

Initial Study

Great America Parkway/Tasman Drive Office Project

File No. PLN2020-14361



50 YEARS
EST. 1972

In Consultation with
DAVID J. POWERS
& ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS & PLANNERS

October 2023

Great America Parkway/Tasman Drive Office Project MITIGATED NEGATIVE DECLARATION (MND)

Pursuant to the California Environmental Quality Act (CEQA) Division 13, Public Resources Code

City of Santa Clara
1500 Warburton Avenue
Santa Clara, CA 95050
(408) 615-2467

The City of Santa Clara (City), serving as Lead Agency under the California Environmental Quality Act (CEQA), is completing the required environmental review for the Great America Parkway/Tasman Drive Project pursuant to CEQA Guidelines (California Code of Regulations Section 15000 et. seq.) and the regulations and policies of the City of Santa Clara, California. The attached Initial Study provides the necessary information to inform the City decision-makers, other responsible agencies, and the public of the nature of the project and its potential effect on the environment. The Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementing the proposed project.

Project Information and Description

Project Name: Great America Parkway/Tasman Drive Office Project

File Number: PLN2020-14361

Project Description and Location: The approximately 10.1-acre project site is comprised of two parcels (APNs 104-49-025 and -104-49-026) located at 2901 Tasman Drive, 5155 Old Ironsides Drive, 2952 Bunker Hill Drive, and 5150 Great America Parkway in the City of Santa Clara. The project site is currently developed with four, two-story office buildings totaling 209,194 square feet and associated surface parking lots. The project site is surrounded by office/research and development (R&D) buildings to the north, west, and south, and hotel/event center uses to the east. The project would demolish the existing buildings and construct two, 12-story office buildings (approximately 1,030,455 square feet), a two-story amenity building (approximately 38,185 square feet), and structured parking. The office buildings would be approximately 177 feet tall to the top of the roof and 192 feet tall to the penthouse. The amenity building would be approximately 32 feet tall to the roof, and 42 feet tall at the top of the enclosed stairwell. The parking garage would be approximately 62 feet to the top floor of the structure and 78.2 feet tall to the top of the elevator enclosure.

The proposed project would construct a crosswalk along the south leg of the Old Ironsides Drive and Bunker Hill Lane intersection with America Disabilities Act (ADA) compliant curb ramps and truncated domes along the southeast corner of the intersection. The proposed project would also construct new six- to 10-foot wide sidewalks and ADA compliant curb ramps along the project frontage at Tasman Drive, Great America Parkway, Old Ironsides Drive, and Bunker Hill Lane. The

project site is designated Low-Intensity Office/R&D in the General Plan. The project applicant proposes a GPA to change the site's designation to High Intensity Office/R&D. The zoning designation for the project site is Light Industrial, which accommodates industries operating primarily within an enclosed building. The project applicant proposes to rezone the site to Planned Development in order to allow the construction of the proposed office development. Additional project description details can be found in Section 3.0 of the Initial Study.

Assessor's Parcel Numbers: 104-49-025 and 104-49-026

Determination

A Mitigated Negative Declaration (MND) is proposed by the City of Santa Clara for the project. The Initial Study and supporting documents have been prepared to determine if the project would result in potentially significant or significant impacts on the environment. The Initial Study concludes, based on substantial evidence in the record, that with the implementation of mitigation measures, all project impacts would be less than significant. The mitigation measures are identified in Table 1 below. Based on the Initial Study and the whole record, it has been determined that the proposed action, with the incorporation of the mitigation measures described below, would not have a significant effect on the environment. This determination will be confirmed after the public review period, which begins on Friday, October 20, 2023 and ends Monday, November 20, 2023. The Draft MND, Draft Initial Study, and supporting technical reports that constitute the record of proceedings upon which this determination is made are available for public review at the City of Santa Clara Planning Division at 1500 Warburton Avenue, Santa Clara, CA 95050, between 8:00 AM and 5:00 PM Monday through Friday. Before the MND is adopted, the City will prepare written responses to any public comments, and revise the Draft MND, if necessary, based on any concerns raised during the public review period. All written comments will be included as part of the Final MND.

Signature



Nimisha Agrawal, Senior Planner
City of Santa Clara

October 19, 2023

Date

TABLE 1 – SUMMARY OF PROJECT IMPACTS

Impacts	Mitigation Measures	Level of Impact
Biological Resources		
Impact BIO-1.1: 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 California Department of Fish and Wildlife (CDFW) or US Fish and Wildlife Service (USFWS).	MM BIO-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 1 through August 31. If it is not possible to schedule construction and tree removal between September and January, then pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests shall be disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of grading, tree removal, or other demolition or 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 all tress and other possible nesting habitats within and immediately adjacent to the construction area of nests. If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist, in consultation with the California Department of Fish and Wildlife, shall determine the extent of a construction-free buffer zone to be established around the nest to ensure that nests of bird species protected by the Migratory Bird Treaty Act or Fish and Game Code shall not be disturbed during project construction.	Less than Significant Impact with Mitigation Incorporated
Cultural Resources		
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.	MM CUL-2.1: Prior to commencement of any ground-disturbing activity on-site, the project applicant shall retain a registered professional archaeologist and a tribal monitor from a culturally affiliated tribe to be present during all ground-disturbing activities associated with the project. For the purposes of these conditions, ground-disturbing activities shall be defined as any ground disturbance, including but not limited to, excavation, grading, grubbing, scarring, drilling, scraping, blading, trenching, vegetation removal, or demolition of the existing structure or site improvements within the development area shown on the project plans. The registered professional archaeologist and tribal monitor shall be given five days' written notice prior to the start of any ground-disturbing	Less than Significant Impact with Mitigation Incorporated

TABLE 1 – SUMMARY OF PROJECT IMPACTS		
Impacts	Mitigation Measures	Level of Impact
	activity. The project applicant shall document receipt of notification in writing. MM CUL-2.2: In the event that buried, or previously unrecognized archaeological deposits or materials of any kind are inadvertently exposed during any construction activity, work within 50 feet of the find shall cease until a qualified archaeologist can assess the find and provide recommendations for further treatment in consultation with a culturally affiliated tribal representative, if warranted. The archaeologist, in consultation with the project applicant, shall make the necessary plans for treatment of the find(s) if the resource is eligible for listing on the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR). Construction within a radius determined by the archaeologist shall not recommence until the assessment is complete.	
Impact CUL-3: As mitigated, the project would not disturb any human remains, including those interred outside of dedicated cemeteries.	MM CUL-3.1: In the event that human remains are discovered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped. The Santa Clara County Coroner will 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 will notify the Native American Heritage Commission (NAHC) immediately. Once the 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.	Less than Significant Impact with Mitigation Incorporated
Geology and Soils		
Impact GEO-2: As mitigated, the project would not result in substantial soil erosion or the loss of topsoil.	MM GEO-2.1: The project applicant shall schedule all excavation and grading work in dry weather months or construction sites shall be weatherized¹ to withstand or avoid erosion. MM GEO-2.2: During construction, stockpiles and excavated soils shall be covered with secured tarps or plastic sheeting by the project applicant (or the project applicant's contractor).	Less than Significant Impact with Mitigation Incorporated

¹ Weatherized refers to measures that would protect exposed soils from rain and stormwater runoff.

TABLE 1 – SUMMARY OF PROJECT IMPACTS		
Impacts	Mitigation Measures	Level of Impact
	MM GEO-2.3: Vegetation in disturbed areas shall be replanted as quickly as possible by the project applicant (or the project applicant's contractor) after construction.	
Hazards and Hazardous Materials		
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.	MM HAZ-2.1: Prior to demolition and excavation of the project site, a limited Phase II Environmental Site Assessment (Phase II ESA) shall be completed to determine if agricultural chemicals are present in the soil and groundwater at the site. The site will be sampled for CAM 17 Metals, pesticides. Phase II ESA sampling activities shall be coordinated with the Santa Clara Fire Department. MM HAZ-2.2: Following demolition and removal of pavement, soil samples will be gathered from the site and sent for laboratory analyses to evaluate appropriate disposal alternatives. The analyses would include but not be limited to organochlorine pesticides, lead, petroleum hydrocarbons, and other metals. Sampling will occur prior to the issuance of grading permits. MM HAZ-2.3: In the event that impacted soil is identified on-site, the Director of Community Development shall be notified and the lateral and vertical extent of soil containing contaminant concentrations greater than the San Francisco Bay Regional Water Quality Control Board's (RWQCB's) environmental screening levels (ESLs) will be notified. Sample results shall be submitted to the Santa Clara Fire Department for review. Contaminated soil shall be handled separately from "clean" soil. Common and potentially applicable remedial measures for the impacted soil may include: 1) excavation and off-site disposal at a permitted facility; 2) the use of engineering and administrative controls, such as consolidation and capping of the soil on-site and land use covenants restricting certain activities/uses; and 3) a combination of the above. Remedial activities at the site, if warranted, will be overseen by an appropriate regulatory agency, such as the Department of Toxic Substances Control (DTSC) or the Santa Clara County Department of Environmental Health (SCCDEH).	Less than Significant Impact with Mitigation Incorporated

TABLE 1 – SUMMARY OF PROJECT IMPACTS		
Impacts	Mitigation Measures	Level of Impact
Noise		
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.	MM NOI-1.1: The project applicant shall develop a construction noise control plan, including, but not limited to, the following available controls: • Ensure that excavating, grading and filling activities, and other construction activities (including the loading and unloading of materials and truck movements) within 300 feet of residentially zoned property, including hotel properties, are limited to the hours of 7:00 AM to 6:00 PM on weekdays and between the hours of 9:00 AM and 6:00 PM on Saturdays. No construction is permitted on Sundays or holidays. • Construct temporary noise barriers, where feasible, to screen stationary noise-generating equipment. Temporary noise barrier fences would provide a five dBA noise reduction if the noise barrier interrupts the line-of-sight between the noise source and receptor and if the barrier is constructed in a manner that eliminates any cracks or gaps. • Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment. • Unnecessary idling of internal combustion engines shall be strictly prohibited. • Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used to reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors. • Utilize "quiet" air compressors and other stationary noise sources where technology exists. • Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.	Less than Significant Impact with Mitigation Incorporated

TABLE 1 – SUMMARY OF PROJECT IMPACTS		
Impacts	Mitigation Measures	Level of Impact
	• Locate material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from residential receptors. • Route construction-related traffic along major roadways and as far as feasible from sensitive receptors. • Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site. • The contractor shall prepare a detailed construction schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance. • 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 correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.	

