1 Environmental Site Assessment (ESA) prepared by Tetra Tech on May 22, 2022. This study is included in Appendix C of this document. Additionally, information in the section is based on the Draft Soil and Groundwater Management Plan prepared by Tetra Tech on March 31, 2023 and included as Appendix D.

4.9.1 Environmental Setting

4.9.1.1 *Regulatory Framework*

Overview

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. In California, the EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program.

Worker health and safety and public safety are key issues when dealing with hazardous materials. Proper handling and disposal of hazardous material is vital if it is disturbed during project construction. Cal/OSHA enforces state worker health and safety regulations related to construction activities. Regulations include exposure limits, requirements for protective clothing, and training requirements to prevent exposure to hazardous materials. Cal/OSHA also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement.

Federal and State

Federal Aviation Regulations Part 77

Federal Aviation Regulations, Part 77 Objects Affecting Navigable Airspace (FAR Part 77) 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 aircraft in flight. These regulations require that the Federal Aviation Administration (FAA) be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above the ground.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Over five years, $1.6 billion was collected and the tax went to a trust fund for cleaning

up abandoned or uncontrolled hazardous waste sites. CERCLA accomplished the following objectives:

- Established prohibitions and requirements concerning closed and abandoned hazardous waste sites;
- Provided for liability of persons responsible for releases of hazardous waste at these sites; and
- Established a trust fund to provide for cleanup when no responsible party could be identified.

The law authorizes two kinds of response actions:

- Short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response; and
- Long-term remedial response actions that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life-threatening. These actions can be completed only at sites listed on the EPA's National Priorities List.

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.[36]

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), enacted in 1976, is the principal federal law in the United States governing the disposal of solid waste and hazardous waste. RCRA gives the EPA the authority to control hazardous waste from the "cradle to the grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also sets forth a framework for the management of non-hazardous solid wastes.

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization, phasing out land disposal of hazardous waste, and corrective action for releases. Some of the other mandates of this law include increased enforcement authority for the EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.[37]

Government Code Section 65962.5

[36] United States Environmental Protection Agency. "Superfund: CERCLA Overview." Accessed July 11, 2022. https://www.epa.gov/superfund/superfund-cercla-overview.
[37] United States Environmental Protection Agency. "Summary of the Resource Conservation and Recovery Act." Accessed July 11, 2022. https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act.

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by state and local agencies and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB).[38]

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 provides the EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. The TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint.

California Accidental Release Prevention Program

The California Accidental Release Prevention (CalARP) Program aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond the boundaries of a property. Facilities that are required to participate in the CalARP Program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released. The Santa Clara Fire Department of reviews CalARP risk management plans as the CUPA.

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. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl floor tiles, and transite siding made with cement. The EPA phased out use of friable asbestos products between 1973 and 1978. National Emission Standards for Hazardous Air Pollutants (NESHAP) guidelines require that potentially friable ACMs be removed prior to building demolition or remodeling that may disturb the ACMs.

CCR Title 8, Section 1532.1

The United States Consumer Product Safety Commission banned the use of lead-based paint in 1978. Removal of older structures with lead-based paint is subject to requirements outlined by the Cal/OSHA Lead in Construction Standard, CCR Title 8, Section 1532.1 during demolition activities. Requirements include employee training, employee air monitoring, and dust control. If lead-based paint is peeling, flaking, or blistered, it is required to be removed prior to demolition.

[38] California Environmental Protection Agency. "Cortese List Data Resources." Accessed July 11, 2022. https://calepa.ca.gov/sitecleanup/corteselist/.

Regional and Local

Norman Y. Mineta San José International Airport Comprehensive Land Use Plan

The Norman Y. Mineta International Airport is located approximately 0.8 miles northeast of the project site. Given this distance, the project site is located within the Airport Influence Area (AIA) of the Norman Y. Mineta International Airport, as defined by the Comprehensive Land Use Plan (CLUP). The project would be reviewed by Airport Land Use Commission (ALUC) prior to approval by the lead agency to determine conformance with the CLUP.

Municipal Regional Permit Provision C.12.f

Polychlorinated biphenyls (PCBs) were produced in the United States between 1955 and 1978 and used in hundreds of industrial and commercial applications, including building and structure materials such as plasticizers, paints, sealants, caulk, and wood floor finishes. In 1979, the EPA banned the production and use of PCBs due to their potential harmful health effects and persistence in the environment. PCBs can still be released to the environment today during demolition of buildings that contain legacy caulks, sealants, or other PCB-containing materials.

With the adoption of the San Francisco Bay Region Municipal Regional NPDES Permit (MRP) by the San Francisco Bay Regional Water Quality Control Board (RWQB) on November 19, 2015, Provision C.12.f requires that permittees develop an assessment methodology for applicable structures planned for demolition to ensure PCBs do not enter municipal storm drain systems.[39] Municipalities throughout the Bay Area are currently modifying demolition permit processes and implementing PCB screening protocols to comply with Provision C.12.f. Buildings constructed between 1950 and 1980 that are proposed for demolition must be screened for the presence of PCBs prior to the issuance of a demolition permit. Single family homes and wood-frame structures are exempt from these requirements.

Santa Clara General Plan

General Plan policies hazardous materials-related policies applicable to the project include the following.

Policies	Description
5.10.5-P23	Require appropriate clean-up and remediation of contaminated sites.
5.10.5-P24	Protect City residents from the risks inherent in the transport, distribution, use and storage of hazardous materials.
5.10.5-P25	Use Best Management Practices to control the transport of hazardous substances and to identify appropriate haul routes to minimize community exposure to potential hazards.

Santa Clara Emergency Operations Plan

In June 2016, the City of Santa Clara adopted an Emergency Operations Plan (EOP) to address the planned response to emergency situations associated with natural disasters and technological

[39] California Regional Water Quality Control Board. *San Francisco Bay Region Municipal Regional Stormwater NPDES Permit.* November 2015.

incidents, as well as chemical, biological, radiological, nuclear and explosive emergencies. The EOP establishes the emergency organization, assign tasks, specifies policies and general procedures, and provides for coordination of planning efforts for emergency events such as earthquake, flooding, dam failure, and hazardous materials responses.

4.9.1.2 *Existing Conditions*

Current Uses of the Project Site

The project site is currently a vacant dirt lot, with no improvements, which is fenced on all sides with an entrance gate located on Park Avenue and The Alameda. The site is located in a mixed-use commercial/residential area of the City of Santa Clara. The project site was previously used as a gas station and is an active leaking underground storage tank (LUST) site which is undergoing remediation with oversight by the RWQCB. The underground storage tanks (USTs) and all associated features have been removed and soil vapor extraction and groundwater monitoring wells are currently operating on the site. Twenty-four monitoring wells are located within the fenced area of the site.

Existing Uses of Surrounding Properties

The project site is surrounded on three sides by roadways with a large parking lot to the south that serves the Safeway shopping center. The surrounding properties are a mixture of commercial and residential uses. Santa Clara University student housing and associated quasi-public buildings are located across The Alameda, north and east of the project site. A mixture of commercial and residential properties are adjacent to the southwest and west of the project site including a drycleaners (University Cleaners) in the shopping center southeast of the project site. The adjacent property northwest of the property across Park Avenue is a daycare (Kids on Campus).

Historic Use of Project Site

As stated above, the site formerly contained a gas station. All structures on-site have been removed and the project site is currently vacant and unimproved. The perimeter of the project site is fenced with gates on the east and west sides.

No areas of recent soil disturbance were observed during the site reconnaissance. At the time of the site reconnaissance, grasses and weeds covered most all of the project site with small patches of asphalt visible beneath the soil in the southeast portion of the project site.

Twenty-four monitoring wells were observed on-site during the site reconnaissance. An additional six monitoring wells were observed off-site, primarily to the west and north. Several of the monitoring wells were opened to check condition, and one on-site well (UV-4) was found to have been filled. A petroleum odor was observed from wells U-12, U-14 and U-18 when opened. No other noticeable odors were detected during the site reconnaissance.

Other than the release which required installation of the monitoring wells (as detailed below), no other evidence of spills or releases were observed during the site reconnaissance.

Existing On-Site Hazards

As noted above, the project site is an active LUST cleanup site under the RWQCB. A former UNOCAL branded service station operated on the project site from approximately 1930 to 1993. Site features included a station building, three gas pump islands, four USTs, one waste oil UST, and a clarifier. In March 1993, the service station ceased operations and all above- and below-ground facilities were removed. Site assessments performed at the project site since 1988 revealed petroleum hydrocarbon impacts to soil, soil vapor, and groundwater.

A network of groundwater monitoring wells is installed at and to the north of the project site has been gauged and sampled generally on a quarterly basis since 1991. The groundwater flow direction beneath the project site is predominantly to the north-northwest with a high variability in groundwater elevations since groundwater monitoring began. A variety of bioremediation techniques have been utilized for the site as outlined on page 7-1 and7-2 of Appendix C.

A request for closure was made in May 2020 under the Low-Threat Underground Storage Tank Case Closure Policy; however, the RWQCB has not granted closure for the project site. The results of the latest groundwater monitoring event conducted in March 2022 indicates significant petroleum impacts remain on the project site and have migrated off-site to the northwest. The presence of petroleum products at the project site due to a release and the lack of regulatory closure is considered a recognized environmental condition (REC).

Existing Off-Site Hazards

Twenty-six sites located within a half-mile of the project site were listed on the EnviroStor database as sites with hazardous materials or past releases. These sites are further described in the Phase 1 ESA prepared for the project. Based on the findings in the report these sites would not represent RECs for the project site due to distance from the site and direction of groundwater flow.

Five other LUST sites were identified in the Phase 1 further from the project site on different regulatory databases, however, based on the location, extent of contamination, and flow of groundwater these sites were not determined to be RECs for the project site.

700 Bellomy Street

A former gasoline service station located at 700 Bellomy Street (currently the Pizza My Heart restaurant) is immediately west of the project site across Park Avenue. A 2,500-gallon and a 750-gallon UST containing diesel/gasoline were discovered during excavation activities within the sidewalk of Park Avenue in 1994. Elevated concentrations of petroleum hydrocarbons were detected in soil samples collected from beneath the USTs and in groundwater. Three groundwater monitoring wells were installed at the northern portion of the property and within Park Avenue. The last groundwater monitoring event at this property was conducted in April 2002. Gasoline and benzene were detected on-site at this time in moderate levels. The facility received a case closure letter from Valley Water on June 26, 2002 with the advisory that moderate levels of residual soil contamination exist in the vicinity of the former tank system beneath the sidewalk along Park Avenue. The release from the UST is considered a historical recognized environmental condition (HREC) as the petroleum impacts associated with the release from the property may have affected the project site;

however, the impacts have been addressed to the satisfaction of the regulatory authority (Valley Water).

4.9.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Create a significant hazard to the public or the environment through the 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, result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
6) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
7) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

Impact HAZ-1: The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (Less than Significant Impact)

Construction

The proposed project would not require large amounts of hazardous materials to be brought to and from the project site during construction. Therefore, the proposed project would not result in impacts during construction related to the routine transport, use, or disposal of hazardous materials.

Operations

The proposed project would likely include the use and storage of cleaning supplies and maintenance chemicals in small quantities typical for residential land uses. The small quantities of cleaning supplies and maintenance chemicals used on-site during project operation would not pose a risk to adjacent land uses. Based on the proposed use of the site, the project would not create a significant hazard to the public or environment from the use, transport, or storage of these chemicals.

Impact HAZ-2:	**As mitigated, the project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. (Less than Significant Impact with Mitigation Incorporated)**

The proposed project would be constructed on a vacant site, therefore, no lead or asbestos impacts would occur as a result of demolition of structures on-site.

Based on the Phase 1 ESA prepared for the proposed project, contamination resulting from the LUST on-site (Park Avenue Site), which was removed from the project site, and contamination resulting from the adjacent closed LUST site at 700 Bellomy have resulted in soil and groundwater contamination on the project site. These sites are associated with prior uses of petroleum projects and detectable amounts of Benzene, Hexane, Ethlybenzene, Chlroroform, Tetrachloroethene (PCE), n-Heptane, and 1,2-Dibromoethane have been found at testing wells located throughout the project site in excess of residential screening thresholds. These petroleum byproducts present in soil and groundwater could result in exposure of construction workers and persons in proximity to contaminated soil, groundwater, and soil vapor.

These two conditions would represent an environmental hazard for construction workers. Based on the March 2022 testing of the groundwater, petroleum products are still present in the project site and construction activities that would expose the contaminants would result in a significant impact.

IMPACT HAZ-2.1 Construction activities associated with the proposed project could expose the public and/or the environment to hazardous materials and/or soil, soil vapor, and/or groundwater contamination from the former use of the site and from contaminants that have migrated from off-site.

Mitigation Measure

MM HAZ-2.1: Prior to obtaining grading permits, the environmental professional will perform chemical injections to remediate groundwater impacts present at the site and will collect soil vapor samples across the property prior to preparation of the Health and Safety Plan (HSP) and construction activities to evaluate the soil vapor concentrations present and the potential for vapor intrusion to occur. The groundwater injections will be performed in accordance with the Remedial Action Plan for Groundwater for the proposed project and persulfate injection will be used to oxidize the contaminants of

concern with limited byproducts from the process. Groundwater monitoring will be conducted in compliance with a waste discharge requirement (WDR) permit after the injections are conducted to meter the performance of the procedure under the oversight of the Regional Water Quality Control Board (RWQCB). The results of the performance groundwater monitoring events will be provided in the semi-annual groundwater monitoring reports and WDR reports as required by the WDR permit. The soil vapor samples will be collected in accordance with the identified in the Soil Vapor Assessment Work Plan prepared for the proposed project.

MM HAZ-2.2: The project applicant shall be required to develop a Soil and Groundwater Management Plan and submit it to the City of Santa Clara and the Santa Clara County Department of Environment Health (SCCDEH) prior to issuance of any demolition or grading permits (whichever occurs first) for review and approval. The project applicant must then provide the approved Soil and Groundwater Management Plan to the general contractor and each of its subcontractors for incorporation into their Health and Safety Plans (HSP).

MM HAZ-2.3: All contractors must prepare a site-specific HSP to establish health and safety protocols for their personnel working at the project site. The HSPs will be reviewed and approved by the City of Santa Clara and the SCCDEH prior to issuance of demolition or grading permits (whichever occurs first) and will be modified accordingly if previously unknown impacted materials are encountered during construction. These modifications must meet Federal and State of California (OSHA) standards for hazardous waste operations (29 CFR 1910.120 and 8 CCR 5192). Earthwork activities in contaminated materials will be performed by licensed contractors with personnel trained in hazardous waste operations (40-hour OSHA training).

All contractors will be responsible for following the protocols presented in their HSP. The contractor will also prepare an injury and illness prevention plan. The contractor's HSP will contain provisions for limiting chemical exposure to construction workers, chemical and on-chemical hazards, emergency procedures, and standard safety protocols.

- Work activities will be conducted with, at a minimum, Level D protection including:
    - Rubber boots when in contact with groundwater;
    - Nitrile gloves when handling impacted soils;
    - Work boots;
    - High-visibility vest or clothing;
    - Safety glasses;
    - Hard hat; and
    - Hearing protection (if noise levels exceed 85 dBA).

Contractors are also required to determine the requirements for worker training, based on the level of expected contact to soil and groundwater associated with their workers' activities.

MM HAZ-2.4: The project site will be fenced and gated with a lock. Access to the project site will be limited by the general contractor to authorized personnel. Site control procedures will be implemented by the general contractor to control the flow of personnel, vehicles, and materials in and out of the site. Signs will be posted by the general contractor instructing visitors to sign in at the project support areas at all project site entrances.

MM HAZ-2.5: If suspect and/or confirmed impacted soil is encountered, decontamination procedures shall be established and implemented by the contractor to reduce the potential for construction equipment and vehicles to release contaminated soil onto public roadways or other off-site transfer. At a minimum, gravel will be placed at all project site access points by the contractor and excess soil will be removed from construction equipment using dry methods (e.g., brushing or scraping) prior to moving the equipment to off-site locations. All truck tires shall be cleaned prior to leaving the project site.