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Appendix B: Arborist Report
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Appendix D: Phase I Environmental Site Assessments
Appendix E: Noise and Vibration Assessment
Appendix F: Local Transportation Analysis and Transportation Demand Management Plan
Appendix G: Sanitary Sewer Study
Appendix H: Water Supply Assessment

All appendices are hereby incorporated by this reference into this Initial Study. No other documents are incorporated by reference.

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 Great America Parkway Office 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 Santa Clara, California.

As proposed, the project would demolish the existing buildings and construct two new office buildings and one amenity building on the project site (located at 2901 Tasman Drive, 5155 Old Ironsides Drive, 2952 Bunker Hill Drive, and 5150 Great America Parkway in the City of Santa Clara). 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:

Nimisha Agrawal, Senior Planner
City of Santa Clara, Community Development Department
1500 Warburton Avenue
Santa Clara, CA 95050
NAgrawal@SantaClaraCA.gov

1.3 CONSIDERATION OF THE INITIAL STUDY AND PROJECT

Following the conclusion of the public review period, the City 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 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

Great America Parkway and Tasman Drive Office; Project File Numbers: PLN2020-14361

2.2 LEAD AGENCY CONTACT

Nimisha Agrawal, Senior Planner
City of Santa Clara
Community Development Department
Planning Division
1500 Warburton Avenue
Santa Clara, CA 95050
Email: NAgrawal@santaclaraca.gov

2.3 PROJECT APPLICANT

Jane Vaughan
Menlo Equities
2765 Sand Hill Road
Menlo Park, CA 94025
Email: vaughan@menloequities.com

2.4 PROJECT LOCATION

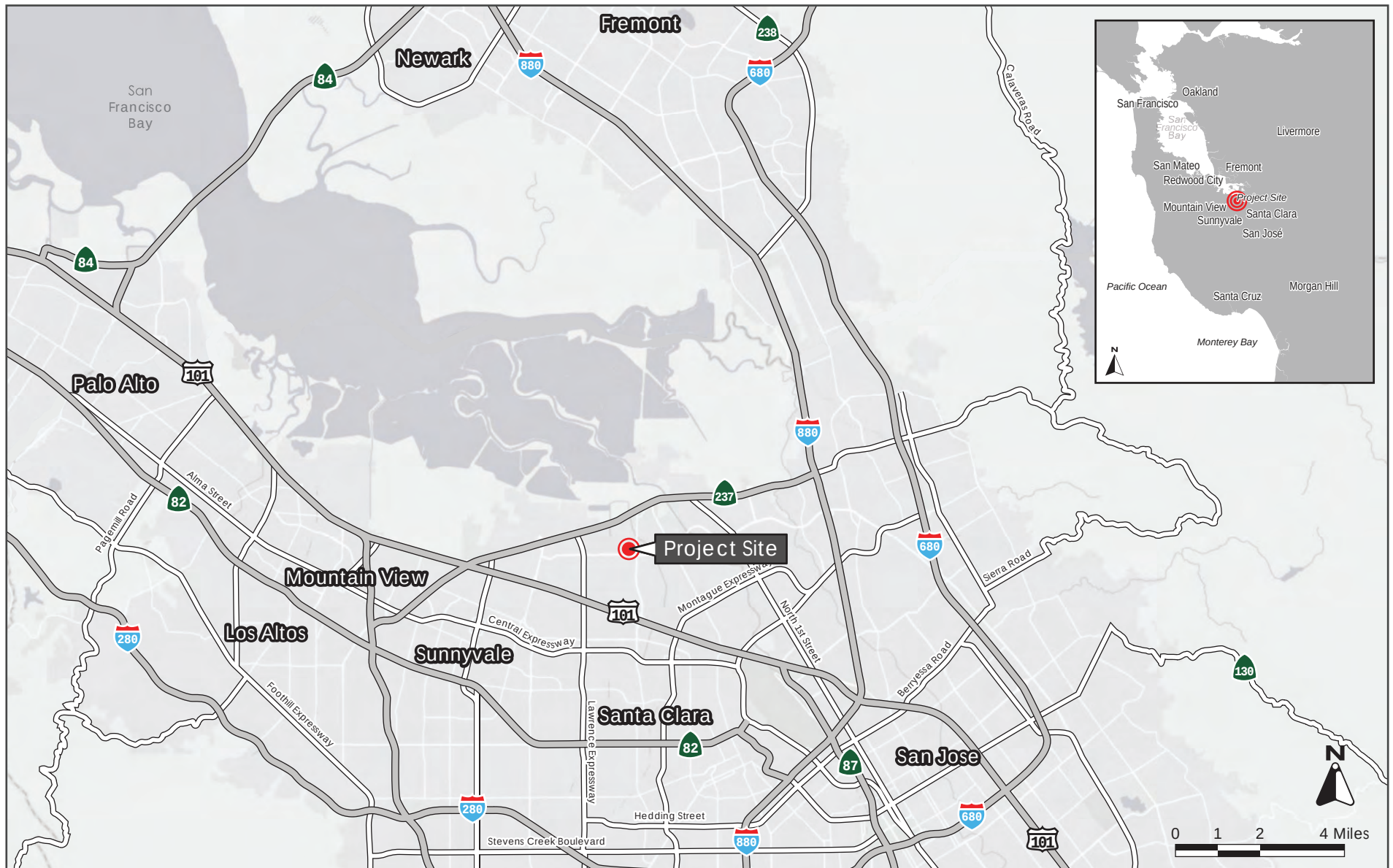
The project site is located at 2901 Tasman Drive, 5155 Old Ironsides Drive, 2952 Bunker Hill Drive, and 5150 Great America Parkway in the City of Santa Clara. Refer to Figures 2.4-1, 2.4-2, and 2.4-3 for the regional map, vicinity map, and aerial photograph and surrounding land uses of the site.

2.5 ASSESSOR'S PARCEL NUMBER

APNs 104-49-025 and -104-49-026

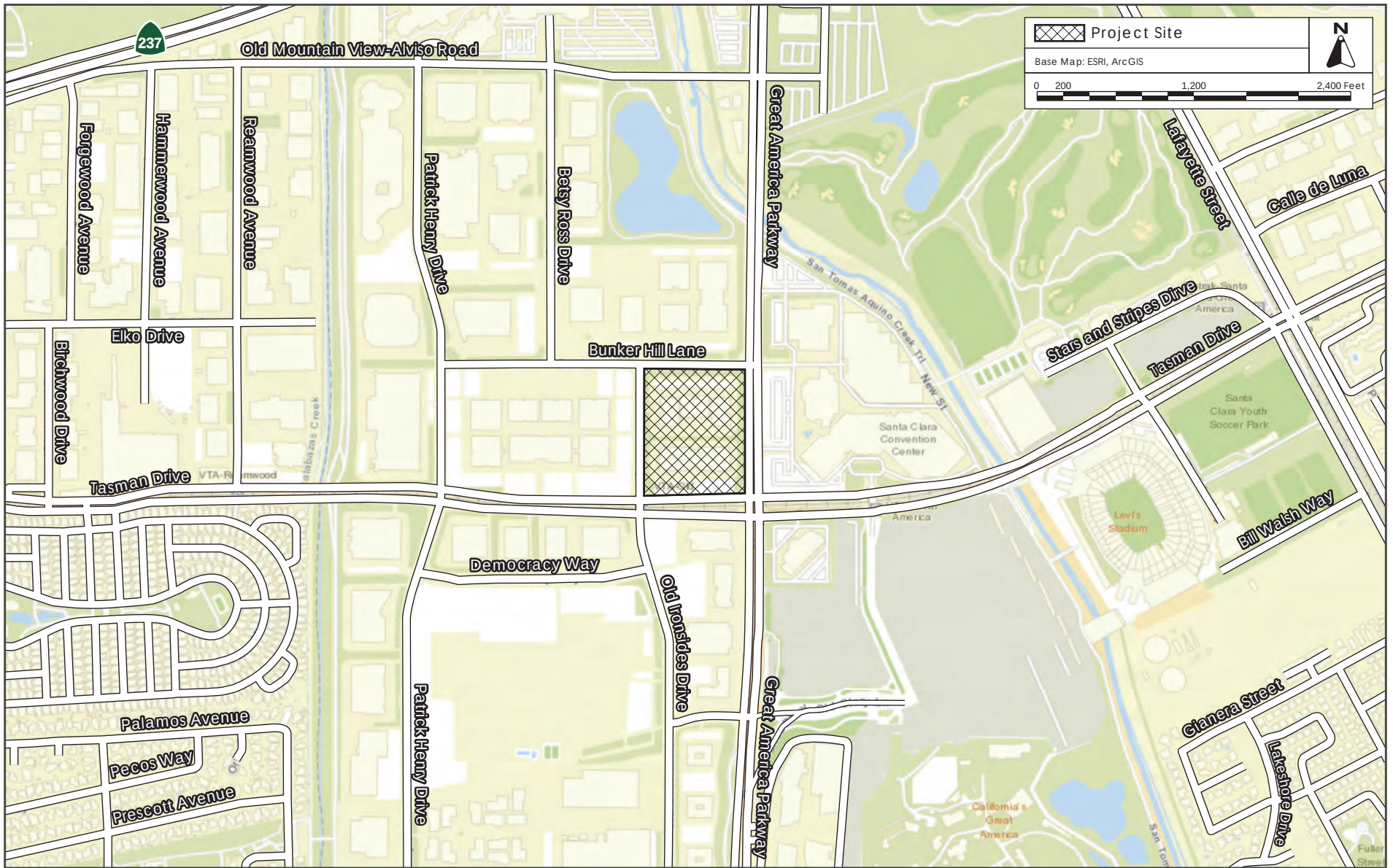
2.6 GENERAL PLAN DESIGNATION AND ZONING DISTRICT

General Plan Designation: *Low-Intensity Office/R&D*
Zoning District: *Light Industrial (ML)*