Decontamination rinse will be captured and stored in Department of Transportation (DOT) approved containers for subsequent testing and off-site disposal.

MM HAZ-2.6: Excavated soil suspected to be impacted will be screened in the field by the environmental professional using field observations and an organic vapor meter. Soils observed to be potentially impacted may be direct-loaded into trucks for transport to an appropriate waste management facility under manifest or may be separately stockpiled from presumed "clean" soil for additional testing. Trucks will be loaded so there is at least one foot of free board space and the beds will be covered with a tarp to prevent soil and/or dust from spilling out of the truck during transport to the disposal facility. Prior to leaving the loading area, each truck will be inspected by on-site personnel to ensure that the loads are adequately secured and covered. The stockpile area will be clean and free of debris prior to the placement of the bottom liner. The liners will consist of heavy-duty plastic (minimum of 30-mil) as the bottom and top liners. All stockpiles will include berms for containment of any water that drains from the soil. Stockpiles will be inspected at least twice daily and repaired as needed. At the end of each shift or when the stockpile is not in use for two hours or longer, the pile(s) will be securely covered with the heavy-duty plastic liner. All stockpiles will be handled as to prevent or reduce potential dust generation. Additional water spray will be utilized for dust suppression and foam or surfactant will be utilized for stabilization of stockpiles, if necessary. The environmental professional will collect and process stockpile samples as described in the Soil and Groundwater Management Plan.

MM HAZ-2.7: During construction activities, if unanticipated contamination (e.g., if soil discoloration, odors, and/or elevated organic vapor meter readings are noted), buried structures (e.g., sumps or tanks), or hazardous debris are encountered that may pose a risk to human health or the environment, earthwork in the suspect area will be immediately stopped and worker access to the suspect area will be restricted. The area will be cordoned off using delineators and caution tape, or similar materials by the contractor. Subsequently, the environmental professional and project applicant will be notified. The quality of soil suspected to be contaminated will be evaluated through field screening and/or analytical testing by the environmental professional so that appropriate handling and disposal alternatives can be determined.

MM HAZ-2.8: The environmental professional will be present on-site during the removal of impacted soil and will be responsible for observing soil conditions and contractor's activities. As part of this process, daily field reports documenting site activities will be completed and made available for inspection by authorized oversight personnel for the duration of the project.

The environmental professional will complete daily field reports for each day that they are on-site. Entries will be complete and accurate enough to permit reconstruction of the environmental professional's field activities. Each page will be dated, and the time of entry noted. The following information will be included for each soil sample:

- Sample identification number
- Sample location and description
- Site sketch showing sample location and measured distances
- Sampler's name(s)
- Date and time of sample collection
- Designation of sample as composite or grab
- Type of sample (i.e., matrix)
- Type of preservation
- Type of sampling equipment used
- Field observations and details important to analysis or integrity of samples (e.g., heavy rains, odors, colors, etc.)
- Instrument readings (e.g., photoionization detector [PID], etc.)
- Chain-of-custody form numbers and chain-of-custody seal numbers
- Transport arrangements (courier delivery, lab pickup, etc.).

MM HAZ-2.9: The following general procedures will be carried out for construction on the project site:

- Trenches/excavations shall be screened daily with an organic vapor meter or similar meter. Total volatile organic compounds at a sustainable concentration of five ppm above background shall require personnel to stop work and leave area. If concentrations do not recede, the trench/excavation shall be barricaded and the Environmental Consultant contacted.
- Open trenches/excavations shall be inspected daily for readily observable indications of possible cave-ins, hazardous atmosphere or other hazardous conditions.
- If readily observable conditions are noted that could result in cave-in, hazardous atmosphere or other hazardous condition, exposed workers shall be removed from the area until the necessary precautions have been taken to address the concern.
- Trenches/excavations shall be protected with adequate barriers or physical protection.
- Stockpiles of soil shall not be stored within two feet of a trench/excavation.
- Where oxygen deficiency (atmospheres containing less than 19.5 percent oxygen) or a hazardous atmosphere exists or could reasonably be expected to exist, the atmosphere shall be tested before workers enter the work area.
- Adequate precautions shall be taken to prevent exposures to atmospheres containing less than 19.5 percent oxygen and or hazardous atmospheres, including proper respiratory protection or ventilation.
- Workers shall not work in excavations/trenches in which there is accumulated water or in trenches/excavations in which water is accumulating, unless adequate precautions have been taken against the hazards posed by the accumulation. These measures can include PPE, shoring or water removal.
- Workers shall wash hands thoroughly after handling project site soil or groundwater even if they were wearing protective gloves.

MM HAZ-2.10: If utility trenches extend into groundwater, measures will be implemented to reduce the potential for vapor and groundwater migration through trench backfill and utility conduits. Such measures shall include placement of low-permeability backfill "plugs" at selected intervals on-site and at all locations where the utility trenches extend off-site. In addition, utility conduits that are placed below groundwater will be installed with water-tight fittings to reduce the potential for groundwater to migrate into the conduits. A qualified civil engineer will survey and record all 'plug' placement locations.

MM HAZ-2.11: If excavation dewatering is required, pumped water will be transferred from the excavations into holding tanks and then either pumped to the sanitary sewer under a publicly owned treatment works permit, treated and discharged

to the storm drain system pursuant to a California Regional Water Quality Control Board – San Francisco Bay Region (Water Board) National Pollutant Discharge Elimination System (NPDES) permit, and/or loaded into tanker trucks for off-site disposal at an appropriately licensed facility.

With implementation of the identified mitigation measures, redevelopment of the project site would not significantly impact the public or the environment due to exposure to any hazards or contamination sources.

Operational Impacts

The proposed project would be constructed on a project site with soil vapor contamination from LUST contaminant releases including PCE and benzene. PCE and benzene are hazardous chemical compounds at very low concentrations and can be mobilized in groundwater and released through soil vapor into structures located above the groundwater plumes. The soil sampling conducted for the proposed project determined that PCE and benzene were discovered at levels above environmental screening levels (ESL) which would represent a hazard for occupants of the project site. Based on the presence of PCE and benzene in the soil vapor, the proposed project would represent a risk of vapor intrusion for the public on the project site.

IMPACT HAZ-2.2 The proposed project would expose future residents to vapor intrusion on-site. **(Significant Impact)**

Mitigation Measure

MM HAZ-2.12: Based on the vapor intrusion risk on-site, implement a vapor intrusion mitigation (VIM) system to ensure the health and safety of the future project occupants. The project will submit a VIM System Plan to the Santa Clara County Department of Environmental Health (SCCDEH) for review and approval prior to the issuance of building permits. The proposed VIM system could include one or more of the following remediation measures: 1) sub-grade and/or sub-slab membranes, 2) gas-permeable gravel beneath the concrete slab/membrane, and 3) passive sub-slab ventilation. As previously mentioned, the final design of the VIM system will be decided in coordination with the SCCDEH to ensure the system meets all applicable thresholds.

With implementation of the mitigation measure above, the proposed project would control vapor intrusion on-site and would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Impact HAZ-3:	**The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (Less than Significant Impact)**

The proposed project would be constructed within a quarter mile of Santa Clara University. The proposed project would result in the construction of a residential building with commercial uses on the ground floor. With the exception of common chemical cleansers, these uses are not associated with the emission or handling of hazardous materials; therefore, the proposed project would not result in the handling or emission on hazardous materials within a quarter mile of a school site and would result in a less than significant impact.

Impact HAZ-4:	**The project is located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, with mitigation, the project would not create a significant hazard to the public or the environment. (Less than Significant Impact with Mitigation Incorporated)**

The project site is located on a Geotracker LUST Cleanup site identified on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As described above, based on historical uses of the site and soil and groundwater sampling, the soil on-site contains concentrations of petroleum compounds which are also contaminants of concern for the site. The proposed project would comply with policies governing construction and would implement mitigation measures MM HAZ 2.1 and MM HAZ 2.2 to reduce the hazards of construction created by the LUST and hazards presented to on-site residents. Therefore, the proposed project would create a less than significant hazard to the public or the environment with mitigation.

Impact HAZ-5:	**The project would be located within an airport land use plan. Nevertheless, the project would not result in a safety hazard or excessive noise for people residing or working in the project area. (Less than Significant Impact)**

The project site is located approximately 0.8 miles from the Norman Y. Mineta International Airport and is within the airplane traffic Airport Safety Zone established in the Comprehensive Land Use Plan. The proposed project would be substantially under 212 feet above mean sea level in height, which is the maximum building height for safe plane operations at the project site, and would not interfere with flight operations or pose a hazard to residents. Additionally, the proposed project is not located within the noise contours of the airport and would not experience excessive noise. Further, the proposed project would be reviewed by the ALUC prior to approval by the lead agency. Therefore, the project would not expose people residing or working in the project area to a safety hazard or excessive noise.

Impact HAZ-6:	**The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (No Impact)**

The project would be constructed in accordance with current building and fire codes and would be required to be maintained in accordance with applicable City policies identified in the General Plan to avoid unsafe building conditions. The proposed project would not alter routes of access, nor would it create impediments to existing emergency response plans or emergency evacuation plans in the City of Santa Clara. Therefore, the proposed project would result in no impact.

Impact HAZ-7:	**The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. (No Impact)**

The proposed project is located in an urbanized environment and is not within a fire hazard severity zone. Therefore, the proposed project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

4.9.3 Non-CEQA Effects

Per *California Building Industry Association v. Bay Area Air Quality Management District,* 62 Cal. 4th 369 *(BIA v. BAAQMD)*, effects of the environment on the project are not considered CEQA impacts. The following discussion is included for informational purposes because the City of Santa Clara has policies that address existing hazards and hazardous materials conditions affecting a proposed project.

As discussed previously, the project shall implement Mitigation Measures HAZ-2.1 through HAZ-2.11 which would ensure that the site is fully remediated to meet the ESL thresholds for residential development (Included in Appendix C and D documents) and a case closure is issued by the RWQCB which would allow residential development to occur on-site. Additionally, the project would include the installation of a vapor barrier as described in Mitigation Measure HAZ-2.12 or other measures which would prevent soil vapor from affecting residents on the project site. As a result, the proposed project would not result in human health and environmental hazards to future site occupants consistent with the policies of the General Plan.

4.10 HYDROLOGY AND WATER QUALITY

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

Federal and State

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

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) 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 (FIRMs) that identify Special Flood Hazard Areas (SFHAs). An SFHA is an area that would be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100-year flood.

Statewide Construction General Permit

The SWRCB has implemented an NPDES General Construction Permit for the State of California (Construction General Permit). For projects disturbing one acre or more of soil, a Notice of Intent (NOI) must be filed with the RWQCB by the project sponsor, and a Stormwater Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction and filed with the RWQCB by the project sponsor. 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 is to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related stormwater discharges.

Regional and Local

San Francisco Bay Basin Plan

The San Francisco Bay RWQCB regulates water quality in accordance with the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan lists the beneficial uses that the San Francisco Bay 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 San Francisco Bay 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.

Municipal Regional Permit Provision C.3

The San Francisco Bay RWQCB re-issued the MRP in 2015 to regulate stormwater discharges from municipalities and local agencies (co-permittees) in Alameda, Contra Costa, San Mateo, and Santa Clara Counties, and the cities of Fairfield, Suisun City, and Vallejo.[40] Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 10,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat post-construction stormwater runoff. LID-based treatment controls are intended to maintain or restore the site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g. rainwater harvesting for non-potable uses). The MRP also requires that stormwater treatment measures are properly installed, operated, and maintained.

In addition to water quality controls, the MRP requires new development 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 local rivers, streams, and creeks. Projects may be deemed exempt from these requirements if they do not meet the minimized size threshold, drain into tidally influenced areas or directly into the Bay, or drain into hardened channels, or if they are infill projects in subwatersheds or catchment areas that are greater than or equal to 65 percent impervious.

Municipal Regional Permit Provision C.12.f

Provision C.12.f of the MRP requires co-permittee agencies to implement a control program for PCBs that reduces PCB loads by a specified amount during the term of the permit, thereby making substantial progress toward achieving the urban runoff PCBs wasteload allocation in the Basin Plan by March 2030.[41] Programs must include focused implementation of PCB control measures, such as source control, treatment control, and pollution prevention strategies. Municipalities throughout the Bay Area are updating their demolition permit processes to incorporate the management of PCBs in demolition building materials to ensure PCBs are not discharged to storm drains during demolition. Buildings constructed between 1955 and 1978 that are proposed for demolition must be screened for the presence of PCBs prior to the issuance of a demolition permit.

Water Resources Protection Ordinance and District Well Ordinance

The Santa Clara Valley Water District (Valley Water) 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 Valley Water property or easements are required under Valley Water's Water Resources Protection Ordinance and District Well Ordinance.

[40] MRP Number CAS612008
[41] San Francisco Bay Regional Water Quality Control Board. *Municipal Regional Stormwater Permit, Provision C.12.* November 19, 2015.

Dam Safety

Since August 14, 1929, the State of California has regulated dams to prevent failure, safeguard life, and protect property. The California Water Code entrusts dam safety regulatory power to California Department of Water Resources, Division of Safety of Dams (DSOD). The DSOD provide oversight to the design, construction, and maintenance of over 1,200 jurisdictional sized dams in California.[42]

As part of its comprehensive dam safety program, Valley Water routinely monitors and studies the condition of each of its 10 dams. Valley Water 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.

Construction Dewatering Waste Discharge Requirements

Each of the RWQCBs regulate construction dewatering discharges to storm drains or surface waters within its region under the NPDES program and Waste Discharge Requirements.

City of Santa Clara 2010 – 2035 General Plan

General Plan policies applicable to hydrology and water quality include, but are not limited to, the following listed below.

Policies	Description
5.10.5-P11	Require that new development meet stormwater and water management requirements in conformance with state and regional regulations.
5.10.5-P13	Require that development complies with the Flood Damage Protection Code.
5.10.5-P15	Require new development to minimize paved and impervious surfaces and promote on-site Best Management Practices for infiltration and retention, including grassy swales, pervious pavement, covered retention areas, bioswales, and cisterns, to reduce urban water run-off.
5.10.5-P16	Require new development to implement erosion and sedimentation control measures to maintain an operational drainage system, preserve drainage capacity and protect water quality.
5.10.5-P17	Require that grading and other construction activities comply with the Association of Bay Area Governments' Manual of Standards for Erosion and Sediment Control Measures and with the California Stormwater Quality Association, Stormwater Best Management Practice Handbook for Construction.
5.10.5-P18	Implement the Santa Clara Valley Nonpoint Source Pollution Control Program, Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and the Urban Runoff Management Plan .
5.10.5-P20	Maintain, upgrade and replace storm drains throughout the City to reduce potential flooding.
5.10.5-P21	Require that storm drain infrastructure is adequate to serve all new development and is in place prior to occupancy.

[42] California Department of Water Resources, Division of Safety of Dams. Accessed June 9, 2020. https://water.ca.gov/Programs/All-Programs/Division-of-Safety-of-Dams#:~:text=Since%20August%2014%2C%201929%2C%20the,Safety%20of%20Dams%20(DSOD).

Santa Clara City Code

Chapter 13.20, Storms Drains and Discharges, of the SCCC is enacted for the protection of health, life, resources and property through prevention and control of unauthorized discharges into watercourses. The primary goal of this chapter is the cleanup of stormwater pollution from urban runoff that flows to creeks and channels, eventually discharging into the San Francisco Bay. The SCCC also includes Flood Damage Prevention Code (Chapter 15.45) and requirements for grading and excavation permits and erosion control (Chapter 15.15).

4.10.1.2 *Existing Conditions*

Groundwater

The project site is located in a confined area of the Santa Clara Valley groundwater basin and does not contribute to the recharging of the groundwater aquifer used for water supply. The depth to groundwater can vary seasonally, and can be influenced by underground drainage patterns, regional fluctuation, and other factors. The depth to groundwater, as measured within the groundwater monitoring wells, was estimated to be approximately four feet deep. The groundwater flow was reported to be north-northwest. The project site is not located within a designated groundwater recharge area.

Storm Drainage

The City of Santa Clara owns and maintains the municipal storm drainage system serving the project area. The storm drains near the project site are located within The Alameda and Park Avenue and water from the site flows southeast through stormwater systems, which flows east into the Guadalupe River and eventually to the San Francisco Bay. The project site is currently vacant and mostly unpaved, with approximately 17,890square feet (almost 100 percent) of the site covered with pervious surfaces and 51 square feet of impervious surfaces.

Flooding

The project site is not located within a 100-year flood hazard area. Based on the FEMA flood maps, the project site is located in Zone D which is an area with undetermined chance of flood.

Dam Failure

According to Valley Water dam failure maps, the project site is located within the Lexington Dam failure inundation hazard zone with depths of two to five feet.[43] The site is not located within the Anderson Dame failure inundation hazard zone [44]

[43] Valley Water. Lexington Dam Inundation Zone Map. Sheet 21. November 2019.
[44] Valley Water. Anderson Dam Inundation Zone Map. Sheet 11. November 2019.

4.10.2 Impact Discussion

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

Impact HYD-1: The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. (Less than Significant Impact)

Construction Impacts

Construction of the proposed project, including grading and excavation activities, would disturb soils within the project site. As a result, surface runoff after rain events may discharge a greater quantity of sediments to the stormwater system, which ultimately outfalls to the San Francisco Bay. The proposed project would, however, disturb less than one-acre of soil and would not be required to

comply with the NPDES General permit for construction activities to control the discharge of stormwater pollutants including sediments associated with construction activities. The following measures would be required by the City as conditions of project approval to reduce potential construction-related water quality impacts:

Conditions of Approval

- 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 period 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 shall be covered;
- All paved access roads, parking areas, staging areas and residential streets adjacent to the construction sites would be swept daily (with water sweepers); and
- Vegetation in disturbed areas would be replanted as quickly as possible.

With the implementation of the above measures, construction related water quality impacts would be reduced to a less than significant level.

Post Construction Impacts

To reduce post-construction water quality impacts, the project is required to comply with the MRP. The MRP requires all 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 the project characteristics. The proposed project includes LID measures to treat water flowing from 82 percent of the site and non-LID measures for the remaining 18 percent. The stormwater treatment measures include seven bioretention areas with liner and underdrains, two self-retaining areas, and a media filter system. Therefore, the proposed project, in compliance with existing regulations, would not result in significant impacts to water quality.

Impact HYD-2:	**The project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. (Less than Significant Impact)**

Although the project site is mostly unpaved, it does not substantially contribute to groundwater recharge. The proposed project would, therefore, not decrease groundwater supplies or interfere with groundwater recharge. The project would also implement LID stormwater treatment measures that would allow rainwater percolation on-site. The excavation associated with the underground parking and other below-grade work would likely encounter shallow groundwater; however, the project

would has a small footprint and would not interfere with groundwater flow. For these reasons, the project would have a less than significant impact on sustainable groundwater management.

Impact HYD-3:	**The project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows. (Less than Significant Impact)**

The proposed project is located within a watershed made up of more than 65 percent impervious surfaces. Therefore, the addition of impervious surfaces as part of the proposed project would not cause hydromodification in compliance with Santa Clara County C.3 technical guidance. Therefore, the proposed project would not result in the alteration of streams or rivers near the project site.

Additionally, the proposed project would replace more than 99 percent of the project site with impervious surfaces and would be required to provide stormwater treatment for the totality of the project site. The proposed project would include three drainage areas treated by a total of five flow-through planters. The existing project site is 100 percent pervious, and the proposed project would increase impervious surfaces to cover 99 percent of the site. A summary of the impervious surfaces is included in Table 4.10-1 below.

Table 4.10-1 Pervious and Impervious Surface Areas

	Impervious Surface	Pervious Surface
Existing Site Area (square feet)	51	17,890
Existing Percentage	0.2	98.8
Proposed Site Area (square feet)	17,814	127
Proposed Percentage	99	1.0

The flow-through planters would be sized compliant with Provision C.3 of the Municipal Regional Stormwater Permit. These bioretention areas provide landscaping designed to allow water to filter through the planter, and also allows for some water to evaporate away as it would in normal soil mediums. This slows the release of water into the stormwater system and would limit the surge of water from the new impervious surfaces during storm events. Therefore, the proposed project would not result in flooding or runoff exceeding the capacity of existing or planned stormwater drainage. Additionally, the treatment features would filter stormwater and the proposed project would not contribute as a source of polluted runoff. The proposed project would have a less than significant impact.

Impact HYD-4:	The project would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. (Less than Significant Impact)

The project site is not located within tsunami hazard areas or located near an inland body of water which may result in seiches during seismic activity. The proposed project is located within the Lexington dam inundation zone, therefore, in the event of a dam failure the project site would be at risk of flooding. Valley Water maintains and repairs the reservoirs in their jurisdiction. As such, the increase the risk of site being inundation is minimal.

Additionally, the project site is within the FEMA Flood Hazard Zone D. This flood zone does not have a defined risk of flood. The proposed project would result in the creation of commercial and residential uses on-site. These uses are not associated with the use of pollutants, with the exception of household cleaners, and would not release significant amounts of pollutants into stormwater if flooding were to occur. Therefore, the proposed project would not result in significant release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones.

Impact HYD-5:	The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (No Impact)

The proposed project would implement the conditions of project approval identified under Impact HYD-1, and the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and the Urban Runoff Management Plan (URMP). As described under Impact HYD-2, the project would not impact groundwater supplies or impede aquifer recharge. For these reasons, the proposed project would not conflict with, or obstruct implementation of, any water quality control plan or sustainable groundwater management plan.

4.11 LAND USE AND PLANNING

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

Regional and Local

Santa Clara General Plan

The following land-use related General Plan policies are applicable to the proposed project.

Policies	Description
5.3.1-P9	Require new development provide adequate public services and facilities, infrastructure, and amenities to serve the new employment or residential growth.
5.3.2-P1	Encourage the annual construction of the housing units necessary to meet the City's regional housing needs assessment by reducing constraints to housing finance and development.
5.3.2-P6	Provide adequate choices for housing tenure, type and location, including higher density, and affordability for low- and moderate-income and special needs household.
5.4.1-P9	Residential development should include front doors, windows, stoops, porches, and bay windows or balconies along street frontages.
5.5.2-P12	Screen loading and trash areas to preclude visibility from off-site and public streets.

City of Santa Clara Zoning Code

The City's Zoning Code regulates land uses within the boundaries of Santa Clara. The overall goals of the Zoning Code are to promote the city's growth in an orderly manner and to promote and protect the public health, safety, peace, comfort, and general welfare in conformance with the General Plan. For each of the zoning districts in the city, the Code identifies land uses that are permitted, conditionally permitted, and not permitted. It also establishes standards such as minimum lot size, maximum building height, and the minimum distance buildings must be set back from the street. Provisions for parking, landscaping, lighting, and other rules that guide the development of projects in the city are also included.

4.11.1.2 *Existing Conditions*

The project site is a vacant site. The project site is currently zoned Neighborhood Commercial and is designated Neighborhood Mixed Use in the General Plan.

Neighborhood Commercial zoning allows commercial uses that are appropriate to serve local communities and is intended to provide retail goods and services for the convenience of the immediately adjacent residential neighborhood.

The General Plan designation of Neighborhood Mixed Use is a combination of the Community Commercial and Medium Density Residential designations and is intended to encourage a mix of residential and commercial uses along major streets.

Auto-oriented uses are not appropriate in this designation, except under certain circumstances within the El Camino Real Focus Area. Parking should be behind buildings, below-grade or in structures, to ensure that active uses face public streets. Retail, commercial and neighborhood office uses, at a minimum FAR of 0.10, are required in conjunction with residential development between 20 and 36 units per acre.

The land uses around the project site include a mix of residential, and commercial uses, as well as Santa Clara University. North and east of the project site is Santa Clara University and its associated dormitory residential uses. West of the site there are commercial uses, including multiple restaurant service businesses, and beyond these is a neighborhood of single and multi-family residences.

4.11.2 Impact Discussion

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

Impact LU-1: The project would not physically divide an established community. (No Impact)

The proposed project would develop an existing vacant site in an area of mixed residential and commercial uses. This would not result in obstructive infrastructure (like a freeway) or barriers to movement surrounding the site and would not physically separate the existing community from local amenities or isolate residences. Therefore, the proposed project would have no impact from division of established communities.

Impact LU-2: The project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. (Less than Significant Impact)

As described within the individual sections of this document, with incorporation of the Conditions of Approval, mitigation measures, and regulatory requirements the project would not cause a significant environmental impact due to a conflict with plans, policies or regulations adopted for the purpose of avoiding or mitigating an environmental effect. The proposed development project would be reviewed for compliance with applicable land use plans and policies. As a result, the impact is less than significant.

The proposed development project includes a General Plan Amendment to change the General Plan designation of the project site from Neighborhood Mixed Use to Very High-Density Residential.

This designation allows for residential development from 51 to 100 du/ac and is intended to take advantage of proximity to transit, offering an urban feel and typically comprised of mid to high rise buildings featuring structured or below grade parking and shared outdoor space. Unlike the Very High Density Mixed Use designation, this designation also allows for ground floor retail and other compatible uses that activate the street without a minimum or maximum FAR requirement.

The current land use designation provides a maximum of 36 units per acre on the site with a FAR of 0.10. The new General Plan designation would allow for a maximum of 100 units per acre. The 0.4-acre site would currently allow up to 36 units per acre for a total of 14 units under current conditions; whereas up to 40 units would be permitted under the proposed General Plan Amendment. This would result in an increase in population and resource consumption higher than the levels analyzed in the General Plan Integrated Final Environmental Impact Report (FEIR).

The proposed development project would provide 39 residential units on-site, which would be an increase of 25 units above the maximum allowed under the current General Plan designation. The General Plan included a net increase of 2,957 dwelling units throughout the City. The increase in housing allowed on-site would be approximately 1.3 percent of the total planned housing planned for the City of Santa Clara. Therefore, this would not represent a significant amount of growth on the project site. The proposed development project would comply with Conditions of Approval, mitigation measures, and regulatory requirements included as part of the General Plan, Therefore, the proposed development project would result in a less than significant impact related to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

4.12 MINERAL RESOURCES

4.12.1 Environmental Setting

4.12.1.1 *Regulatory Framework*

State

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. As mandated under SMARA, the State Geologist has designated mineral land classifications 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 (SMGB), after receiving classification information from the State Geologist, to designate lands containing mineral deposits of regional or statewide significance.

4.12.1.2 *Existing Conditions*

The City of Santa Clara is located in an area zoned MRZ-1, which classifies an area where adequate information indicates that no significant mineral deposits are present. The area is not known to support significant resources of any other type. No mineral resources are currently being extracted in the City. The State Office of Mine Reclamation's list of mines (the AB 3098 List) regulated under the Surface Mining and Reclamation Act (SMARA) does not include any mines within the City.[45]

4.12.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
2) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

[45] City of Santa Clara. 2010-2035 General Plan Integrated Final EIR. January 2011.

Impact MIN-1:	**The project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. (No Impact)**

As stated above, the proposed project is located in an area where no mineral resources exist or are expected to be encountered. Therefore, the proposed project would not impact the availability of a known mineral resource that would be of value to the region and residents of the state.

Impact MIN-2:	**The project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. (No Impact)**

As stated above, the proposed project is located in an area where no mineral resources exist or are expected to be encountered. Therefore, the proposed project would not impact the availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

4.13 NOISE

The information in this section is based in part on the 2655 The Alameda Noise and Vibration Assessment prepared by Illingworth and Rodkin Inc., on September 19, 2022. This study is included in Appendix E of this document.

4.13.1 Environmental Setting

Noise

Factors that influence sound as it is perceived by the human ear, include the actual level of sound, period of exposure, frequencies involved, and fluctuation in the noise level during exposure. Noise is measured on a decibel scale, which serves as an index of loudness. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the A-weighted decibel, or dBA.

Since excessive noise levels can adversely affect human activities and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. Noise guidelines are generally expressed using one of several noise averaging methods, including L_{eq}, DNL, or CNEL.[46] These descriptors are used to measure a location's overall noise exposure, given that there are times when noise levels are higher (e.g., when a jet is taking off from an airport or when a leaf blower is operating) and times when noise levels are lower (e.g., during lulls in traffic flows on freeways or in the middle of the night). L_{max} is the maximum A-weighted noise level during a measurement period.

Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Vibration amplitude can be quantified using Peak Particle Velocity (PPV), which is defined as the maximum instantaneous positive or negative peak of the vibration wave. PPV has been routinely used to measure and assess ground-borne construction vibration. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 inches/second (in/sec) PPV.

4.13.1.1 *Regulatory Framework*

Federal

Federal Transit Administration Vibration Limits

The Federal Transit Administration (FTA) has developed vibration impact assessment criteria for evaluating vibration impacts associated with transit projects. The FTA has proposed vibration impact

[46] L_{eq} is a measurement of average energy level intensity of noise over a given period of time. Day-Night Level (DNL) is a 24-hour average of noise levels, with a 10 dB penalty applied to noise occurring between 10:00 PM and 7:00 AM. Community Noise Equivalent Level (CNEL) includes an additional five dB applied to noise occurring between 7:00 PM and 10:00 PM. Where traffic noise predominates, the CNEL and DNL are typically within two dBA of the peak-hour L_{eq}.

criteria based on maximum overall levels for a single event. The impact criteria for groundborne vibration are shown in Table 4.13-1 below. These criteria can be applied to development projects in jurisdictions that lack vibration impact standards.

Table 4.13-1: Groundborne Vibration Impact Criteria			
Land Use Category	**Groundborne Vibration Impact Levels (VdB inch/sec)**		
	Frequent Event	**Occasional Events**	**Infrequent Events**
Category 1: Buildings where vibration would interfere with interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime use	75	78	83
Source: Federal Transit Administration. *Transit Noise and Vibration Assessment Manual.* September 2018.			

State and Local

California Building Code

The CBC establishes uniform minimum noise insulation performance standards to protect persons within new buildings housing people, including hotels, motels, dormitories, apartments, and dwellings other than single-family residences. Title 24 mandates that interior noise levels attributable to exterior sources not exceed 45 L_{dn}/CNEL in any habitable room. Exterior windows must have a minimum Sound Transmission Class (STC) of 40 or Outdoor-Indoor Transmission Class (OITC) of 30 when the property falls within the 65 dBA DNL noise contour for a freeway or expressway, railroad, or industrial source.

City of Santa Clara General Plan

The City's General Plan contains noise goals and policies in Chapter 5, Section 5.10.6. These goals and policies identify Normally Acceptable noise exposures for various land uses, including limits of 60 dB CNEL for residential exteriors and 45 dB CNEL for residential interiors. The standards also specify an interior limit of 50 dB CNEL for offices, retail and other less sensitive indoor spaces.

The General Plan also identifies the following policies that would be applicable to the project.

Policy	Description
5.10.6-P1	Review all land use and development proposals for consistency with the General Plan Compatibility standards and acceptable noise exposure levels.
5.10.6-P2	Incorporate noise attenuation measures for all projects that have noise exposure levels greater than General Plan "normally acceptable" levels.
5.10.6-P3	New development should include noise control techniques to reduce noise to acceptable levels, including site layout (setbacks, separation and shielding), building treatments (mechanical ventilation system, sound-rated windows, solid core doors and baffling) and structural measures (earthen berms and sound walls).
5.10.6-P4	Encourage the control of noise at the source through site design, building design, landscaping, hours of operation and other techniques.
5.10.6-P5	Require noise-generating uses near residential neighborhoods to include solid walls and heavy landscaping along common property lines, and to place compressors and mechanical equipment in sound-proof enclosures.