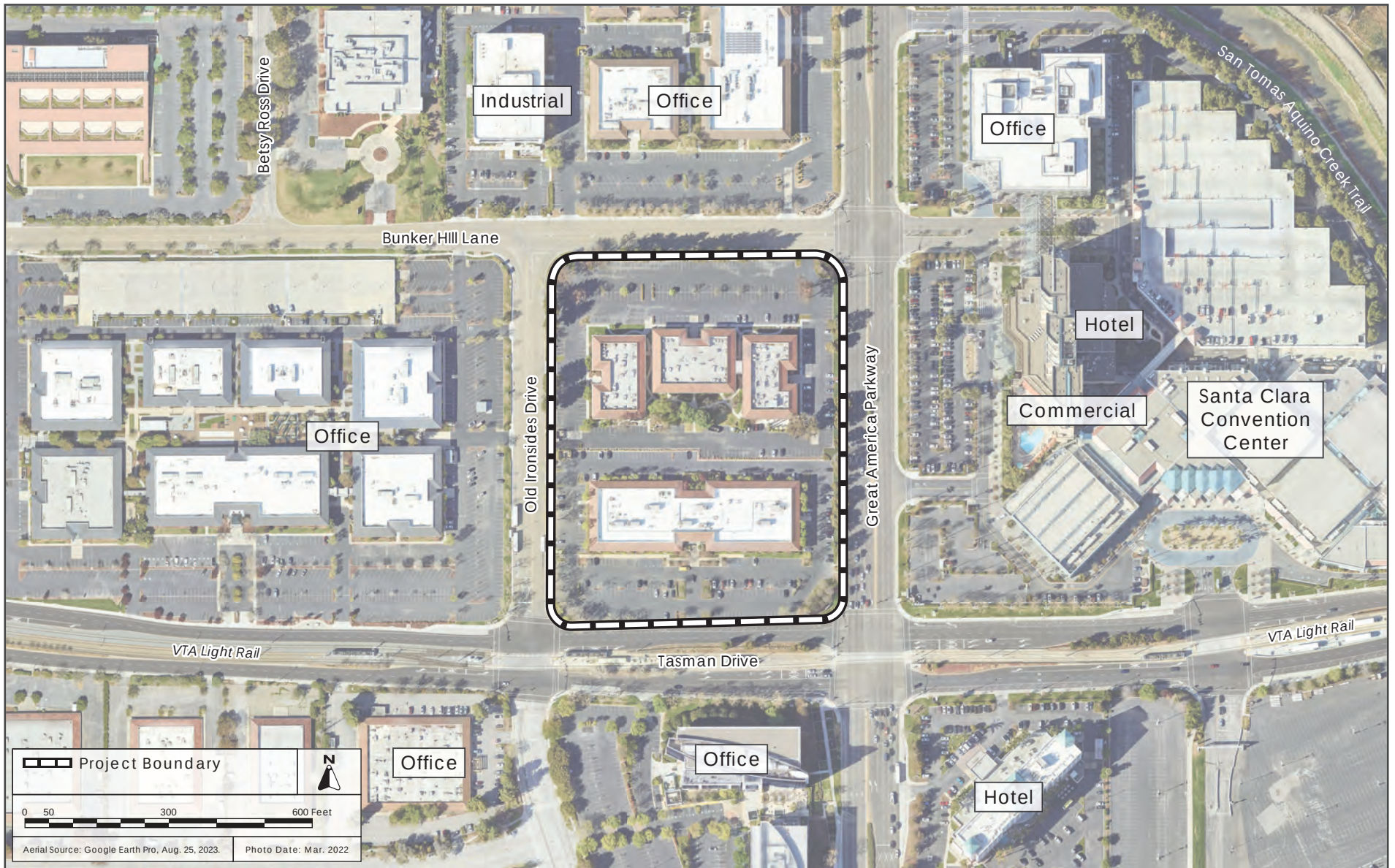
REGIONAL MAP

FIGURE 2.4-1



VICINITY MAP

FIGURE 2.4-2



AERIAL PHOTOGRAPH AND SURROUNDING LAND USES

FIGURE 2.4-3

2.7 PROJECT-RELATED APPROVALS, AGREEMENTS, AND PERMITS

This Initial Study would provide decision-makers in the City of Santa Clara, other public agencies, and the general public with relevant environmental information to use when considering the project. If the proposed project is approved, the Initial Study could be used by the City in conjunction with appropriate discretionary approvals including, but not limited to, the following:

- General Plan Amendment
- Rezoning
- Lot Merger
- Architectural Approval
- Certification of the Initial Study
- Issuance of Demolition, Grading, Building, and Occupancy permits.

SECTION 3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION AND SETTING

The approximately 10.1-acre project site is comprised of two parcels (APNs 104-49-025 and -026) located at 2901 Tasman Drive, 5155 Old Ironsides Drive, 2952 Bunker Hill Drive, and 5150 Great America Parkway in the City of Santa Clara. The project site is currently developed with four, two-story office buildings totaling 209,194 square feet and associated surface parking lots. The project site is surrounded by office/research and development (R&D) buildings to the north, west, and south, and hotel/event center uses to the east. As proposed, the project would demolish the existing buildings and construct two, 12-story office buildings (approximately 1,030,455 square feet), a two-story amenity building (approximately 38,185 square feet), and structured parking. Refer to Figures 2.4-1, 2.4-2, and 2.4-3 for the Regional Map, Vicinity Map, and Aerial Photograph and Surrounding Land Uses to view the project location.

The site is currently designated Low Intensity Office/R&D under the City's General Plan and is zoned ML-Light Industrial. The project proposes a General Plan Amendment (GPA) to High Intensity Office/R&D, a rezoning to a Planned Development, and a lot merger.

3.2 PROPOSED DESCRIPTION

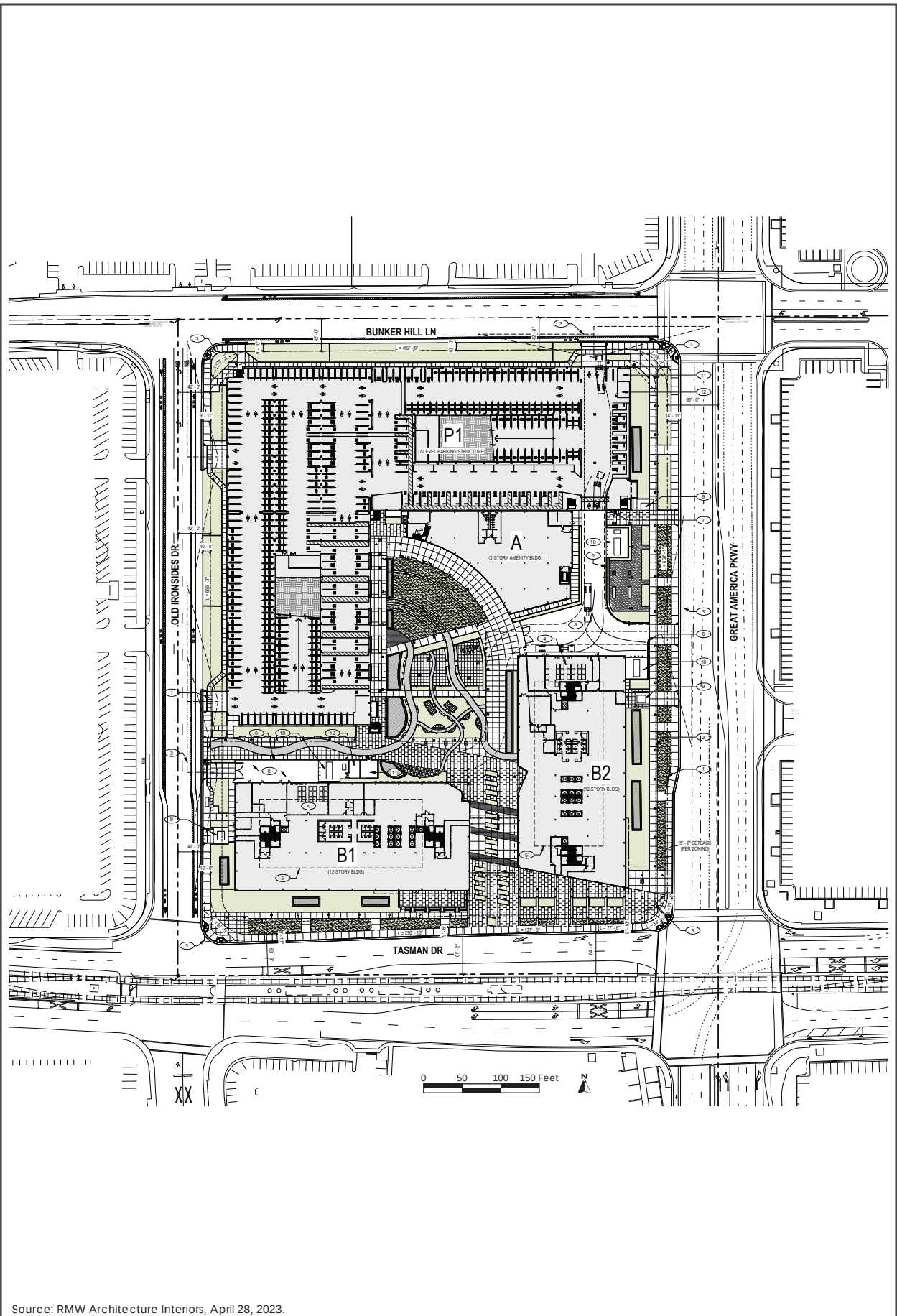
The project would demolish four, two-story office buildings and associated surface parking lots, as well as remove approximately 194 trees and construct a new office complex.

3.2.1 Proposed Development

The project would construct two, 12-story office buildings (Building 1 and Building 2) totaling 1,030,455 square feet. The office buildings would be approximately 177 feet tall to the top of the roof and 192 feet tall to the penthouse. The proposed buildings would include office space, cafeterias and dining areas, and showers and changing areas available to the future employees at the site. The project proposes enclosed pedestrian walkways ("bridges") to connect the two office buildings on the fourth through 12th floors, refer to Figure 3.2-1, 3.2-2, and 3.2-3 for the site plan and building elevations.

In addition, the project proposes to construct a seven-level, above-grade parking structure with an attached 38,185 square foot, two-story amenity building. The project would result in a net increase of approximately 821,261 square feet of office space and 38,185 square feet of amenity space on the site. The amenity building would be approximately 32 feet tall to the roof, and 42 feet tall at the top of the enclosed stairwell. The parking garage would be approximately 62 feet to the top floor of the structure and 78.2 feet tall to the top of the elevator enclosure (refer to Figure 3.2-4 for the parking garage elevations). The parking structure would provide 3,313 parking spaces.

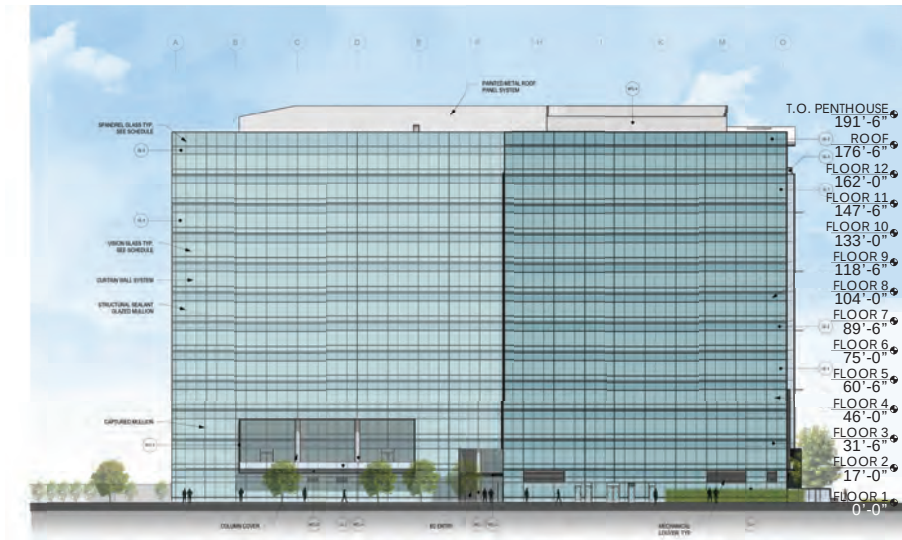
The proposed project would construct a crosswalk along the south leg of the Old Ironsides Drive and Bunker Hill Lane intersection with America Disabilities Act (ADA) compliant curb ramps and truncated domes along the southeast corner of the intersection. The proposed project would also construct new six- to 10-foot wide sidewalks and ADA compliant curb ramps along the project frontage at Tasman Drive, Great America Parkway, Old Ironsides Drive, and Bunker Hill Lane.



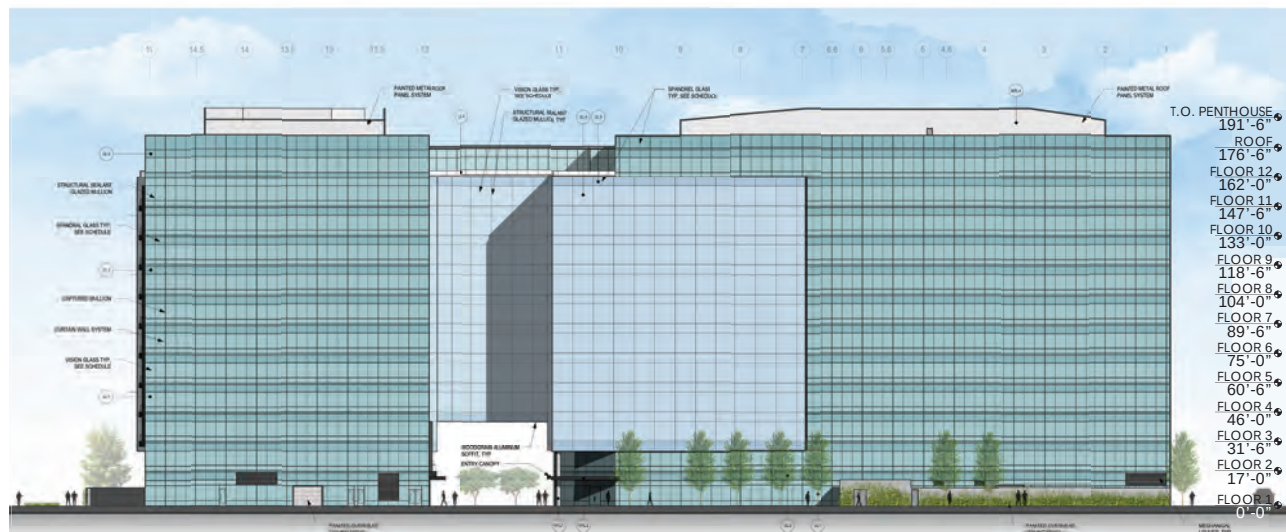
Source: RMW Architecture Interiors, April 28, 2023.

SITE PLAN

FIGURE 3.2-1



WEST ELEVATION

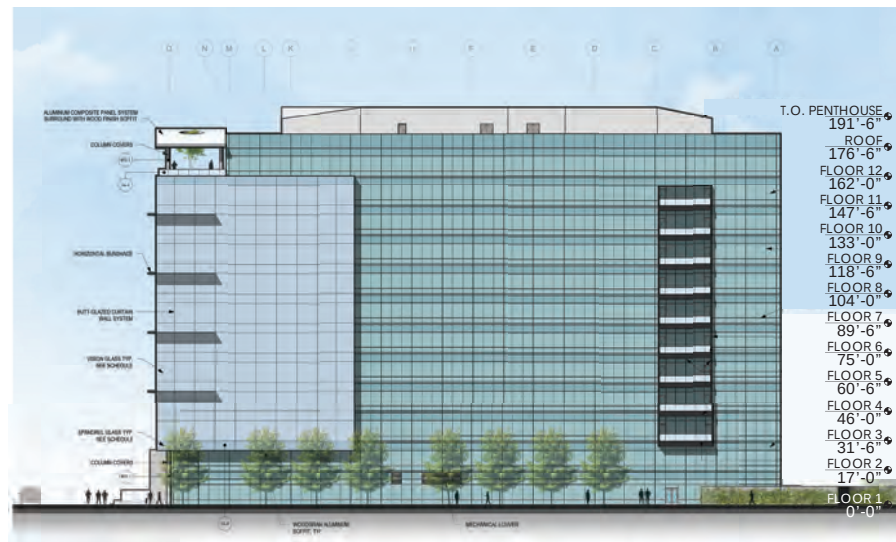


NORTH ELEVATION

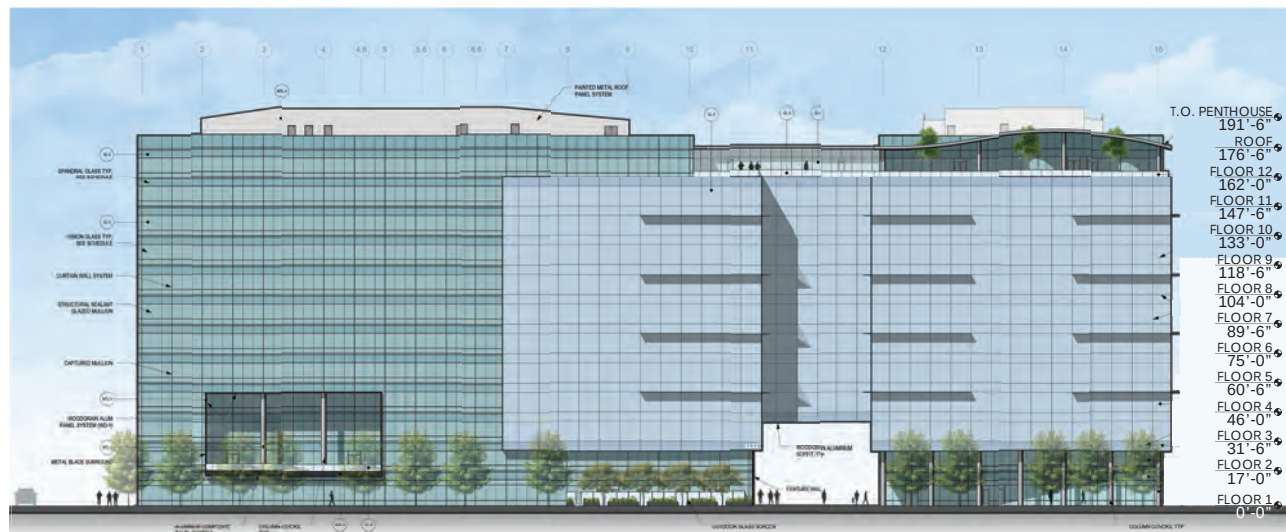
Source: RMW Architecture Interiors, April 28, 2023.