Santa Clara City Code

Section 9.10.040 of the SCCC establishes noise level performance standards for fixed sources of noise, as seen below in Schedule A. Noise levels at single-family residences, multi-family residences, and at public spaces are limited to 55 dBA during daytime hours (7:00 a.m. to 10:00 p.m.) and 50 dBA at night (10:00 p.m. to 7:00 a.m.). Noise levels at commercial and office uses are limited to 65 dBA during daytime hours and 60 dBA during nighttime hours. Section 9.10.060the states that if the measured ambient noise level at any given location differs from those levels set forth in Schedule A, the allowable noise exposure standard shall be adjusted in five dBA increments in each category as appropriate to encompass or reflect the ambient noise level.

Schedule A		
Receiving Zone	**Noise Level (dBA)**	
	7:00am – 10:00 pm	**10:00 pm – 7:00 am**
Single-family and duplex residential	55	50
Multiple-family residential, public space	55	50
Commercial, Office	65	60
Light Industrial	70	70
Heavy Industrial	75	75

Section 9.10.230 prohibits construction activities permitted within 300 feet of residentially zoned property except within the hours of 7:00 a.m. and 6:00 p.m. on weekdays and 9:00 a.m. and 6:00 p.m. on Saturdays. No construction is permitted on Sundays or holidays. Section 9.10.070 exempts construction activities which occur during allowed hours from Schedule A noise limits.

The SCCC does not define the acoustical time descriptor such as L_{eq} (the average noise level) or L_{max} (the maximum instantaneous noise level) that is associated with the above limits. A reasonable interpretation of the SCCC would identify the ambient base noise level criteria as an average or median noise level (L_{eq}/L_{50}).

4.13.1.2 *Existing Conditions*

Noise in the project area is generated primarily by traffic on The Alameda and the surrounding roadways. Based on field surveys conducted by Illingworth and Rodkin on Monday September 12, 2022 the average noise on-site ranged from 54 to 63 dBA on average throughout the day.[47] Because the site is vacant, there are no noise-generating activities on-site.

The project site is located approximately 0.85 miles west of the nearest airport, Norman Y. Mineta International Airport. The site is outside the 60 dBA contour for the airport noise impacts.[48]

4.13.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
1) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
2) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
3) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Impact NOI-1:	**As mitigated, the project would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Less than Significant Impact with Mitigation Incorporated)**

Construction Noise

Construction of the proposed project would take place over the course of approximately one and a half years with construction proposed from 7:00 am to 6:00 pm Monday through Friday. The excavation on-site would remove approximately 7,400 cubic yards of soil. The proposed project would not require demolition, or foundation construction involving pile driving. During each phase

[47] Illingworth and Rodkin. 2655 The Alameda Noise and Vibration Assessment. September 19, 2022.
[48] Bridgenet International. Norman Y. Mineta San Jose International Airport Noise Assessment for the Master Plan Environmental Impact Report. October 2019.

of construction, there would be a different mix of equipment operating, and noise levels would vary, based on the amount of equipment and the location at which the equipment is operating. The SCCC limits construction activities (including the loading and unloading of materials and truck movements) within 300 feet of residentially zoned property to the hours of 7:00 a.m. to 6:00 p.m. on weekdays and between the hours of 9:00 a.m. and 6:00 p.m. on Saturdays. No construction is permitted on Sundays or holidays.

The City of Santa Clara does not establish noise level thresholds for construction activities. As an alternative, this analysis uses the noise limits established by the FTA to identify the potential for impacts due to substantial temporary construction noise. The FTA identifies construction noise limits in the Transit Noise and Vibration Impact Assessment Manual. During daytime hours, an exterior threshold of 80 dBA Leq shall be enforced at residential land uses and 90 dBA Leq shall be enforced at commercial and industrial land uses.

The typical range of maximum instantaneous noise levels for the proposed project would be 70 to 90 dBA Lmax at a distance of 50 feet from the equipment. Construction-generated noise levels drop off at a rate of about six dBA per doubling of the distance between the source and receptor. Obstruction by buildings or landmass would often result in lower construction noise levels at distant receptors.

Equipment expected to be used in each construction phase is summarized in Table 4.13-2, along with the quantity of each type of equipment, the reference noise level at 50 feet assuming the operation of the two loudest pieces of construction equipment, and the estimated noise levels at the nearest property lines projected from the center of the construction activity by phase.

Table 4.13-2 Construction Noise Levels

Phase (Work Days)	Construction Equipment (Quantity)	Calculated Hourly Average Leq (dBA) From Operation of Two Loudest Pieces of Construction Equipment		
		50 feet	70 feet	100 feet
Site Preparation (1 day)	Tractor/Loader/Backhoe (1)	80	77	74
Grading (44 days)	Excavator (1) Tractor/Loader/Backhoe (1)	82	79	76
Trenching (124 days)	Crane (1) Forklift (2)	74	71	68
Building – Exterior (163 days)	Crane (1) Welder (1) Forklift (1)	75	72	69
Building – Interior (138 days)	Air Compressor (4)	77	74	71
Paving (28 days)	Paver (1) Paving Equipment (1) Roller (1) Tractor/Loader/Backhoe (2) Concrete Saw (1)	85	82	79

Source: Illingworth and Rodkin. 2655 The Alameda Noise and Vibration Assessment. September 19, 2022.

As shown in Table 4.13-2, construction noise levels would range from 74 to 85 dBA Leq at a distance of 50 feet. The nearest receptors to the west are about 70 feet from the project boundary, while the nearest receptors to the northeast are approximately 100 feet from the site. Construction noise levels would exceed the exterior threshold of 80 dBA Leq at residential land uses to the west during the paving phase when activities occur within a distance of 90 feet. Construction noise levels would not exceed 90 dBA Leq at commercial land uses in the project vicinity. Since project construction would last approximately one and a half years and, at times, produce noise levels exceeding 80 dBA Leq at nearby residences, this construction impact would be considered significant.

IMPACT NOI–1.1 Construction of the proposed project would result in construction noise exceeding 80 dBA at residential uses near the project site.

Mitigation Measure

MM-NOI 1.1-1 Project construction operations shall use best available noise suppression devices and techniques including, but not limited to the following:

- Limit construction hours to between 7:00 a.m. and 6:00 p.m. on weekdays and between the hours of 9:00 a.m. and 6:00 p.m. on Saturdays. No construction is permitted on Sundays or holidays.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Prohibit unnecessary idling of internal combustion engines.
- 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.
- 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 business, residences, and other noise-sensitive land uses of the construction schedule, in writing, and provide a written schedule of “noisy” construction activities to adjacent land uses and nearby residences.
- 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 will require that reasonable measures be implemented to current the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

With the implementation of the above measures, the construction noise impact would be reduced to a less than significant level.

Operational Noise

During operation of the proposed project, a significant impact would occur if the permanent noise level increase due to project-generated traffic was three dBA CNEL or greater for future ambient noise levels exceeding 60 dBA CNEL. Additionally, the City Code establishes noise level performance standards for fixed sources of noise. Section 9.10.40 of the City Code limits noise levels at residences to 55 dBA during daytime hours (7:00 a.m. to 10:00 p.m.) and 50 dBA at night (10:00 p.m. to 7:00 a.m.). The primary two sources of operational noise would result from new traffic trips and mechanical equipment located throughout the project site.

Traffic Noise

Based on the project trip generation, estimated as a part of the transportation assessment conducted by Hexagon Transportation Consultants, the project would result in 214 new trips per day, with 15 new trips in the AM peak hour and 19 new trips in the PM peak hour. This small increase in daily/hourly trips would not measurably increase traffic noise levels along The Alameda or Park Avenue. Noise from vehicles utilizing the driveway would be similar to existing noise levels produced by surface parking at the Safeway Center, and noise occurring in the below grade parking garage would be less. The overall change in the noise environment due to vehicles associated with the project would be approximately zero dBA CNEL.

Mechanical Equipment

Mechanical equipment for heating, ventilation, and cooling purposes, exhaust fans, and other similar equipment would likely be located on the roof of the proposed building within mechanical equipment wells. The primary noise sources on the roof of the building would be the air conditioning condensing units, which would run intermittently based on the heating or cooling needs. To represent a worst-case scenario, up to eight clustered units were modeled to run continuously, producing hourly average noise levels of 75 dBA Leq at a distance of three feet. The nearby receptors would not have direct line-of-sight to the rooftop equipment; therefore, worst-case noise levels were calculated to be 33 dBA Leq or less assuming the distance from the equipment to the receivers and the shielding provided by the rooftop edge of the building. The associated noise levels from the mechanical equipment would be 39 dBA CNEL or less at the nearest receptor to the west, which would not exceed the daytime or nighttime City Code noise limits, nor measurably contribute to ambient noise levels in the project vicinity.

The project also proposes two mechanical equipment rooms within the underground parking garage (for a boiler, electrical equipment, etc.). The underground location of this equipment would provide adequate shielding for all surrounding noise-sensitive receptors and would not result in increase to ambient noise during operations.

While the project, as designed, would not result in significant operational noise impacts, the following Condition of Approval will be required to further reduce noise levels.

Condition of Approval

- As a project condition of approval, mechanical equipment shall be selected and designed to reduce noise levels to meet the City Code requirements at the nearby noise-sensitive land uses. A qualified acoustical consultant shall be retained to review mechanical noise as these systems are selected to determine specific noise reduction measures necessary to reduce noise to comply with the City Code noise level requirements. 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 the nearest receptors. Other alternate measures may be optimal, such as locating equipment in less noise-sensitive areas, such as along the building façades farthest from adjacent neighbors, where feasible.

Due to the size of the project, the operational noise levels produced by the project would be well below ambient noise levels produced by local vehicle traffic, and would not substantially increase the ambient noise environment at the nearest noise-sensitive receptors, resulting in a less than significant impact.

Impact NOI-2:	**The project would not result in generation of excessive groundborne vibration or groundborne noise levels. (Less than Significant Impact)**

Construction Vibration

The construction of the project may result in vibration that can be felt at surrounding buildings when heavy equipment or impact tools are used during site preparation, grading, trenching, building construction, and paving. Foundation work would not involve impact or vibratory pile driving equipment, which can cause excessive vibration.

No known ancient ruins or monuments or buildings that are documented to be structurally weakened adjoin the project area and the nearest historic building is the John C. McPherson House located approximately 1,200 feet to the west at 561 Washington Street. Therefore, since the buildings surround the site are structurally stable, groundborne vibration levels exceeding 0.3 in/sec PPV would have the potential to result in a significant vibration impact at standard construction buildings in the site vicinity.

Vibration levels vary depending on soil conditions, construction methods, and equipment used. Project construction activities, such as drilling, the use of jackhammers, rock drills and other high-power or vibratory tools, and tracked vehicles may generate substantial vibration in the immediate vicinity of the project site. Vibratory levels of common construction equipment are summarized in Table 4.13-3 along with the expected vibratory levels at areas around the project site.

Table 4.13-3 Vibration Levels for Construction Equipment					
Equipment		**PPV at 25 feet (in/sec)**	**Estimated Vibration Levels at Structures Surrounding the Project Site, in/sec PPV**		
			West Residential (80 feet)	**Northeast Educational (120 feet)**	**South Commercial (240 feet)**
Clam shovel drop		0.202	0.056	0.036	0.017
Hydromill (slurry wall)	In Soil	0.008	0.002	0.001	0.001
	In Rock	0.017	0.005	0.003	0.001
Vibratory Roller		0.210	0.058	0.037	0.017
Hoe Ram		0.089	0.025	0.016	0.007
Large bulldozer		0.089	0.025	0.016	0.007
Caisson drilling		0.089	0.025	0.016	0.007
Loaded trucks		0.076	0.021	0.014	0.006
Jackhammer		0.035	0.010	0.006	0.003
Small bulldozer		0.003	0.001	0.001	0.000
Source: Illingworth and Rodkin. 2655 The Alameda Noise and Vibration Assessment. September 19, 2022.					

Vibration levels are highest close to the source, and then decrease with distance from the project site. Table 4.13-3 above shows that the nearest uses (80 to 240 feet from the site) would experience vibratory impacts less than the 0.3 in/sec PPV threshold. At these locations, and in other surrounding areas where vibration would not be expected to cause cosmetic damage, vibration levels may still be perceptible. However, as with any type of construction, this is anticipated and would not be considered significant, given the intermittent and short duration of the phases that have the highest potential of producing vibration (use of jackhammers and other high-power tools). Therefore, the proposed project would result in less than significant construction vibrations.

Operational Vibration

The proposed project would not operate vibration generating machinery on-site and would not result in continued heavy truck traffic post-construction which could cause vibration at surrounding areas. Therefore, the proposed project would not result in operational vibratory impacts.

Impact NOI-3: The project would be located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has been adopted, within two miles of a public airport or public use airport. The project would not expose people residing or working in the project area to excessive noise levels. (Less than Significant Impact)

The proposed project is located within one mile of the Norman Y. Mineta Airport. Although the project site is near to the airport, the site is located outside the 60 dBA aircraft noise contour and would not result in the exposure of people residing or working in an area with excessive noise. Therefore, the proposed project would have a less than significant impact in relation to aircraft noise impacts.

4.13.3 Non-CEQA Effects

Per *California Building Industry Association v. Bay Area Air Quality Management District,* 62 Cal. 4th 369 *(BIA v. BAAQMD)*, effects of the environment on the project are not considered CEQA impacts. The following discussion is included for informational purposes only because the City of Santa Clara has policies that address existing noise conditions affecting a proposed project.

Exterior Noise Environment Effects on New Residents

The future noise environment at the site would continue to result primarily from vehicular traffic along nearby roadways. This analysis conducted as part of the Noise and Vibration Assessment conservatively assumes that the noise would be approximately 67 dBA CNEL at about 45 feet from the center of The Alameda and 64 dBA CNEL at about 25 feet from the center of Park Avenue.

The centrally located courtyard for residential use on the second floor and partially shielded outdoor residential patios on the third and fourth floors are the primary outdoor spaces which new residents would use for recreation. Future exterior noise levels at the courtyard would be attenuated by the building itself and were calculated to be 58 to 60 dBA CNEL. The unshielded outdoor patios facing The Alameda would be exposed to exterior noise levels reaching approximately 65 dBA CNEL, however residents would have the option of selecting the lower noise courtyard for a quiet outdoor environment.

Exterior noise levels would exceed the City's 55 dBA CNEL "compatible" threshold without additional noise control. This would be in conflict with General Plan policy 5.10.6-P2 which requires noise attenuation for sounds exceeding "normally acceptable" levels.

Condition of Approval

- The project would be required to implement one or more design features which would reduce the ambient noise levels at the primary outdoor spaces below the City's 55 dBA CNEL threshold. This could include closing off the open side of the building (i.e., putting up a wall with sealed windows on each floor with a central courtyard or occupiable open space area) or other measures. The design features will be determined during the building permit stage in consultation with City staff and an acoustical professional. Once the design features are determined, the acoustical professional will be required to provide the City with a report demonstrating the effectiveness of the measure(s) to meet the City's applicable noise threshold. This report must be reviewed and approved prior to the issuance of any building permits.

Future Interior Noise Environment Effects on New Residents

Standard residential design provides approximately 15 dBA of exterior-to-interior noise reduction, assuming the windows are partially open for ventilation. Standard design with the windows closed provides approximately 20 to 25 dBA of noise reduction in interior spaces. Where exterior noise levels range from 60 to 65 dBA CNEL, the inclusion of adequate mechanical ventilation would reduce interior noise levels by closing the windows to control noise. Where noise levels exceed 65 dBA CNEL, mechanical ventilation systems and other noise reducing design features, such as

smaller window and door sizes, sound-rated windows and doors, and sound-rated exterior wall assemblies, are normally required.