BUILDING 1 AND 2 ELEVATIONS: NORTH AND WEST

FIGURE 3.2-2



EAST ELEVATION

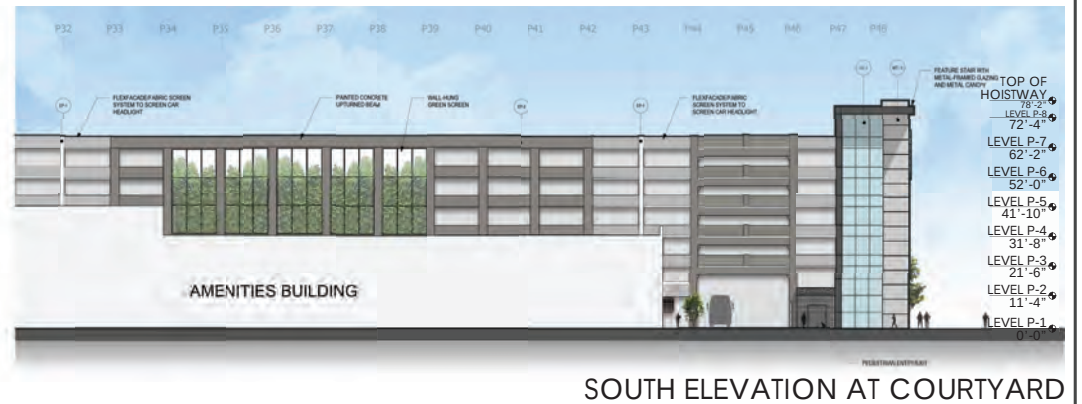
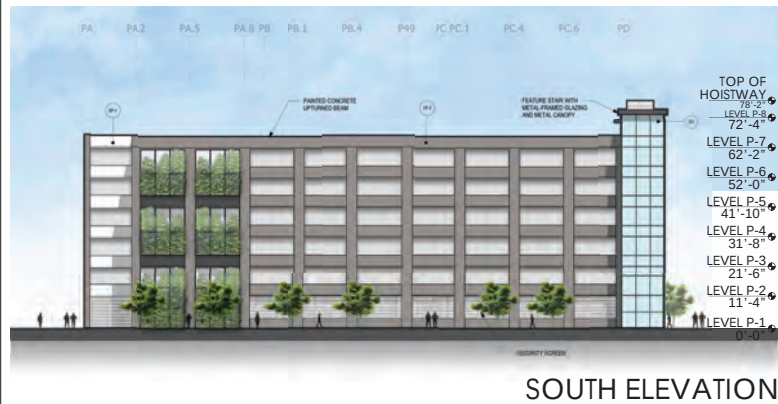


SOUTH ELEVATION

Source: RMW Architecture Interiors, April 28, 2023.

BUILDING 1 AND 2 ELEVATIONS: SOUTH AND EAST

FIGURE 3.2-3



Source: RMW Architecture Interiors, April 28, 2023.

PARKING GARAGE ELEVATIONS

FIGURE 3.2-4

Vehicles would enter/exit the site via one existing driveway on Bunker Hill Lane and two new driveways on Old Ironsides Drive.

3.2.2 Utilities

Stormwater runoff would flow to drainage management areas and would be treated via media filters and bioretention basins. Stormwater would then be directed to the City's stormwater system. New six-inch, eight-inch, and 12-inch storm drain lines and manholes, overflow drains, and drain clean outs would be installed at the site and would connect to the City's existing 15- to 90-inch storm drains on Bunker Hill Lane, Great America Parkway, Tasman Drive, and Old Ironsides Drive. New water and sanitary sewer lines would be installed at the site and would connect to the City's existing 12- to 30-inch sanitary sewer lines on Great America Parkway.

The project would include a generator room on the first floor of each office building. Building 1 would include a 900-kilowatt (kW) generator and Building 2 would include a 1,200-kW generator. Each building would also have a service yard that would include a trash/recycling storage area and electrical room.

3.2.3 Landscaping and Recreation

The development would have an enclosed outdoor recreational area at grade between the buildings and parking structures, which would include an amphitheater/meeting area, a barbeque area, and dining areas. Additionally, there would be rooftop terraces on the bridge linking the office buildings and the roof of the amenity building. Each office building would have a large second-fourth level balcony with sufficient space for large meetings or gatherings. The proposed development would have landscaping throughout the site, including trees and shrubs planted along the perimeter of the buildings, in the central courtyard, and on the terraces and balconies.

3.2.4 Green Building Measures

The project would comply with the California Green Building Standards code (CALGreen) and achieve a minimum of 50 points through the GreenPoint Rated certification system or a Leadership in Energy and Environmental Design (LEED) Gold certification.¹ The project would include the following green building measures:

- Adjacent to public transit: VTA Light Rail Station at Tasman and VTA bus stop on Old Ironsides.
- Bicycle facilities and Electric Vehicle (EV) Charging Stations.
- Construction in conformance with Title 24 and CALGreen to promote energy and water efficiency.
- Optimized energy performance using efficient HVAC equipment and building materials.
- Enhanced commissioning and ongoing metering of power usage.
- Efficient landscape water usage and installation of low flow fixtures within the buildings.

¹ The GreenPoint Rated system was established by the U.S. Green Building Council.

- Recycling services on-site to reduce solid waste disposal.
- Planting trees and installing roofing materials to reduce the heat island effect.

3.2.5 Transportation Demand Management Plan

The City's Climate Action Plan (CAP) states that large employers over 500 employees must achieve a minimum 25 percent reduction in VMT through the implementation of active transportation demand management (TDM) measures. The project TDM plan, completed in October 2022, includes the TDM measures and features listed below. The project applicant's office tenant(s) would offer, the following TDM measures to future employees at the site:

TDM Infrastructure/Project Design Features

- Infill development
- Transit and shuttle shelter
- Bicycle parking – long-term secure lockers or bike rooms (Class I)
- Bicycle parking – short-term racks (Class II)
- Enhanced bicycle parking facilities
- Bicycle Fix-it Station/repair tools/air pump
- Showers and changing facilities
- Pedestrian facilities – on-site amenities
- Reduced parking
- Preferential carpool parking spaces
- Preferential vanpool parking spaces
- Clean-air vehicle parking
- EV parking
- Shared-use parking
- Electronic Transit Board, to communicate transit information to commuters

Commuter Benefits (office tenant to provide)

- Bay Area Commuter Benefits Program
- Transit subsidies
- Vanpool subsidies
- Pre-tax transit deduction payroll option
- Pre-tax parking deduction payroll option (for parking at a transit station)
- Carpool/bike/walk commuter allowance (taxable) – conceptual
- Telework option
- Alternative work schedule option (flextime, compressed workweek)

Commuter Service and Resources (office tenant to provide)

- Commute information web portal/intranet
- Guaranteed Ride Home Program
- Scheduled mobile Bicycle Repair Service
- Tenant e-bike fleet

- Tenant scooter program
- Electric bicycle and electric scooter share
- Promote the \$400 monthly 511.org vanpool group subsidy
- Promote the \$350 monthly VTA vanpool group subsidy
- Carpool and Vanpool Incentives

Commuter Marketing and Outreach (office tenant to perform)

- New employee – onboarding introduction to the commuter program
- Employee Commuter Transportation Fair, events, and campaigns
- Carpool matching events
- Newsletter articles and emails
- Employer participation (e.g., Silicon Valley Bicycle Coalition, Best Workplaces for Commuters, Association for Commuter Transportation, League of American Bicyclists)
- Transportation Management Agency (TMA) participation

TDM Performance Monitoring and Surveying (applicant and all tenants to perform)

- Tenant Compliance Requirement
- Annual online Employee Commuter Survey and reporting
- Annual driveway trip count assessment (compared to ITE estimates) – conceptual
- Notice of implementation
- Pre-occupancy site visit
- Non-compliance penalty (included as a tenant responsibility per lease)
- No expiration of the TDM Plan (all measures in the TDM Plan will continue to be implemented by the applicant on an ongoing basis)

3.2.6 Construction and Demolition

The construction duration for the proposed project would be 25 months. Construction activities would include demolition, grading, excavation, trenching (to access utilities), and construction of the proposed office buildings, parking structure, and amenities building. The project would include the use of electrified cranes for efficiency and reduce NO_x emissions. The project would export 21,000 cubic yards from the site. No soil would be imported to the site.

3.2.7 General Plan and Zoning

The project site is designated Low-Intensity Office/R&D in the General Plan. The *Low-Intensity Office/R&D* designation is intended for campus-like office development that includes office and R&D, as well as medical facilities, free standing data centers, and limited manufacturing uses. The maximum floor area ratio (FAR) for this designation is 1.0. The project applicant proposes a GPA to change the site's designation to High Intensity Office/R&D. This designation allows for high-rise or campus-like developments for corporate headquarters, R&D and supporting uses, with landscaped areas for employee activities. The maximum FAR is 2.0, excluding any FAR devoted to supporting retail uses. The project would have a FAR of 2.3, which is above the maximum FAR for this land use designation. As a part of the GPA, the City would add a policy to the General Plan to allow up to 2.5 FAR for the sites within one half mile of rail stations. The project site is 70 feet north of the Old

Ironsides Light Rail Station on Tasman Drive; therefore, the project would be consistent with the new General Plan Policy.

There are 22 other parcels, totaling 133 acres, designated as High Intensity Office/R&D within a half mile of LRT stations (i.e., Old Ironsides Station, Great America Station, and the Patrick Henry Pocket Track) in the City. The High Intensity Office/R&D parcels are located north and south of Tasman Drive. The General Plan EIR analysis assumed these parcels would have a maximum FAR of 2.0. With the approval of the GPA, it is possible these parcels could be redeveloped with a maximum FAR of 2.5. This could result in an approximate additional 2,896,740 square feet of High Intensity Office/R&D above what was assumed in the General Plan.² Future projects within one half mile of LRT stations (under the GPA) would require environmental review under CEQA.

The zoning designation for the project site is Light Industrial (ML), which accommodates industries operating primarily within an enclosed building. The project is not consistent with the zoning district's height requirements, which limits building heights to 70 feet above ground surface. The maximum height of the proposed buildings would be twelve stories tall (176.5 feet). Therefore, the project applicant proposes to rezone the site to Planned Development in order to allow the construction of the proposed office development.

² Additional square footage = total lot sizes (acreage/square feet) * 0.5 (FAR above General Plan Amendment) = 5,793,480 square feet (133 acres) * 0.5 FAR = 2,896,740 square feet

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:

3.1	Aesthetics	3.12	Mineral Resources
3.2	Agriculture and Forestry Resources	3.13	Noise
3.3	Air Quality	3.14	Population and Housing
3.4	Biological Resources	3.15	Public Services
3.5	Cultural Resources	3.16	Recreation
3.6	Energy	3.17	Transportation
3.7	Geology and Soils	3.18	Tribal Cultural Resources
3.8	Greenhouse Gas Emissions	3.19	Utilities and Service Systems
3.9	Hazards and Hazardous Materials	3.20	Wildfire
3.10	Hydrology and Water Quality	3.21	Mandatory Findings of Significance
3.11	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.³

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.⁴

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

³ 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 or applicable regional transportation plan." 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: OPR. "CEQA Review of Housing Projects Technical Advisory." Accessed March 1, 2022. [https://opr.ca.gov/docs/20190208-TechAdvisory-Review of Housing Exemptions.pdf](https://opr.ca.gov/docs/20190208-TechAdvisory-Review%20of%20Housing%20Exemptions.pdf).

⁴ California Department of Transportation. "Scenic Highways." Accessed March 9, 2022. <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>.

Local

Santa Clara City Code

The City Code includes regulations associated with protection of the City's visual character to promote a sound and attractive community appearance, as stated in Chapter 8.30 Public Nuisances and Chapter 18.52 Regulations for Public, Quasi-Public, and Public Park or Recreation Zoning Districts.⁵ The City Code also includes an Architectural Review process, as outlined in Zoning Ordinance Chapter 18.76. The Architectural Review process is intended to serve the following purposes:

- Encourage the orderly and harmonious appearance of structures and properties;
- Maintain the public health, safety, and welfare;
- Maintain property and improvement values throughout the City;
- Encourage the physical development of the City that is consistent with the General Plan and other City regulations; and
- Enhance the aesthetic appearance, functional relationships, neighborhood compatibility and excellent design quality.

Architectural Review Process – Community Design Guidelines

The City reviews plans and drawings submitted for architectural review for design, aesthetic considerations, and consistency with zoning standards, generally prior to submittal for building permits. Architectural review is conducted at a public Development Review Hearing conducted by the Hearing Officer as delegated by the Director of Community Development, who follows the City's Community Design Guidelines. The intent of these guidelines is to provide consistent development standards in the interest of continued maintenance and enhancement of the high-quality living and working environment in the City.

4.1.1.2 *Existing Conditions*

Project Site

The approximately 10.1-acre project site is comprised of two parcels within a developed area of the City of Santa Clara. The site is currently developed with four, two-story office buildings that are surrounded by associated surface parking lots. The buildings are set back from Bunker Hill Lane, Tasman Drive, Old Ironsides Drive, and Great America Parkway by paved surface parking, landscaping, and sidewalks. Landscaping consists of grass, shrubs, and trees around the buildings, along the perimeter of the site, and within the parking lot. The existing buildings on-site are primarily made of concrete and were built between 1979 and 1982 and have similar architectural styles, with Mansard roofs,⁶ tinted windows, and decorative arches along the first-floor windows. Refer to Photos 1 and 2 for images of the existing buildings.

⁵ City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan*.

⁶ Mansard roofs are roofs that are flat with steep side slopes.



Photo 1: View of the existing offices on the project site.



Photo 2: Close up view of the architectural style of the existing office buildings.

PHOTOS 1 & 2

Surrounding Land Uses

Development in the project area consists of a mixture of office and commercial land uses primarily made of concrete. Buildings in the area vary in height from two to 14 stories.

The project site is bordered by Bunker Hill Lane, a two-lane roadway, to the north. North of Bunker Hill Lane are two- to four-story office buildings surrounded by surface parking. The two-story office buildings have Mansard-styled roofs, and tinted windows. The façade of the four-story buildings are primarily tinted glass and concrete. Refer to Photos 3 and 4.

Located east of the project site is Great America Parkway, a four-lane roadway. East of Great America Parkway is a 14-story hotel connected to the two-story Santa Clara Convention Center and a large surface parking lot. The roofs of both buildings are mostly flat. Both building façades are made of tinted windows and concrete. Refer to Photo 5.

The project site fronts Tasman Drive along the site's southern edge. Tasman Drive is a four-lane roadway containing VTA light rail tracks and a station (see Photo 6). Across Tasman Drive, visible from the project frontage, is four-story office building with a cream exterior, brown tinted windows and a five-story office building with a primarily a glass façade with brown tinted windows (see Photo 7).

West of the project site is Old Ironsides Drive, a two-lane roadway. Located across Old Ironsides Drive are various two-story office buildings with dark grey exteriors and Mansard-styled roofs, with an associated paved surface parking lots. Refer to Photo 8. All of the surrounding properties include landscaping that is well-maintained.

Scenic Views and Resources

A scenic vista is the view of an area that is visually or aesthetically pleasing. No designated scenic vistas or view corridors are located within the City; however, the City of Santa Clara 2010-2035 General Plan Integrated Environmental Impact Report lists the Santa Cruz Mountains, Diablo Range, San Tomas Aquino Creek, and the Guadalupe River as “visual resources” that can be viewed from areas within the City. Other areas within the City provide views of the community and surrounding natural features, including views of the open space/undeveloped land in the Ulistac Natural Area (approximately two miles northeast of the site). Views of the Santa Cruz Mountains to the west, Diablo Range to the east, and the Ulistac Natural Area to the northeast, from the project area, are obstructed due to existing urban development and landscaping.

There are no state-designated scenic roadways near the project site. The nearest state-designated highway is SR 9/Los Gatos-Saratoga Road, approximately 10 miles southwest of the site.⁷

The project site and the surrounding area are relatively flat and, as a result, the site is only visible from the immediate area.

⁷ Caltrans. Caltrans State Scenic Highway Program. Accessed August 16, 2023.
<https://www.arcgis.com/home/item.html?id=f0259b1ad0fe4093a5604c9b838a486a..>



Photo 3: View of the two-story office buildings across Bunker Hill Lane, north of the project site.



Photo 4: View of the four-story office building across Bunker Hill Lane, north of the project site.

PHOTOS 3 & 4



Photo 5: View of the 14-story hotel across Great America Parkway, facing east from the project site.



Photo 6: View of the VTA stop on Tasman Drive, south of the project site.

PHOTOS 5 & 6



Photo 7: View of the office building across Tasman Drive, facing south from the project site.



Photo 8: View of the office buildings across Old Ironsides Drive, facing west from the project site.

PHOTOS 7 & 8

Light and Glare

Sources of light and glare in the project area include streetlights, parking lot lights, security lights, vehicular headlights, internal building lights, and reflective building surfaces and windows.

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? ⁸ 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?	☐	☐	☒	☐

4.1.2.1 *Project Impacts*

Impact AES-1: The project would not have a substantial adverse effect on a scenic vista.
(Less than Significant Impact)

The project site is developed with four, two-story office buildings and associated surface parking lots. It is not a designated scenic vista. The project site is surrounded by commercial/office R&D and a hotel/event center and is not in proximity to any scenic vistas (e.g., the Ulistac Natural Area, Santa Cruz Mountains, Diablo Range). Given the distance of these vistas from the project area, the flat topography of the area, and surrounding development which blocks views of these vistas, the proposed development would not result in a substantial impact to views of scenic vistas within or surrounding the City. **(Less than Significant Impact)**

⁸ Public views are those that are experienced from publicly accessible vantage points.