The worst-case exterior noise exposure would occur at the units nearest the intersection of The Alameda and Park Avenue where the traffic noise levels would reach approximately 68 dBA CNEL. Assuming windows are partially open for ventilation, future interior noise levels in these units would reach approximately 53 dBA CNEL.

Street level retail shops are proposed at the north end of the site where noise levels are calculated to reach 68 dBA CNEL. Standard design features for commercial uses would provide about 25 dBA of noise reduction in interior spaces. Additionally, the inclusion of adequate mechanical ventilation systems is normally required so that windows may be kept closed to reduce noise by an additional five dBA. With these standard design features incorporated the commercial spaces would not exceed the interior daytime threshold of 50 dBA Leq.

Conditions of Approval

The following noise insulation features shall be incorporated into the proposed project to reduce interior noise levels to 45 dBA CNEL or less at residential interiors consistent with General Plan Policy 5.10.6-P2:

- Provide a suitable form of forced-air mechanical ventilation, as determined by the City's local Building Official, so that windows can be kept closed at the occupant's discretion to control interior noise and achieve the interior noise standards. Preliminary calculations indicate that worst-case units on the perimeter of the building would require windows and doors having a minimum rating of 26 to 30 STC in order to achieve the interior noise threshold of 45 dBA CNEL.
- A qualified acoustical specialist shall prepare a detailed analysis of interior residential noise levels resulting from all exterior sources during the design phase pursuant to requirements set forth in the Santa Clara General Plan and California Building Code. The study will review the final site plan, building elevations, and floor plans prior to construction and recommend building treatments to reduce residential interior noise levels to 45 dBA CNEL or lower. Treatments would include, but are not limited to, sound-rated windows and doors, sound-rated wall and window constructions, acoustical caulking, protected ventilation openings, etc. The specific determination of what noise insulation treatments are necessary shall be conducted on a unit-by-unit basis during final design of the project. Results of the analysis, including the description of the necessary noise control treatments, shall be submitted to the City, along with the building plans and approved design, prior to issuance of a building permit.

4.14 POPULATION AND HOUSING

4.14.1 Environmental Setting

4.14.1.1 *Regulatory Framework*

State

Housing-Element Law

State requirements mandating that housing be included as an element of each jurisdiction's general plan is known as housing-element law. The Regional Housing Need Allocation (RHNA) is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its housing element. California housing-element law requires cities to: 1) zone adequate lands to accommodate its RHNA; 2) produce an inventory of sites that can accommodate its share of the RHNA; 3) identify governmental and non-governmental constraints to residential development; 4) develop strategies and a work plan to mitigate or eliminate those constraints; and 5) adopt a housing element and update it on a regular basis.[49] The City of Santa Clara Housing Element and related land use policies were last updated in 2015.

Regional and Local

Plan Bay Area 2050

Plan Bay Area 2050 is a long-range plan for the nine-county San Francisco Bay Area that provides strategies that increase the availability of affordable housing, support a more equitable and efficient economy, improve the transportation network, and enhance the region's environmental resilience. Plan Bay Area 2050 promotes the development of a variety of housing types and densities within identified Priority Development Areas (PDAs). PDAs are areas generally near existing job centers or frequent transit that are locally identified for housing and job growth.[50]

ABAG allocates regional housing needs to each city and county within the San Francisco Bay Area, based on statewide goals. These allocations are designed to lay the foundation for Plan Bay Area 2050's long-term envisioned growth pattern for the region. ABAG also develops a series of forecasts and models to project the growth of population, housing units, and jobs in the Bay Area. ABAG, MTC, and local jurisdiction planning staff created the Forecasting and Modeling Report, which is a technical overview of the growth forecasts and land use models upon which Plan Bay Area 2050 is based.

Santa Clara General Plan

General Plan policies related to population and housing that are relevant to the project include the following.

[49] California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed December 9, 2020. http://hcd.ca.gov/community-development/housing-element/index.shtml.

[50] Association of Bay Area Governments and Metropolitan Transportation Commission. *Plan Bay Area 2050*. October 21, 2021. Page 20.

Policy	Description
5.3.2-P1	Encourage the annual construction of the housing units necessary to meet the City's regional housing needs assessment by reducing constraints to housing finance and development.
5.3.2-P2	Encourage higher-density residential development in transit and mixed-use areas and in other locations throughout the City where appropriate.
5.3.2-P6	Provide adequate choices for housing tenure, type and location, including higher density, and affordability for low- and moderate-income and special needs households.

4.14.1.2 *Existing Conditions*

According to the California Department of Finance, the City had a population of approximately 130,127 residents in 48,391 households as of May 2022.[51] Of the 130,127 residents, approximately 50 percent are employed residents.[52] There are approximately 137,000 jobs in the City (estimated by ABAG for 2020). In 2035, it is estimated that the City will have approximately 154,825 residents, 54,830 households, 154,300 jobs and 72,080 employed residents.[53]

The jobs/housing relationship is quantified by the jobs/employed resident ratio. When the ratio reaches 1.0, a balance is struck between the supply of local housing and jobs. The jobs/housing resident ratio is determined by dividing the number of local jobs by the number of employed residents that can be housed in local housing.

The City of Santa Clara had an estimated 2.50 jobs for every employed resident in 2010.[54] The General Plan focuses on increased housing and the placement of housing near employment. As a result, the jobs to housing ratio is projected to slightly decrease to 2.48 by 2040.[55] Some employees who work within the City are, and still would be, required to seek housing outside the community with full implementation of the General Plan.

The existing project site is vacant and does not contribute to the current permanent resident population of the City.

[51] California Department of Finance. "E-5 City/County Population and Housing Estimates." May 2022. Accessed: June, 2022. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/.
[52] Association of Bay Area Governments. Plan Bay Area: Projections 2013. December 2013.
[53] City of Santa Clara. 2010-2035 General Plan. December 2014.
[54] City of Santa Clara 2010-2035 General Plan. December 2014. Appendix 8.12 (Housing Element). Page 8.12-25.
[55] City of Santa Clara 2010-2035 General Plan Final Environmental Impact Report. 2011.

4.14.2 Impact Discussion

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

Impact POP-1: The project would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). (Less than Significant Impact)

The project site is currently undeveloped. The proposed project would result in an increase of approximately 1,540 square feet of commercial space and 39 residential units on-site. The 39 residential units would result in approximately 102 residents, a net increase of approximately 65 residents over the maximum residential development assumed for the site in the General Plan.[56] This would be a minimal increase in the overall population of the City of Santa Clara and would be generally consistent with the City's planned growth. For these reasons, the proposed development project would not result in substantial unplanned population growth.

Impact POP-2: The project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. (No Impact)

The proposed project would develop a vacant site and would not result in the demolition of existing housing. Therefore, the proposed project would not result in impacts from the displacement of existing population or housing.

[56] 39 residential units x 2.61 residents per unit = 102 residents
Source: California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2022, available at http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/, accessed July 21, 2022.

4.15 PUBLIC SERVICES

4.15.1 Environmental Setting

4.15.1.1 *Regulatory Framework*

State

Quimby Act-California Code Section 66477

The Quimby Act (California Government Code Section 66477) was approved by the California legislature to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees due in lieu of parkland dedication to help mitigate the impacts from new residential developments. This legislation was initiated in 1980's 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 residential subdivisions to dedicate parkland, pay a fee in-lieu of parkland dedication, or perform a combination of the two at the discretion of the City.

Mitigation Fee Act.

In 1989, the State Legislature passed Assembly Bill 1600 (AB1600), adding Section 66000 et seq. to the California Government Code (the "Mitigation Fee Act"), which sets forth requirements for local agencies to follow if they collect fees from developers to defray the cost of the construction of public facilities related to development projects. These legal requirements are frequently referred to as "AB 1600 requirements." Each local agency imposing such development impact fees must prepare an annual report providing specific information about these fees (i.e., a "nexus study") that shows the proper connection of the fees to the project and how accounting and reporting for the fees collected are regulated.

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 set forth provisions for the payment of school impact fees by new development for "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 projects. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

Regional and Local

City of Santa Clara 2010 – 2035 General Plan

The City of Santa Clara 2010-2035 General Plan includes policies and programs to provide public services throughout the City. Applicable General Plan policies include, but are not limited to, the following listed below.

Policies	Description
Parks, Open Space and Recreation	
5.4.3-P3	Provide pedestrian-oriented ground floor uses and a network of parks and public spaces to serve both residential and non-residential development.
5.9.3-P1	Encourage design techniques that promote public and property safety in new development and public spaces.
5.9.1-P2	Develop new parks to serve the needs of the surrounding community based on the criteria for mini (less than one acre, appropriate for all areas), neighborhood (1-15 acres, appropriate for medium- and high-density residential areas serving individual neighborhoods), and community (over 15 acres, appropriate for medium- and high-density residential areas serving the City as a whole) parks.
5.9.3-P3	Maintain a City-wide average three minute response time for 90 percent of police emergency service calls.
5.9.3-P4	Maintain a City-wide average three minute response time for fire emergency service calls.
5.9.1-P5	Encourage public visibility for all parks, trails and open spaces.
5.9.1-P14	Encourage publicly accessible open space in new development.
5.9.1-P15	Provide opportunities for private maintenance of publicly accessible open space and trails.
5.9.1-P17	Foster site design for new development so that building height and massing do not overshadow new parks and plazas.
5.9.1-P18	Promote open space and recreational facilities in large-scale developments in order to meet a portion of the demand for parks generated by new development.
5.9.1-P20	Promote the continuation of parks per population ratio of 2.4 per 1,000 residents and explore the potential to increase the ratio to 3.0, based on the Parks and Recreation Needs Assessment (Parks Master Plan), referenced in Plan Prerequisite 5.1.1-P24.

Countywide Trails Master Plan

The Santa Clara County Trails Master Plan Update is a regional trails plan approved by the Santa Clara County Board of Supervisors. It provides a framework for implementing the County's vision of providing a contiguous trail network that connects cities to one another, cities to the county's regional open space resources, County parks to other County parks, and the northern and southern urbanized regions of the County. The plan identifies regional trail routes, sub-regional trail routes, connector trail routes, and historic trails.

City of Santa Clara City Code Chapter 17.35

On July 15, 2014, the Santa Clara City Council adopted Ordinance Number 1928 adding Chapter 17.35 ("Park and Recreational Land") to Title 17 ("Development") of the SCCC. New residential developments are required to provide adequate park and recreational facilities and/or pay a fee in-lieu

of parkland dedication at the discretion of the City, pursuant to the Quimby Act and/or Mitigation Fee Act, to mitigate the impacts of the new residential demand. For subdivisions of 50 units or less, the City may accept a fee in-lieu of the parkland dedication requirement.

The purpose of SCCC Chapter 17.35 is to help mitigate the impacts of new housing development growth on existing parkland and recreational facilities subject to the provisions of the State of California Quimby Act (Quimby) and/or the California Mitigation Fee Act (MFA). Chapter 17.35 requires new residential developments to provide developed park and recreational land and/or pay a fee in lieu of parkland dedication, at the discretion of the City. The City is meeting the parkland dedication standard of three acres per 1,000 residents per the Quimby provisions of the SCCC and 2.6 acres per 1,000 residents per the MFA provisions of the SCCC with regard to neighborhood parks.

4.15.1.2 *Existing Conditions*

Fire Service

Fire protection services for the project site are provided by the City of Santa Clara Fire Department (SCFD). The SCFD consists of 10 stations (Station 10 is temporarily closed and being relocated) distributed throughout the City. The Fire Department responds with highly trained and equipped personnel to emergency scenes, maintaining a City-wide response time of less than 5:30 minutes to 90% of all high-level emergency calls. Response time is measured from time of dispatch to the time of arrival at the call. The closest fire station to the project site is Station 1, located at 777 Benton Street, approximately 0.45 miles northwest of the project site.

Police Service

Police protection services are provided by the City of Santa Clara Police Department (SCPD). Police headquarters are located at 601 El Camino Real, approximately 0.47 miles northeast of the project site.

Schools

The project site is located within the Santa Clara Unified School District (SCUSD). The nearest public schools to the project site are Washington Open Elementary School, located at 270 Washington Street (approximately 0.28 miles southwest of the site), Buchser Middle School, located at 1111 Bellomy Street (approximately 0.26 miles west of the site), and Wilson High School, located at 1840 Benton Street (approximately 0.9 miles northwest of the site).

Parks

The Santa Clara Parks and Recreation Department (Department) provides parks and recreational services in the City. The department is responsible for maintaining and programming the various parks and recreation facilities and works cooperatively with public agencies in coordinating all recreational activities within the City. Overall, as of July 2022, the Department maintains and operates Central Park, a 45.04-acre community park (45.04 acres improved and Central Park North 34.93 acres unimproved, resulting in 79.97 acres), 30 neighborhood parks (121.26 acres improved and 9.39 acres unimproved resulting in 130.65 acres), 13 mini parks (2.69 acres improved and 3.189

acres unimproved resulting in 5.88 acres), public open space (16.32 acres improved and 40.08 acres unimproved resulting in 56.40 acres), recreational facilities (23.90 acres improved and excluding the BMX track), recreational trails (7.59 acres improved and 0.20 acres unimproved resulting in 7.79 acres), and joint use facilities (48.59 acres) throughout the City totaling approximately 265.39 improved acres and 87.79 unimproved acres. Community parks are over fifteen acres, neighborhood parks are one to fifteen acres and mini parks are typically less than one acre in size.

SCCC Chapter 17.35 requires new residential developments to provide developed park and recreational land and/or pay a fee in-lieu of parkland dedication, at the discretion, of the City, and pursuant to the State of California Quimby Act (Quimby) and/or the Mitigation Fee Act (MFA) to help mitigate the impacts of the new resident demand on existing parkland and recreational facilities. The City is meeting the standard of three acres per 1,000 residents per the Quimby provisions of the SCCC and 2.60 acres per 1,000 residents per the MFA provisions of the SCCC with regard to neighborhood parks.

The nearest public parks and mini parks to the project site are Elmer Johnson Field, Townsend Field, War Memorial Park and the Washington Park, all of which are located at 295 Monroe Street (approximately 0.35 miles southwest of the site). These are more than a 10-minute walk from the project site.

Libraries

The City of Santa Clara is served by the Central Park Library located at 2635 Homestead Road, the Mission Library Family Reading Center located at 1098 Lexington Street, and the Northside Branch Library located at 695 Moreland Way. The nearest library is Mission Library Family Reading Center approximately 0.37 miles away at 1098 Lexington Street.

4.15.2 Impact Discussion

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

Impact PS-1:	**The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services. (Less than Significant Impact)**

The certified General Plan EIR concluded that the existing fire station facilities have capacity to absorb additional fire personnel without the need to expand or construct new facilities.[57] The General Plan Amendment proposed by the project would facilitate the expansion of housing on the project site beyond that planned for in the General Plan. As described above in Population and Housing section, the proposed project would result in a net increase of approximately 102 residents compared to existing conditions, and an increase of 65 residents over the maximum residential development assumed for the site in the General Plan. This would represent an incremental increase in the demand for fire protection services.

The project site is within the service area of SCFD and while the project would result in a higher residential density than previously assumed, the additional 65 residents could be served by existing facilities without requiring the construction of new or altered facilities because any additional staffing required for the increase in population could be accommodated within the existing fire facilities.[58] In addition, the proposed project would be constructed in accordance with current fire codes, including those specifying emergency vehicle access and reduction of fire hazards and would pay fees for the expansion of fire services. Therefore, the proposed development project would result in a less than significant impact on fire protection services.