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. **(No Impact)**

As stated in Section 4.1.1.2, Existing Conditions, the project site is not located within or in the vicinity of a scenic highway. Therefore, the project would not damage scenic resources within a state scenic highway. **(No 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)**

The project would demolish the four existing two-story buildings and associated parking lots to construct two 12-story buildings. The project would also construct a seven-story parking structure with an attached two-story amenity building. The proposed 12-story office buildings would be approximately 177 feet tall to the top of the roof and 192 feet tall to the penthouse. The proposed office building façades would incorporate tinted windows, aluminum framing in the exterior design, and a metal roof panel system. Enclosed pedestrian walkways would be located between the two office buildings, on the fourth through 12th floors.

The parking structure would be approximately 62 feet to the top floor of the structure and 78.2 feet tall to the top of the elevator enclosure. The attached amenity building would be approximately 32 feet tall to the roof and 42 feet tall at the top of the enclosed stairwell. The parking structure would primarily consist of aluminum paneling and concrete. The amenity building would be a two-story concrete building with aluminum paneling and wood finish paneling. The project would include landscaping throughout the site, including trees and shrubs planted along the perimeter of the buildings, in the central courtyard, and on the terraces and balconies.

There are 212 trees on the site, 194 of which would be removed as part of the project. Trees would be replaced in accordance with the City's requirements to offset the aesthetic effects of tree removal (refer to Section 4.3 Biological Resources for a detailed discussion regarding tree removal and replacement).

Although the proposed project would change the visual conditions of the project site compared to existing conditions, implementation of the project would not substantially degrade the existing visual character of the site or its surroundings, since it would conform with the City's Community Design Guidelines. Furthermore, site development would be subject to the City's Development Review Hearing process for architectural review. Therefore, the project would not conflict with the City's regulations related to 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)**

The project would include outdoor security lighting on-site, along walkways, driveways, entrance areas, and within the parking structure and surface lots. The outside lighting would be comparable in brightness to the existing ambient lighting on the site and in the surrounding area. The proposed office buildings and parking structure with an attached amenity building would also include interior lighting. The outside lighting would comply with the City's lighting requirements (City Code Section 18.48.140⁹) and would be comparable in brightness to the ambient lighting in the surrounding area. The new building would be constructed with non-reflective materials and would not result in glare to adjacent buildings. The project, therefore, would not significantly impact adjacent land uses due to increased nighttime light levels or daytime glare from building materials. **(Less Than Significant Impact)**

⁹ Section 18.48.140 states that lighting shall reflect away from residential areas and public streets.

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.¹⁰

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.¹¹

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.¹² Programs such as CAL FIRE's Fire and Resource Assessment Program and 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.¹³

4.2.1.2 *Existing Conditions*

The project site is located in a developed, urban area of Santa Clara and is surrounded by office R&D and hotel uses. The project site is within the Light Industrial (ML) zoning district. The Santa Clara County Important Farmland 2016 Map designates the project site as "Urban and Built-Up Land".¹⁴

¹⁰ California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed March 9, 2022. <http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx>.

¹¹ California Department of Conservation. "Williamson Act." <http://www.conservation.ca.gov/dlrp/lca>.

¹² 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)).

¹³ California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed March 9, 2022. <http://frap.fire.ca.gov/>.

¹⁴ California Natural Resources Agency. *Santa Clara County Important Farmland 2016*. September 2018. Accessed March 9, 2022. <https://www.conservation.ca.gov/dlrp/fmmp/Pages/SantaClara.aspx>.

Urban and Built-up Land is defined as land with at least six structures per ten acres. Common examples of “Urban and Built-Up Land” are residential, institutional, industrial, commercial, landfill, golf course, airports, and other utility uses. The site is not subject to a Williamson Act contract.

The project site and surrounding area do not meet the definition of forest land or timberland.¹⁵

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?	☐	☐	☐	☒

¹⁵ According to California Public Resources Code Section 12220(g), Forest Land is land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. According to California Public Resources Code Section 4526, “Timberland” means land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees.

4.2.2.1 *Project Impacts*

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)
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The project site is located in an urbanized area that is not used for agriculture. The proposed project would not affect Prime Farmland or any other type of farmland. Therefore, the project would not convert farmland to a non-agricultural use. **(No Impact)**

Impact AG-2:	The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. (No Impact)
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The project site is zoned as Light Industrial and is not zoned for agricultural use. The project would not use or conflict with a Williamson Act contract. **(No Impact)**

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)
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Per Sections 12220(g) and 4526 of the California Public Resources Code, the project site does not meet the definition of forest land or timberland. Therefore, the project would not conflict with existing zoning or cause rezoning of forest land or timberland. **(No Impact)**

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)
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As discussed under Impact AG-3, the project site is not designated as forest land. Therefore, the proposed project would not result in a loss of forest land. **(No Impact)**

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)
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The project site is not designated by the California Natural Resources Agency as important farmland. The site is not designated as forest land and is not adjacent to farmland or forest land. The project, therefore, would not result in the conversion of farmland or forest land to a non-agricultural or non-forest use. **(No Impact)**

4.3 AIR QUALITY

The following discussion is based, in part, on an Air Quality and Greenhouse Gas Emission Assessment prepared for the project by Illingworth & Rodkin, Inc., dated October 2021. A copy of this report is included in Appendix A of this Initial Study.

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 (O₃), nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), sulfur oxides (SO_x), and lead.¹⁶ 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, 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, 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 O₃ 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 O₃ levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to

¹⁶ 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 O₃ levels. The highest O₃ 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 (PM₁₀) and fine particulate matter where particles have a diameter of 2.5 micrometers or less (PM_{2.5}). Elevated concentrations of PM₁₀ 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).¹⁷ 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, athletes, 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, O₃, CO, SO_x, NO_x, and lead.

¹⁷ California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed October 12, 2021. <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 addition 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

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-greenhouse gases (GHGs) that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.¹⁸

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.

¹⁸ BAAQMD. *Final 2017 Clean Air Plan*. April 19, 2017. <http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans>.

City of Santa Clara General Plan

The Santa Clara 2010-2035 General Plan includes policies that address air quality during the planning horizon of the General Plan. The following goals, policies, and actions are applicable to the proposed project:

Policies	Description
5.10.2-P3	Encourage implementation of technological advances that minimize public health hazards and reduce the generation of air pollutants.
5.10.2-P6	Require “Best Management Practices” for construction dust abatement.

4.3.1.3 *Existing Conditions*

Climate and Topography

Topography can restrict horizontal dilution and mixing of pollutants by creating a barrier to air movement. The South Bay has significant terrain features that affect air quality. The Santa Cruz Mountains and Diablo Range on either side of the South Bay restrict horizontal dilution, and this alignment of the terrain also channels winds from the north to south, carrying pollution from the northern Peninsula toward Santa Clara.

The combined effects of moderate ventilation, frequent inversions that restrict vertical dilution and terrain that restricts horizontal dilution give Santa Clara a relatively high atmospheric potential for pollution compared to other parts of the San Francisco Bay Air Basin and provide a high potential for transport of pollutants to the east and south.

Existing Air Pollutant Levels

BAAQMD monitors air pollution at various sites within the Bay Area. The nearest official monitoring station to the City of Santa Clara is located at 158 East Jackson Street in San José, approximately six miles southeast of the site. Pollutant monitoring results for the years 2017 to 2019 (the most current data available) at the San José monitoring station are shown in Table 4.3-2.

Table 4.3-2: Ambient Air Quality Standards Violations and Highest Concentrations				
Pollutant	Standard	Days Exceeding Standard		
		2017	2018	2019
San José Station				
Ozone	State 1-hour	6	2	6
	Federal 8-hour	6	3	9
Carbon Monoxide	Federal 8-hour	0	0	0
	State 8-hour	0	0	0
Nitrogen Dioxide	State 1-hour	1	0	0
	Federal 1-hour	0	0	0
PM ₁₀	Federal 24-hour	0	1	0
	State 24-hour	6	6	5
PM _{2.5}	Federal 24-hour	18	18	1
Source: BAAQMD. Air Pollution Summaries (2017-2019). Available at: http://www.baaqmd.gov/about-air-quality/air-quality-summaries .				

The Bay Area, as a whole, does not meet state or federal ambient air quality standards for ground level O₃ and PM_{2.5}, nor does it meet state standards for PM₁₀. The Bay Area is considered in attainment or unclassified for all other pollutants.

Local Community Risks/Toxic Air Contaminants

The project area includes both mobile and TAC sources. The primary mobile TAC sources within 1,000 feet of the site include emissions from vehicles traveling along Great America Parkway and Tasman Drive. BAAMQD-permitted stationary TAC sources within 1,000 feet of the site include generators at 4988 Great America Parkway (an office/R&D use), 300 feet south of the site, 5201 Great America Parkway (an office use), 400 feet northeast of the site, and 4949 Great America Parkway (a hotel use), 500 feet southeast of the site.¹⁹

Sensitive Receptors

There are no sensitive receptors within 1,000 feet of the project site. The nearest sensitive receptors are residences on Tasman Drive, 2,120 feet west of the site.

¹⁹ BAAQMD. Permitted Stationary Sources Risk and Hazards. Accessed January 3, 2022. <https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=2387ae674013413f987b1071715daa65>.

Odors

Common sources of odors and odor complaints include wastewater treatment plants, transfer stations, coffee roasters, painting/coating operations, and landfills. Significant sources of offending odors are typically identified based on complaint histories received and compiled by BAAQMD. Typical large sources of odors that result in complaints are wastewater treatment facilities, landfills including composting operations, food processing facilities, and chemical plants. Other sources, such as restaurants, paint or body shops, and coffee roasters typically result in localized sources of odors. The project site is in an office/R&D and commercial area and is not surrounded by facilities that produce substantial odors.