Impact PS-2:	**The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection services. (Less than Significant Impact)**

As described in Impact PS-1, the project would result in a minimal population increase and resultant increase in demand for public services, including police protection. The General Plan FEIR concluded that, if additional police officers are needed, they could be housed in the existing facilities. The proposed development project would result in a General Plan Amendment which would facilitate the expansion of housing on-site, and add 65 residents above the General Plan projection. Although the proposed project would result increase the population beyond the level analyzed in the General Plan FEIR, the General Plan concluded that existing facilities have capacity for expansion of staff and resources without the need for new facilities. There would be no need for the construction of new

[57] City of Santa Clara. *2010-2035 General Plan Integrated Final Environmental Impact Report. SCH# 2008092005*. January 2011. Pages 206 to 207.
[58] City of Santa Clara. 2010-2035 General Plan Integrated Final Environmental Impact Report. SCH# 2008092005. January 2011. Pages 209.

or expanded facilities.[59] The project would be adequately served by existing police protection facilities. Therefore, the proposed development project would result in a less than significant impact on police protection services.

Impact PS-3:	**The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools. (Less than Significant Impact)**

The project site is located within the service area of the SCUSD. The General Plan FEIR concluded that the planned increase in City residents will eventually require the construction of additional school facilities.[60] However, the SCUSD currently has four closed school sites that could be employed to serve students generated by new residential development.[61]

A net increase of three residential units at the project site over General Plan assumptions would result in approximately one student who would attend local schools.[62] The total number of students generated by the project is estimated to be approximately 19 students. The addition of 19 students would be incremental and would not result in a substantial adverse impact on school facilities, nor would it require the construction of new facilities. In addition, the proposed development project would be required to pay school impact fees consistent with AB1600.

Impact PS-4:	**The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks. (Less than Significant Impact)**

. The proposed project will contribute to an increase in demand for parkland. The increased population associated with the proposed project would contribute to increased use of existing parks near the project site. Increased use of local parks could potentially lead to physical deterioration of park facilities. The proposed project would not dedicate any public parkland and will be required to pay a fee in-lieu for parkland dedication to help offset the impacts of the new resident demand on existing parkland and recreational facilities. Therefore, the proposed development project would result in a less than significant impact.

[59] City of Santa Clara. *2010-2035 General Plan Integrated Final Environmental Impact Report. SCH# 2008092005.* January 2011. Page 207.
[60] City of Santa Clara. 2010-2035 General Plan. December 2014.
[61] City of Santa Clara. 2010-2035 General Plan Integrated FEIR. January 2011. Page 208
[62] 0.5 students per household for apartment units: 0.5 x 39 units = ~ 19 students
Enrollment projection consultants. Projected Enrollments January 17, 2020. Page 16.

Impact PS-5:	**The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities. (Less than Significant Impact)**

The addition of approximately 102 residents on-site (65 residents more than what was assumed in the General Plan) would result in an incremental increase in demand for public library facilities. The increase would not, however, result in substantial adverse impacts to existing library, or other, facilities, and would not require the construction of new facilities. The addition of up to 65 additional residents in the City beyond the existing General Plan designation would not cause the City to fall below their service goals for library services. If, however, a new library is required in the future, that development would require its own environmental analysis which would determine the impacts of the construction of the facilities.

4.16 RECREATION

4.16.1 Environmental Setting

4.16.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Mitigation Fee Act.

In 1989, the State Legislature passed Assembly Bill 1600 (AB1600), adding Section 66000 et seq. to the California Government Code (the "Mitigation Fee Act"), which sets forth requirements for local agencies to follow if they collect fees from developers to defray the cost of the construction of public facilities related to development projects. These legal requirements are frequently referred to as "AB 1600 requirements." Each local agency imposing such development impact fees must prepare an annual report providing specific information about these fees (i.e., a "nexus study") that shows the proper connection of the fees to the project and how accounting and reporting for the fees collected are regulated.

Local

City of Santa Clara 2010 – 2035 General Plan

The City of Santa Clara 2010-2035 General Plan includes policies and programs to provide public services throughout the City. Applicable General Plan policies include, but are not limited to, the following listed below.

Policies	Description
5.1.1-P20	Prior to 2023, identify the location for new parkland and/or recreational facilities to serve employment centers and pursue funding to develop these facilities by 2035.
5.9.1-P2	Develop new parks to serve the needs of the surrounding community based on the criteria for mini (less than one acre, appropriate for all areas), neighborhood (1-15 acres, appropriate for medium- and high-density residential areas serving individual neighborhoods), and community (over 15 acres, appropriate for medium- and high-density residential areas serving the City as a whole) parks.
5.9.1-P5	Encourage public visibility for all parks, trails and open spaces.
5.9.1-P14	Encourage publicly accessible open space in new development.
5.9.1-P15	Provide opportunities for private maintenance of publicly accessible open space and trails.
5.9.1-P17	Foster site design for new development so that building height and massing do not overshadow new parks and plazas.

5.9.1-P18	Promote open space and recreational facilities in large-scale developments in order to meet a portion of the demand for parks generated by new development.
5.9.1-P20	Promote the continuation of parks per population ratio of 2.4 per 1,000 residents and explore the potential to increase the ratio to 3.0, based on the Parks and Recreation Needs Assessment (Parks Master Plan), referenced in Plan Prerequisite 5.1.1-P24.

City of Santa Clara City Code Chapter 17.35

The purpose of SCCC Chapter 17.35 is to help mitigate the impacts of new housing development growth on existing parkland and recreational facilities subject to the provisions of the State of California Quimby Act (Quimby) and/or the California Mitigation Fee Act (MFA). Chapter 17.35 requires new residential developments to provide developed park and recreational land and/or pay a fee in lieu of parkland dedication, at the discretion of the City. The City is meeting the parkland dedication standard of 3.0 acres per 1,000 residents per the Quimby provisions of the SCCC and 2.6 acres per 1,000 residents per the MFA provisions of the SCCC for neighborhood parks.

4.16.1.2 *Existing Conditions*

The Santa Clara Parks and Recreation Department (Department) provides parks and recreational services in the City. The department is responsible for maintaining and programming the various parks and recreation facilities and works cooperatively with public agencies in coordinating all recreational activities within the City. Overall, as of December 2022, the Department maintains and operates Central Park, a 45.04-acre community park (45.04 acres improved and Central Park North 34.93 acres unimproved, resulting in 79.97 acres), 30 neighborhood parks (121.26 acres improved and 9.39 acres unimproved resulting in 130.65 acres), 13 mini parks (2.69 acres improved and 3.19 acres unimproved resulting in 5.88 acres), public open space (16.32 acres improved and 40.08 acres unimproved resulting in 56.40 acres), recreational facilities (23.90 acres improved and excluding the BMX track), recreational trails (7.59 acres improved and 0.20 acres unimproved resulting in 7.79 acres), and joint use facilities (48.59 acres) throughout the City totaling approximately 265.39 improved acres and 87.788 unimproved acres. Community parks are over fifteen acres, neighborhood parks are one to fifteen acres and mini parks are typically less than one acre in size.

The nearest public parks and mini parks to the project site are Elmer Johnson Field, Townsend Field, War Memorial Park and the Washington Park, located at 295 Monroe Street (approximately 0.35 miles southwest of the site). These are more than a 10-minute walk from the project site.

4.16.2 **Impact Discussion**

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

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
2) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Impact REC-1: The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. (Less than Significant Impact)

The proposed project would construct 39 apartments, which would generate additional residents who would increase the demand on parks..[63] The proposed project would contribute to an increase in demand for parkland and recreational facilities. The increased use of existing parks and recreational facilities near the project site could potentially lead to physical deterioration of park facilities. The proposed project would not dedicate any public parkland and will be required to pay a fee in-lieu of parkland dedication to help offset the impacts of the new resident demand on existing parkland and recreational facilities. Therefore, the proposed development project would result in a less than significant impact.

Impact REC-2: The project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. (No Impact)

The proposed project does not include the construction or expansion of parks or recreation facilities. and will be required to pay a fee in-lieu of parkland dedication to help offset the impacts of the new resident demand on existing parkland and recreational facilities. Therefore, the proposed project would not result in adverse physical effects on the environment through the expansion of parks or recreation facilities.

[63] For purposes of the City's parkland dedication requirements, the City relies upon census data to calculate the number of persons per household. For this calculation, the project will generate an estimated 94 residents (2.4 persons/household x 39 units). Based on the MFA standard of 2.6 acres / 1000 residents, the amount of public parkland required for the project is approximately 0.24 acres.

4.17 TRANSPORTATION

The information in this section is based in part on the Transportation Analysis prepared by Hexagon Transportation Consultants on August 23, 2022. This study is included as Appendix F of this document.

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

State

Regional Transportation Plan

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 2050 in October 2022, which includes a Regional Transportation Plan to guide regional transportation investment for revenues from federal, state, regional and local sources through 2050.

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a vehicle miles traveled (VMT) metric intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. Specifically, SB 743 requires analysis of VMT in determining the significance of transportation impacts. Local jurisdictions were required by Governor's Office of Planning and Research (OPR) to implement a VMT policy by July 1, 2020.

SB 743 did not authorize OPR to set specific VMT impact thresholds, but it did direct OPR to develop guidelines for jurisdictions to utilize. CEQA Guidelines Section 15064.3(b)(1) describes factors that might indicate whether a development project's VMT may be significant. Notably, projects located within 0.50 mile of transit should be considered to have a less than significant transportation impact based on OPR guidance.

Regional and Local

Congestion Management Program

Valley Transportation Authority (VTA) oversees the Congestion Management Program (CMP), which is aimed at reducing regional traffic congestion. The relevant state legislation requires that urbanized counties in California prepare a CMP in order to obtain each county's share of gas tax revenues. State legislation requires that each CMP define traffic LOS standards, transit service standards, a trip reduction and transportation demand management plan, a land use impact analysis program, and a capital improvement element. VTA has review responsibility for proposed development projects that are expected to affect CMP-designated intersections.

Climate Action Plan Transportation Demand Management

The City will require all new developments greater than 25 housing units or more than 10,000 nonresidential square feet to draft and implement a VMT reduction strategy that reduces drive-alone trips. The degree to which each project implements a Transportation Demand Management (TDM) program as part of the VMT reduction strategy will be based on the location and land use of the proposed project. The VMT reductions may be achieved through project design characteristics, land use, parking, access, or TDM best practices.

City of Santa Clara VMT Policy

The Santa Clara City Council adopted a VMT policy in compliance with SB 743 on June 23, 2020. The policy sets thresholds of significance for various land uses, using the countywide average VMT as the environmental baseline. To determine whether a project will have a significant transportation impact, project VMT is compared to the appropriate threshold. For residential land uses, the adopted threshold is 15 percent below the existing countywide VMT per capita. For employment uses, the adopted threshold is 15 percent below the existing countywide VMT per employee. For retail uses, the threshold is the existing countywide VMT for retail uses.

In addition to establishing the environmental baseline and thresholds of significance, the VMT policy establishes screening criteria for certain projects that are presumed to have a less than significant VMT impact. Projects which meet the screening criteria would not be required to quantify VMT and compare it to the City's adopted threshold. Projects which generate less than 110 daily vehicle trips or less would be screened out from a quantitative VMT analysis and would be presumed to have a less than significant VMT impact. Retail land uses providing 50,000 square feet or less would be presumed to be less than significant. Transit supportive projects which are located within VTA-mile of an existing major transit stop or an existing transit stop along a High Quality Transit Corridor[64] would also be presumed to be less than significant, provided that a minimum density of 35 units/acre is met for residential projects, a minimum FAR of 0.75 is met for office/R&D projects, no excess parking is provided, and no affordable dwelling units are replaced.

All proposed projects are required to undergo environmental review as part of the approval process. This includes an analysis of CEQA impacts (VMT) and non CEQA operational measures of intersection efficiency level of service (LOS). The City's VMT policy also establishes LOS as an operational measure of intersection efficiency, which is not defined as a transportation environmental impact per CEQA.

City of Santa Clara Bicycle Plan

The City of Santa Clara Final Bicycle Plan Update (2018) provides a bikeway planning and design tool, which contains the policy vision, design guidance, and specific recommendations to guide public and private investments in active transportation bicycle facilities and related programs.

City of Santa Clara Pedestrian Master Plan

[64] A high quality transit corridor is a corridor with fixed route bus service with service intervals that do not exceed 15 minutes during peak commute hours.

The Pedestrian Master Plan, approved February 25, 2020, is a forward-looking plan to capture the benefits of walking as the City anticipates growth and redevelopment. The plan establishes methods for safe, comfortable, convenient, active, and implementable goals to improve walkability and establish zones for improved pedestrian development.

4.17.1.2 *Existing Conditions*

The proposed project is located at the intersection of The Alameda and Park Avenue. Regional access to the project site is provided through Interstate 880 and Highway 101 which are south and northeast of the project site respectively. These regional roadways connect to The Alameda, El Camino Real, and Winchester Boulevard which provide access to local streets around the project site. The existing site is accessible via driveways located on Park Avenue and The Alameda.

Bicycle Facilities

There are bike lanes on The Alameda south of Park Avenue/Bellomy Street and on all of Park Avenue that connect cyclists from the project site to the surrounding areas. According to the Santa Clara Bicycle Master Plan Update 2018, Class IV separated bikeways are planned on El Camino Real, Class II bike lanes are planned on Bellomy Street from Park Avenue westward to connect to the existing bike lanes west of Washington Street, and a Class III bike route is planned on Market Street from The Alameda westward to connect to the existing bike lanes west of Lafayette Street.

Pedestrian Facilities

Pedestrian facilities in the project area consist of sidewalks and crosswalks. A continuous network of sidewalks is present along all of the surrounding streets. Crosswalks with pedestrian signals are located at all of the intersections in the area. At the Park Avenue/The Alameda intersection, crosswalks are available on the west and south legs of the intersection. There is also a midblock crossing on The Alameda at the Safeway driveway south of the site. Further, there are pedestrian crossings present on Park Avenue at unsignalized intersections in the project vicinity.

Transit Services

The VTA Frequent Route 22, which has a headway of 15 minutes during morning and evening peaks, runs along the El Camino Real/The Alameda corridor with the nearest bus stop approximately 1,400 feet from the site. Route 22 also stops at the Santa Clara Caltrain Station, which is approximately 0.6 mile from the project site and provides connections to heavy rail service, such as Altamont Corridor Express, Caltrain, Capitol Corridor.

4.17.2 Impact Discussion

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

Impact TRN-1: The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities. (Less than Significant Impact)

Transit Facilities

The proposed development project would increase the population on-site by approximately 102 people. This could increase the use of public transportation in the surrounding area. The additional transit users would not interfere with the normal operations of transit services and would not exceed the capacity of the existing transit operations. Therefore, the proposed development project would have a less than significant impact on transit services.

Roadways

The proposed project would contribute vehicle trips to the roadway network surrounding the project. The City of Santa Clara determined that, based on the trip generation rate of the proposed project, there would not be operational issues associated with these new trips. Additionally, the proposed project would not alter the roadway circulation network. Therefore, the proposed project would result in less than significant impacts on roadway operations.

Pedestrian Facilities

The proposed project would improve the sidewalks along the project frontages by planting trees in sidewalk wells and providing landscaping along the building frontages. According to the transportation assessment prepared by Hexagon Transportation Consultants, the existing curb ramps at the Park Avenue/The Alameda intersection along the project frontage do not include truncated domes, and the ramp slopes do not appear to meet the current Americans with Disabilities Act (ADA) requirement. However, during a site visit to the site conducted in late August, these ramps had been improved and included the ADA required features. The sidewalks and ADA curb ramps

would facilitate pedestrian movements between the project site and surrounding points of interest, such as bus stops. Therefore, the proposed project would not conflict with a program, plan, ordinance, or policy controlling pedestrian facilities.

Bicycle Facilities

The proposed development project would not remove existing bicycle facilities and would not interfere with existing plans, policies, or ordinances corresponding to bicycle facilities. The proposed project would provide secure bicycle storage in a bike room on the ground floor of the building with access from The Alameda and bike racks near the entrance to the retail space on Park Avenue. Therefore, the proposed project would enhance bicycle infrastructure on the project site and would not impact existing or planned bicycle facilities, such as local bike lanes.

Impact TRN-2: The project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). (Less than Significant Impact)

The OPR and City of Santa Clara VMT guidelines state that certain projects (including residential, retail, and office projects, as well as projects that are a mix of these uses) located within 0.5 miles of an existing major transit stop or an existing stop along a high-quality transit corridor would have a less than significant impact on VMT. A high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

The proposed project is located in a transit proximity area because it is located within a half mile of the El Camino Real transit corridor, which is considered a high-quality transit corridor. Additionally, the VTA Frequent Route 22 runs along El Camino Real with the nearest bus stop approximately 0.26 miles from the site and a frequency of 15 minutes during the morning and evening peaks. Route 22 also stops at the Santa Clara Caltrain Station, which is approximately 0.6 miles from the project site.

The proposed project would construct 39 residential units on the 0.4-acre site, which calculates to a density of 98 units per acre, exceeding the minimum density requirement. The City of Santa Clara Zoning Code (Section 18.22.260) states that residential units in mixed-use zoning districts are required to provide one parking space for each studio and one bedroom unit; one and one-half spaces for each two-plus bedroom unit, and three spaces per 1,000 square feet for retail. Based on these ratios the proposed project would be required to provide 51 parking spaces (49 for residential and five for retail). The proposed project would include 33 vehicle parking spaces with 30 used for the residential component and three for the retail. Therefore, the project would provide 30 percent fewer spaces than are required in the mixed-use zoning district.

Therefore, based on the density, proximity, and parking ratio of the proposed project, the proposed project would be consistent with the requirements for a low VMT, transit-oriented development project under OPR and City of Santa Clara VMT guidelines. Therefore, the proposed development project would result in a less than significant VMT impact.

Impact TRN-3:	**The project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). (Less than Significant Impact)**

The proposed development project would not alter the geometric design of the roadways surrounding the project and would not substantially change circulation of vehicles on the project site. Additionally, the proposed project would comply with design requirements as prescribed by the City of Santa Clara. Therefore, the proposed project would not substantially increase hazards due to geometric design features on-site and would not introduce incompatible uses.

Impact TRN-4:	**The project would not result in inadequate emergency access. (No Impact)**

The proposed development project would comply with the regulations of the City of Santa Clara emergency services and would ensure emergency access to the project site. The Alameda and Park Avenue would provide emergency vehicle access to all sides of the project building. Therefore, the proposed development project would provide adequate emergency access to the site and would have no impacts.

4.17.3 Non-CEQA Effects

While the evaluation of project CEQA impacts on the transportation system is based on VMT, in accordance with the City of Santa Clara Transportation Policy (Resolution No. 20-8861), the following discussion is included for informational purposes because the City of Santa Clara requires parking to be provided in quantities sufficient for the development.

Parking

The proposed development project would provide three parking spaces for the retail land uses and 30 parking spaces for the residential units. Parking for the residential units would be provided in the underground parking garage below the building. The proposed project would result in a greater than 25 percent reduction in parking, compared to the 51 parking spaces required in the Zoning Code. Therefore, the proposed project would require a variance in compliance with Zoning Code Section 18.90.020.

4.18 TRIBAL CULTURAL RESOURCES

4.18.1 Environmental Setting

4.18.1.1 *Regulatory Framework*

State

Assembly Bill 52

AB 52, effective July 2015, established a new category of resources for consideration by public agencies called Tribal Cultural Resources (TCRs). AB 52 requires lead agencies to provide notice of projects to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified. Where a project may have a significant impact on a tribal cultural resource, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or until it is concluded that mutual agreement cannot be reached.

Under AB 52, TCRs are defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
    - Included or determined to be eligible for inclusion in the California Register of Historic Resources, or
    - Included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).

A resource determined by the lead agency to be a TCR.

4.18.1.2 *Existing Conditions*

According to the City of Santa Clara General Plan, all parts of the City have the potential to contain subsurface archeological resources including tribal burial grounds.[65] The Tamien Nation has requested notification of projects in the City of Santa Clara under AB 52.

4.18.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				

[65] City of Santa Clara. General Plan 2010-2035 Integrated EIR. Page 327. January 2011

1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	☐	☒	☐	☐
2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Impact TCR-1: As mitigated, the project would not cause a substantial adverse change in the significance of a tribal cultural resource 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). (Less than Significant Impact with Mitigation Incorporated)

The project site does not contain any known tribal cultural resources listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). Additionally, a request for tribal consultation was conducted for the project on August 31st, 2022. None of the tribes contacted requested further consultation or mitigation. The project would not cause substantial adverse change in the significance of tribal cultural resources 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). Additionally, the proposed project would implement the measures identified in Section 4.5 Cultural Resources in the event that Native American resources are discovered. Therefore, the proposed project would result in a less than significant impact with mitigation incorporated.

Impact TCR-2: The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is 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. (Less than Significant Impact with Mitigation Incorporated)

The City of Santa Clara has not identified tribal cultural resources on the project site; therefore, the proposed project would not cause substantial adverse change in the significance of a tribal cultural resource as determined by the City. As stated above, if the proposed project encountered tribal resources the measures identified in Section 4.5 would be implemented to reduce impacts to a less than significant impact.

4.19 UTILITIES AND SERVICE SYSTEMS

4.19.1 Environmental Setting

4.19.1.1 *Regulatory Framework*

State

State Water Code

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 June 2021.

Assembly Bill 939

The California Integrated Waste Management Act of 1989, or 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

AB 341 sets forth the requirements of the statewide mandatory commercial recycling program. 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.

Senate Bill 1383

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 at least 20 percent of currently disposed edible food is recovered for human consumption by 2025.

California Green Building Standards Code

The California Green Building Standards Code (CALGREEN) 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 resources efficiency, and indoor environmental quality. These standards include the following mandatory set of measures, as well as more rigorous voluntary guidelines, 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 occupants.

Local

Santa Clara General Plan

General Plan Policies applicable to utilities and service systems that are relevant to the project include the following:

Policies	Description
5.10.1-P6	Require adequate wastewater treatment and sewer conveyance capacity for all new development.
5.3.1-P9	Require that new development provide adequate public services and facilities, infrastructure, and amenities to serve the new employment or residential growth.
5.3.1-P27	Encourage screening of above-ground utility equipment to minimize visual impacts.
5.3.1-P28	Encourage undergrounding of new utility lines and utility equipment throughout the City.
5.10.5-P21	Require that storm drain infrastructure is adequate to serve all new development and is in place prior to occupancy.

4.19.1.2 *Existing Conditions*

Water Supply

The City of Santa Clara has four sources of water. These sources include two treated water sources from Valley Water and the San Francisco Public Utilities Commission, groundwater pumped from the Santa Clara sub-basin through the City's owned and operated groundwater wells, and recycled water purchased from South Bay Water Recycling.[66] In 2020, the City's water demand was approximately 18,302 acre feet (approximately 16.3 million gallons per day) for potable water and 3,499 acre feet (3.1 million gallons per day) for recycled water.[67] Recycled water lines are located southwest of the project site on parking area near the War Memorial Playground adjacent to Monroe Street.

The water system consists of approximately 335 miles of water mains, 26 active water wells and seven storage tanks with 28.8 million gallons of water storage capacity.[68]

[66] South Bay Recycled Water provides advanced tertiary treated water from the RWF. The City's recycled water program delivers recycled water throughout the City for landscaping, parks, public services and businesses.
[67] City of Santa Clara. 2020 Urban Water Management Plan, City of Santa Clara Water Utility. Adopted June 22, 2021.
[68] City of Santa Clara. 2020 Urban Water Management Plan, City of Santa Clara Water Utility. Adopted June 22, 2021.

The vacant project site does not currently have any water consumption.

Wastewater Services

Sanitary Sewer lines that serve the site are maintained by the City of Santa Clara Sewer Utility. Wastewater from the City of Santa Clara is treated at the Regional Wastewater Facility (RWF), which is owned jointly by the Cities of San José and Santa Clara and is operated by the City of San José's Department of Environmental Services. The facility is one of the largest advanced wastewater treatment facilities in California and serves over 1,400,000 people in San José, Santa Clara, Milpitas, Campbell, Cupertino, Los Gatos, Saratoga and Monte Sereno.[69] The RWF provides primary, secondary, and tertiary treatment of wastewater and has the capacity to treat 167 million gallons of wastewater a day.

Approximately 10 percent of the facility's effluent is recycled for non-potable uses and the remainder flows into San Francisco Bay. The NPDES permit for the RWF includes wastewater discharge requirements. The project site does not generate wastewater under existing conditions.

Stormwater Drainage

The City of Santa Clara owns and maintains the municipal storm drainage system which serves the project site. Existing storm drain lines are located within Park Avenue and The Alameda, adjacent to the project site. The project site is 100 percent pervious.

Solid Waste

Solid waste collection in the City of Santa Clara is provided by Mission Trail Waste System and is disposed of at Newby Island Landfill through a contract with the City. As of December 2019, Newby Island Landfill has a disposal capacity of 14.6 million cubic yards of remaining capacity.[70] Recycling services are provided through Stevens Creek Disposal and Recycling. The site currently does not generate solid waste.

4.19.2 Impact Discussion

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

[69] City of San Jose. San Jose-Santa Clara Regional Wastewater Facility. Accessed October 18, 2022. https://www.sanjoseca.gov/your-government/environment/water-utilities/regional-wastewater-facility
[70] North, Daniel. General Manager, Republic Services. Personal communications. November 14, 2019.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
2) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
4) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
5) Be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Impact UTL-1: The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. (Less than Significant Impact)

Based on a sewer design analysis conducted for the project, the proposed project would connect to existing utilities located in the streets around the project site which would have a capacity to serve the proposed project. The proposed project also includes a General Plan Amendment which would result in an increase of 25 residential units over the existing General Plan designation. The proposed project would increase of the expected population on the site by approximately 65 residents. This increase would only marginally increase the demand on utilities for the site; therefore, the proposed project would not require the expansion of utility facilities or relocation of existing facilities.

Water

It is estimated that each of the residential units on the project site would use approximately 151 gallons per day (equal to 5,889 gallons of water per day for the entire development) and the commercial unit would use 1,805 gallons per day[71]. Additionally, the proposed development project

[71] Bay Area Water Supply and Conservation Agency. Per Capita Water Use. https://bawsca.org/water/use/percapita Accessed August 28, 2020.
2.61 persons per residence x 57.8 gallons per capita per day = 151 gallons per day per residence x 39 residences = 5,889 gallons per day.
Bay Area Water Supply and Conservation Agency. Projected Water Usage for BAWSCA Member Agencies: Water Use Breakdown for the City of Santa Clara. 2006.
1 commercial spaces x 1,805 gallons per day per account = 1,805 gallons per day

includes a General Plan Amendment which would result in the expansion of development capacity which would expand water use. This is accounted for in the calculation of the total water use for the proposed project. The project would utilize existing water lines in Park Avenue and The Alameda and would not require expansion or relocation of City water facilities or installation of new water lines because the proposed project would only marginally increase the total water demand of the City compared to the projected growth identified in the Urban Water Management Plan.[72] Thus, the proposed development project would have a less than significant impact.

Wastewater

The proposed development project would generate an estimated 6,540 gallons of wastewater per day.[73] This is less than one tenth of one percent of the City's total allocation of treatment capacity.[74] The proposed development project would not increase the need for wastewater treatment beyond the capacity of the RWF which has capacity for future population growth. Therefore, the project would have a less than significant impact on the need for new wastewater facilities.

The project would connect to existing sewer lines in Park Avenue and The Alameda, which have adequate capacity to serve the project. Therefore, the project would not require the construction or relocation of new or expanded wastewater lines. The project would have a less than significant impact.

Stormwater Drainage

The project site is currently vacant. Runoff from the project site currently enters the storm drainage system untreated and unimpeded. The project would increase the impervious area on the project site by 17,763 square feet or almost 100 percent compared to the existing impervious area. While the project would increase impervious surfaces on-site, the project would install treatment flow-through planters, sized appropriately for their drainage areas, to decrease the rate and volume of stormwater runoff entering the City's storm drainage system. For these reasons, the project would not exceed the capacity of the existing storm drainage system serving the project site and would not require the construction or relocation of new or expanded storm drains. Therefore, the proposed change in land use would not result in runoff in excess of existing storm drain capacity.

Electric Power and Telecommunication Facilities

The project would utilize existing utility connections to connect to the City's electric and telecommunications systems. Although the project would increase the demand on existing facilities in the City, relocation of existing or construction of new facilities would not be needed to serve the proposed project. As a result, the proposed development project would have a less than significant impact on these facilities.

[72] City of Santa Clara. 2020 Urban Water Management Plan. June 22, 2021.
[73] Wastewater generated by the proposed development project is assumed to be 85 percent of the total water demand.
[74] Based on the City's allocation of treatment capacity of 25 mgd as identified by the Tributary Agencies Estimated Available Plant Capacity – 2020. December 18, 2020. https://www.sanjoseca.gov/Home/ShowDocument?id=68283.

Impact UTL-2:	**The project would not have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. (Less than Significant Impact)**

As proposed, the project would use approximately 7,694 gallons per day of water. This increase is within the assumed water demand accounted for in the Urban Water Management Plan and would not impact the ability for the City to provide water in future years, including normal, dry, and multiple dry years. Therefore, the proposed project would have a less than significant impact on the City's water supplies.

Impact UTL-3:	**The project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. (Less than Significant Impact)**

As stated above, the proposed project would generate an estimated 6,540 gallons of wastewater per day. This is less than one-half of one percent of the City's total allocation of treatment capacity of 25 million gallons. This increase in wastewater would not impact the ability for the RWF to serve the City of Santa Clara and would fall within the capacity for water treatment of the facility. Therefore, the project would have a less than significant impact on the ability for the wastewater provider's existing commitments.

Impact UTL-4:	**The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. (Less than Significant Impact)**

Construction

During construction, the project would be required to comply with the City of Santa Clara construction debris diversion ordinance which requires projects over 5,000 square feet to divert 65 percent of construction and demolition debris from landfills. Implementation of this policy would reduce the waste disposal required during the project construction and limit waste accumulation at local landfills.

Operation

The project is estimated to generate approximately 639 pounds of solid waste per day.[75] Santa Clara County's Integrated Waste Management Plan (IWMP) requires each jurisdiction in the County to achieve a landfill diversion requirement of 50 percent per year. The Newby Island Landfill has

[75] Calrecycle. California's 2017 Per Capita Disposal Rate. Accessed October 18, 2022. https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/mostrecent/. 2.61 existing residents per unit x 39 units x 6.2 lbs. per resident per day = 631 lbs. per day https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates. 5 lbs per 1000 sq ft per day x 1540 square feet = 8 lbs per day

remaining capacity of approximately 14.6 million cubic yards, as of December 2019, with a reasonable compaction rate of 1,850 pounds per cubic yard.[76] Closure of the Landfill is expected to occur in 2041.[77][78] Therefore, implementation of the proposed development project would not result in a significant increase in solid waste and recyclable materials generated within the City of Santa Clara and would not require that new landfill facilities be contracted with or constructed to serve the proposed development project.

Impact UTL-5:	**The project would not be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste. (Less than Significant Impact)**

Consistent with CALGreen requirements, the proposed project would be required to provide on-site recycling facilities, develop a construction waste management plan, salvage at least 65 percent of nonhazardous construction/demolition debris (by weight), and implement other waste reduction measures. Additionally, the estimated increases in solid waste generation from future development would be avoided through implementation of the Santa Clara County Integrated Waste Management Plan. The Integrated Waste Management Plan, in combination with existing regulations and programs, would ensure that the proposed development project would not result in significant impacts on solid waste disposal capacity in excess of state or local standards or in excess of NISL capacity.

[76] North, Daniel. General Manager, Republic Services. Personal communications. November 14, 2019.
[77] North, Daniel. General Manager, Republic Services. Personal communications. November 21, 2019.
[78] After 2041 a new waste disposal location would be required to be conditioned for the City of Santa Clara. This would, however, be after the 2035 General Plan would be drafted and impacts associated with the new landfill needs would be addressed as part of the General Plan update.

4.20 WILDFIRE

4.20.1 Environmental Setting

4.20.1.1 *Regulatory Framework*

State

Fire Hazard Severity Zones

CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. Referred to as Fire Hazard Severity Zones (FHSZs), these maps influence how people construct buildings and protect property to reduce risk associated with wildland fires. FHSZs are divided into areas where the state has financial responsibility for wildland fire protection, known as state responsibility areas (SRAs), and areas where local governments have financial responsibility for wildland fire protection, known as local responsibility areas (LRAs). Homeowners living in an SRA are responsible for ensuring that their property is in compliance with California's building and fire codes. Only lands zoned for very high fire hazard are identified within LRAs.

California Fire Code Chapter 47

Chapter 47 of the California Fire Code sets requirements for wildland-urban interface fire areas that increase the ability of buildings to resist the intrusion of flame or burning embers being projected by a vegetation fire, in addition to systematically reducing conflagration losses through the use of performance and prescriptive requirements.

California Public Resources Code Section 4442 through 4431

The California Public Resources Code includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment that uses an internal combustion engine; specify requirements for the safe use of gasoline-powered tools on forest-covered land, brush-covered land, or grass-covered land; and specify fire suppression equipment that must be provided on-site for various types of work in fire-prone areas. These regulations include the following:

- Earthmoving and portable equipment with internal combustion engines would be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442);
- Appropriate fire suppression equipment would be maintained during the highest fire danger period, from April 1 to December 1 (Public Resources Code Section4428);
- On days when a burning permit is required, flammable materials would be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor would maintain appropriate fire suppression equipment (Public Resources Code Section 4427); and
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines would not be used within 25 feet of any flammable materials (Public Resources Code Section 4431).

California Code of Regulations Title 14

The California Board of Forestry and Fire Protection has adopted regulations, known as SRA Fire Safe Regulations, which apply basic wildland fire protection standards for building, construction, and development occurring in a SRA. The future design and construction of structures, subdivisions and developments in SRAs are required to provide for the basic emergency access and perimeter wildfire protection measures discussed in Title 14.

Fire Management Plans

CAL FIRE has developed an individual Unit Fire Management Plan for each of its 21 units and six contract counties. CAL FIRE has developed a strategic fire management plan for the Santa Clara County Unit, which covers the project area and addresses citizen and firefighter safety, watersheds and water, timber, wildlife and habitat (including rare and endangered species), unique areas (scenic, cultural, and historic), recreation, range, structures, and air quality. The plan includes stakeholder contributions and priorities and identifies strategic areas for pre-fire planning and fuel treatment as defined by the people who live and work with the local fire issues.

4.20.1.2 *Existing Conditions*

The project site is located in an urbanized area in of the City of Santa Clara. This area is not located within a Fire Hazard Severity Zone as designated by Cal Fire's Fire and Resource Assessment Program.[79]

4.20.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
1) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
2) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
3) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒

[79] California Department of Forestry and Fire Protection. Fire and Resource Assessment Program. Very High Fire Hazard Severity Zones in LRA: As Recommended by Calfire. October 8, 2008.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
4) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

The project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; therefore, the project would not result in wildfire impacts.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

Impact MFS-1: As mitigated, the project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. (Less than Significant Impact with Mitigation Incorporated)

The proposed project would not result in impacts to wildlife resulting from reduction of habitat, impacts to sensitive populations, impacts to plant and animal communities, and reduction in rare or endangered species. Mitigation is included to reduce impacts to raptors and other nesting birds from construction activities. Additionally, the proposed project would implement mitigation measures to reduce impacts to on-site tree removal and would require monitoring on-site for archaeological and historical resources during construction. Further, the proposed project would incorporate mitigation measures CUL 2.1-1, CUL 2.1-2, and CUL 3.1-1 to prevent the disturbance or destruction of archaeological or Native American resources if they are determined to be on site and would follow procedures for cataloging and preserving the resources. Therefore, the proposed project would result in a less than significant impact on these resources.

Impact MFS-2: The project does not have impacts that are individually limited, but cumulatively considerable. (Less than Significant Impact)

Under Section 15065(a)(3) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects "that are individually limited, but cumulatively considerable." As defined in Section 15065(a)(3) of the CEQA Guidelines, cumulatively considerable means "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

The proposed project would result in temporary air quality, biological, cultural, hazardous and hazardous materials, hydrology and water quality, and noise impacts during construction. With implementation of the identified Standard Permit Conditions, BMPs, mitigation measures, and consistency with adopted City policies, construction impacts would be mitigated to a less than significant level. Because the nature of the identified impacts is temporary and would be mitigated, the proposed project would not have a cumulatively considerable impact on air quality, biological, cultural, hazardous and hazardous materials, and noise impacts.

Cumulative TAC Impacts

A refined analysis of potential health impacts from vehicle traffic on El Camino Real was conducted since the roadway was estimated to have average daily traffic (ADT) exceeding 10,000 vehicles. The refined analysis involved predicting emissions for the traffic volume and mix of vehicle types on the roadway near the project site and using an atmospheric dispersion model to predict exposure to TACs. The project construction combined with nearby sources of TACs would contribute to cumulative health risk impacts. These impacts are summarized below in Table 4.21-1.

Table 4.21-1 Construction TAC Effects

Source	Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
Project Construction (Mitigated)	1.83 (infant)	0.01	<0.01
El Camino Real, ADT 23,733	0.04	<0.01	<0.01
Santa Clara University (Facility ID #15397_1, Generator), MEI at 1,000 feet	0.13	<0.01	<0.01
Santa Clara University (Facility ID #15397_10, Generator), MEI at 970 feet	0.17	<0.01	<0.01
Santa Clara University (Facility ID #15397_12, Generator), MEI at 950 feet	1.05	<0.01	<0.01
Santa Clara University (Facility ID #15397_13, Generator), MEI at 980 feet	0.29	<0.01	<0.01
Santa Clara University (Facility ID #15397_14, Generator), MEI at 910 feet	0.10	<0.01	<0.01
Santa Clara University (Facility ID #15397_16, Generator), MEI at 970 feet	0.26	<0.01	<0.01
Santa Clara University (Facility ID #15397_18, Generator),	026	<0.01	<0.01

MEI at 510 feet			
Santa Clara University (Facility ID #15397_19, Generator), MEI at 760 feet	0.11	<0.01	<0.01
Santa Clara University (Facility ID #15397_21, Generator), MEI at 3700 feet	0.21	<0.01	<0.01
Santa Clara University (Facility ID #15397_23, Generator), MEI at 575 feet	0.13	<0.01	<0.01
Cumulative Total	4.58	<0.12	<0.12
BAAQMD Cumulative Source threshold	**100**	**0.8**	**10.0**
Exceed Threshold?	No	No	No

As shown above, the proposed project would not have a cumulatively considerable contribute to an exceedance of TACs when combined with existing sources. Therefore, the proposed project would not result in a significant cumulative TAC impact.

The proposed project is consistent with the 2022 CAP and would not, by itself, result in significant emissions of criteria air pollutants or GHGs. Therefore, the project would not result in a cumulatively considerable impact.

As discussed in the respective sections, the proposed project would have no impact, a less than significant impact, or a less than significant impact with mitigation on aesthetics, agriculture and forestry resources, geology and soils, land use, mineral resources, population and housing, public services, recreation, and utility and service facilities. The project would not have a cumulatively considerable impact on these resource areas.

Impact MFS-3: As mitigated, the project does not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. (Less than Significant Impact with Mitigation Incorporated)

Consistent with Section 15065(a)(4) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people would be significantly affected. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could indirectly affect human beings would be represented by all of the designated CEQA issue areas, those that could directly affect human beings include air quality, hazardous materials, and noise. Implementation of applicable regulations and policies, Conditions of Approval, and mitigation measures would reduce the impacts to a less than significant level. No other direct or indirect adverse effects on human beings have been identified.

SECTION 5.0 REFERENCES

The analysis in this Initial Study is based on the professional judgement and expertise of the environmental specialists preparing this document, based upon review of the site, surrounding conditions, site plans, and the following references:

Association of Bay Area Governments and Metropolitan Transportation Commission. Plan Bay Area 2050. October 21, 2021. Page 20.

Association of Bay Area Governments. Plan Bay Area: Projections 2013. December 2013.

BAAQMD. Final 2017 Clean Air Plan. April 19, 2017. http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans.

Bay Area Water Supply and Conservation Agency. Per Capita Water Use. https://bawsca.org/water/use/percapita. Accessed August 28, 2020.

Bay Area Water Supply and Conservation Agency. Projected Water Usage for BAWSCA Member Agencies: Water Use Breakdown for the City of Santa Clara. 2006.

Bridgenet International. Norman Y. Mineta San Jose International Airport Noise Assessment for the Master Plan Environmental Impact Report. October 2019.

CalEEMod. Appendix D. October 2017. Accessed July 19, 2022.

California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed July 11, 2022. https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health.

California Air Resources Board. "The Advanced Clean Cars Program." Accessed July 11, 2022. https://www.arb.ca.gov/msprog/acc/acc.htm.

California Building Standards Commission. "California Building Standards Code." Accessed July 11, 2022. https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo.

California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed July 6, 2022. http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx.

California Department of Conservation. Accessed July 6, 2022. "Williamson Act." http://www.conservation.ca.gov/dlrp/lca.

California Department of Finance. "E-5 City/County Population and Housing Estimates." May 2022. Accessed: June, 2022. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/.

California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed July 6, 2022. http://frap.fire.ca.gov/.

California Department of Forestry and Fire Protection. Fire and Resource Assessment Program. Very High Fire Hazard Severity Zones in LRA: As Recommended by Calfire. October 8, 2008.

California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed December 9, 2020. http://hcd.ca.gov/community-development/housing-element/index.shtml.

California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed August 8, 2022. https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist.

California Department of Transportation. "Scenic Highways." Accessed July 6, 2022. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

California Department of Water Resources, Division of Safety of Dams. Accessed June 9, 2020. https://water.ca.gov/Programs/All-Programs/Division-of-Safety-of-Dams#:~:text=Since%20August%2014%2C%201929%2C%20the,Safety%20of%20Dams%20(DSOD).

California Energy Commission (CEC). "2019 Building Energy Efficiency Standards." Accessed July 11, 2022. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency.

California Energy Commission. "Natural Gas Consumption by County." Accessed August 8, 2022. http://ecdms.energy.ca.gov/gasbycounty.aspx.

California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed August 8, 2022. http://ecdms.energy.ca.gov/elecbycounty.aspx.

California Environmental Protection Agency. "Cortese List Data Resources." Accessed July 11, 2022. https://calepa.ca.gov/sitecleanup/corteselist/.

California Gas and Electric Utilities. 2020 California Gas Report. Accessed August 8, 2022. https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf.

California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." Accessed July 11, 2022. http://www.ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf.

California Regional Water Quality Control Board. San Francisco Bay Region Municipal Regional Stormwater NPDES Permit. November 2015.

Calrecycle. California's 2017 Per Capita Disposal Rate. Accessed October 18, 2022. https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/mostrecent/.

City of San Jose. San Jose-Santa Clara Regional Wastewater Facility. Accessed October 18, 2022. https://www.sanjoseca.gov/your-government/environment/water-utilities/regional-wastewater-facility.

City of Santa Clara 2010-2035 General Plan Final Environmental Impact Report. 2011.

City of Santa Clara 2010-2035 General Plan. December 2014. Appendix 8.12 (Housing Element). Page 8.12-25.

City of Santa Clara. 2010-2035 General Plan Integrated Final Environmental Impact Report. SCH# 2008092005. January 2011. Pages 206 to 207.

City of Santa Clara. 2010-2035 General Plan Integrated Final Environmental Impact Report. SCH# 2008092005. January 2011. Pages 209.

City of Santa Clara. 2010-2035 General Plan Integrated Final Environmental Impact Report. SCH# 2008092005. January 2011. Page 207.

City of Santa Clara. 2010-2035 General Plan Integrate EIR. Page 183. January 2011.

City of Santa Clara. 2010-2035 General Plan Integrate EIR. Page 184-186. January 2011.

City of Santa Clara. 2010-2035 General Plan Integrated FEIR. January 2011. Page 208

City of Santa Clara. 2010-2035 General Plan Integrated Final EIR. January 2011.

City of Santa Clara. 2010-2035 General Plan. December 2014.

City of Santa Clara. 2020 Urban Water Management Plan, City of Santa Clara Water Utility. Adopted June 22, 2021.

City of Santa Clara. 2020 Urban Water Management Plan, City of Santa Clara Water Utility. Adopted June 22, 2021.

City of Santa Clara. 2020 Urban Water Management Plan. June 22, 2021.

City of Santa Clara. General Plan 2010-2035 Integrated EIR. Page 327. January 2011

County of Santa Clara. Williamson Act Properties Geodatabase. Accessed June 9, 2022. https://sccplanning.maps.arcgis.com/apps/webappviewer/index.html?id=1f39e32b4c0644b0915354c3e59778ce.

Enrollment projection consultants. Projected Enrollments January 17, 2020. Page 16.

Illingworth and Rodkin. 2655 The Alameda Noise and Vibration Assessment. September 19, 2022.

Illingworth and Rodkin. the 2655 The Alameda Residential Development Construction Community Risk Assessment. September 21, 2022.

North, Daniel. General Manager, Republic Services. Personal communications. November 14, 2019.

Office of Planning and Research. "Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA." January 20, 2016. Accessed July 6, 2022. https://www.opr.ca.gov/docs/Revised_VMT_CEQA_Guidelines_Proposal_January_20_2016.pdf.

San Francisco Bay Regional Water Quality Control Board. Municipal Regional Stormwater Permit, Provision C.12. November 19, 2015.

Silicon Valley Power. "Did you Know." Accessed August 8, 2022. https://www.siliconvalleypower.com/svp-and-community/about-svp/faqs.

Silicon Valley Power. "Green Power for your Home." Accessed July 11, 2022. https://www.siliconvalleypower.com/sustainability/santa-clara-green-power/green-power-for-your-home.

Tetra tech. Geotechnical Design Report. May 26, 2022.

United States Department of Agriculture. Web Soil Survey. Accessed July 20, 2022.

United States Department of Energy. Energy Independence & Security Act of 2007. Accessed July 20, 2022. http://www.afdc.energy.gov/laws/eisa.

United States Department of the Interior. "Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take." Accessed July 6, 2022. https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf.

United States Department of Transportation. USDOT Announces New Vehicle Fuel Economy Standards for Model Year 2024-2026." Accessed July 20, 2022. https://www.nhtsa.gov/press-releases/usdot-announces-new-vehicle-fuel-economy-standards-model-year-2024-2026.

United States Energy Information Administration. "State Profile and Energy Estimates, 2020." Accessed July 5, 2022. https://www.eia.gov/state/?sid=CA#tabs-2.

United States Environmental Protection Agency. "Summary of the Resource Conservation and Recovery Act." Accessed July 11, 2022. https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act.

United States Environmental Protection Agency. "Superfund: CERCLA Overview." Accessed July 11, 2022. https://www.epa.gov/superfund/superfund-cercla-overview.

United States Environmental Protection Agency. "The 2021 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." November 2021. https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1010U68.pdf.

Valley Water. Anderson Dam Inundation Zone Map. Sheet 11. November 2019.

Valley Water. Lexington Dam Inundation Zone Map. Sheet 21. November 2019.

SECTION 6.0 LEAD AGENCY AND CONSULTANTS

6.1 LEAD AGENCY

City of Santa Clara
Debby Fernandez
City of Santa Clara Planning Department

6.2 CONSULTANTS

David J. Powers & Associates, Inc.
Environmental Consultants and Planners

Shannon George – Principal Project Manager
Patrick Kallas – Project Manager
Ryan Osako – Graphic Artist

Illingworth and Rodkin
Air Quality and Noise Consultants

Hexagon Transportation Consultants
Transportation Analysis

Archaeological/Historical Consultants
Archeological Report

Tetra Tech
Hazardous Materials Consultant