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.

4.3.2.1 **BAAMQMD**

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 4.3-3.

Table 4.3-3: 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 µg/m ³	0.8 µg/m ³ (average)	

Friant Ranch Case

In a 2018 decision (*Sierra Club v. County of Fresno*), the Supreme Court of California determined that CEQA requires that the potential for the project's emissions to affect human health in the air basin must be disclosed when a project's criteria air pollutant emissions would exceed applicable thresholds and contribute considerably to a significant cumulative impact. State and federal ambient air quality standards are health-based standards and exceedances of those standards result in continued unhealthy levels of air pollutants. As stated in the BAAQMD CEQA Air Quality Guidelines, air pollution by its nature is largely a cumulative impact. No single project is sufficient in size to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project has a less than significant impact for criteria air pollutants, it is assumed not to have an adverse health effect with respect to those pollutants.

4.3.2.2 *Project Impacts*

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

2017 BAAQMD Clean Air Plan

The BAAQMD CEQA Air Quality Guidelines set forth criteria for determining consistency with the Clean Air Plan. In general, a project is considered consistent if, a) the plan supports the primary goals of the Clean Air Plan; b) includes relevant control measures; and c) does not interfere with implementation of Clean Air Plan control measures. The project supports the goals of the 2017 BAAQMD CAP of protecting public health and protecting the climate and is consistent with BAAQMD CAP transportation, building, natural and working lands, and water control measures by:

- Implementing mitigation/avoidance measures to reduce criteria air pollutant emissions during construction,
- Reducing motor vehicle miles traveled (VMT) by proposing office/employment development in proximity to existing/proposed/planned pedestrian, bicycle, and transit facilities,
- Including a TDM program that encourages automobile-alternative transportation, and ridesharing,
- Complying with applicable regulations that would result in energy and water efficiency including Title 24 and California Green Building Standards Code,
- Planting new trees in accordance with The City's General Plan Policy 5.3.1-P10 to reduce the urban heat island effect, and
- Complying with the City's construction debris diversion ordinance and state waste diversion requirements to reduce the amount of waste in landfills.

The project as proposed would not disrupt or hinder the implementation of applicable control measures. **(Less than Significant Impact)**

Regional Criteria Pollutants

As discussed previously in Section 3.3.1.3, the Bay Area is considered a non-attainment area for ground-level O₃ and PM_{2.5} under both the federal Clean Air Act and the California Clean Air Act. The area is also considered to be in non-attainment for PM₁₀ under the California Clean Air Act. As part of an effort to attain and maintain ambient air quality standards for O₃ and PM₁₀, BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for O₃ precursor pollutants (ROG and NO_x), PM₁₀, and PM_{2.5} and apply to both construction period and operational period impacts and are summarized in Table 3.3-4 and Table 3.3-5 and described below.

Construction Period Emissions

The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was used to estimate emissions from construction of the project. The project land use type and size, and anticipated construction schedule were inputted to CalEEMod. The model output from CalEEMod along with construction and operational inputs can be found in Appendix A.

CalEEMod provided annual emissions for construction, including both on-site and off-site construction activities. On-site activities are primarily made up of construction equipment emissions while off-site activity includes worker, hauling, and vendor traffic. The project construction schedule and equipment usage assume the project would be built out over a period of approximately 25 months. Average daily emissions were computed by dividing the total construction emissions by the number of construction days. Table 4.3-4 shows the estimated construction emissions of ROG, NO_x, PM₁₀ exhaust, and PM_{2.5} exhaust during construction of the project.

Table 4.3-4: Construction Period Emissions				
Year	ROG	NO_x	PM₁₀ Exhaust	PM_{2.5} Exhaust
Construction Emissions Per Year (Tons)				
2022	0.78	5.12	0.27	0.17
2023	6.58	6.21	0.35	0.23
2024	0.18	1.09	0.07	0.04
Annualized Daily Construction Emissions Per Day (pounds/day)				
2022 (219 construction workdays)	7.12	46.74	2.44	1.51
2023 (261 construction workdays)	50.40	47.55	2.69	1.80
2024 (79 construction workdays)	4.66	27.61	1.77	0.89
BAAQMD Thresholds (pounds/day)	54 lbs./day	54 lbs./day	82 lbs./day	54 lbs./day
Exceed Threshold?	No	No	No	No

The project would include the use of electrified cranes, which reduces NO_x emissions. ROG emissions associated with architectural coatings (e.g., painting) were assumed to occur all within one year. Additionally, the General Plan Policy 5.10.2-P6 requires the implementation of the BAAQMD best management practices (BMPs) to control dust and exhaust during construction. Therefore, criteria air pollutant emissions from the project would be further reduced with those measures.

Conditions of Approval: The following measures shall be implemented during all phases of construction to control dust and exhaust at the project site:

- 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 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of the 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 of the on-site project superintendent to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

The project, with the implementation of the above BMPs, would reduce fugitive dust emissions to a less than significant level by controlling dust and exhaust, limiting exposed soil surfaces, and reducing PM₁₀ and PM_{2.5} exhaust emissions from construction equipment. Therefore, the project would not result in a significant criteria air pollutant impact from construction emissions. **(Less Than Significant Impact)**

Operational Period Emissions

Operational air emissions from the project would be generated primarily from vehicles driven by future employees, customers, and vendors, as well as two new stationary sources (described below). Evaporative emissions from architectural coatings and maintenance products (classified as consumer products) are typical emissions from these types of uses. CalEEMod was used to estimate emissions from operation of the proposed project. Existing site operations were considered to offset the emissions associated with the proposed project.

The project would include a 900-kW diesel-fueled emergency generator and a 1,200-kW diesel-fueled emergency generator, each housed in a generator room in their respective building. These generators would be tested periodically and power the buildings in the event of a power failure. CARB and BAAQMD requirements limit these engine operations to 50 hours each per year of non-emergency operation. During testing periods, the engines would typically be run for less than one hour. The engines would be required to meet CARB and EPA emission standards and consume commercially available California low-sulfur diesel fuel.

Annual emissions were predicted using CalEEMod and daily emissions were estimated assuming 365 days of operation. Table 4.3-5 shows average daily construction emissions of ROG, NO_x, total PM₁₀, and total PM_{2.5} during operation of the project.

Table 4.3-5: Operational Period Emissions				
Scenario	ROG	NO_x	PM₁₀ Exhaust	PM_{2.5} Exhaust
2025 Project Operational Emissions ¹ (tons/year)	7.22	2.76	4.42	1.13
2025 Existing Use Emissions (tons/year) ²	1.49	0.84	1.13	0.30
Net Annual Emissions (tons/year)	5.73	1.92	3.29	0.83
BAAQMD Thresholds (tons/year)	10 tons	10 tons	15 tons	10 tons
Exceed Threshold?	No	No	No	No
2025 Net Project Operational Emissions (pounds/day) ¹	31.41	10.52	18.02	4.55
BAAQMD Thresholds (pounds/day)	54 lbs.	54 lbs.	82 lbs.	54 lbs.
Exceed Threshold?	No	No	No	No
¹ Assumes 365-day operation				
² The project's Air Quality/GHG Assessment evaluated an existing office square footage of 202,690 square feet that would generate 1,856 daily vehicle trips. The project site's existing office square footage is 209,194 square feet and generates 1,916 daily trips. Therefore, the results of the air quality assessment, shown in this table, provides a conservative estimate of operational net annual criteria pollutant emissions.				

As shown in Table 4.3-5, project operation would not exceed BAAQMD's annual or daily emissions thresholds. Therefore, the project would not result in a significant operational criteria pollutants impact in a region classified as non-attainment. **(Less Than Significant 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)**

As discussed under Impact AIR-1, the proposed project's construction and operational criteria pollutant emissions would not exceed the BAAQMD significance thresholds. Since the project would have a less than significant criteria pollutant impact, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment. **(Less Than Significant Impact)**

Impact AIR-3: **The project would not expose sensitive receptors to substantial pollutant concentrations. (Less than Significant Impact)**

The project would construct an office development with two emergency diesel-operated generators, which would be considered stationary TAC sources. Diesel-operated construction equipment would also be a TAC source at the site. Based on BAAQMD CEQA Air Quality Guidelines, TAC sources have the potential to impact off-site sensitive receptors located within 1,000 feet of a project site.

Given the nearest sensitive receptors are 2,120 feet west of the project site, the project would not result in TAC impacts to off-site sensitive receptors. **(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)

No new stationary odor sources are proposed as part of the proposed project; therefore, the project would not expose existing nearby sensitive receptors to new odor sources. Operation of construction equipment could create objectionable odors, however, due to the localized and temporary nature of construction-related odors, construction of the project would not generate odors that would affect a substantial number of people. **(Less Than Significant Impact)**

4.4 BIOLOGICAL RESOURCES

The following discussion is based, in part, on an Arborist Report completed by Kielty Arborist Services on July 6, 2020. A copy of the report is attached as Appendix B.

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.²⁰ 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

²⁰ United States Department of the Interior. “Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take.” Accessed March 9, 2022. <https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf>.

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.

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.

Regional and Local

Santa Clara Valley Habitat Plan/Natural Community Conservation Plan

The Santa Clara Valley Habitat Plan/Natural Community Conservation Plan (Habitat Plan) covers approximately 520,000 acres, or approximately 62 percent of Santa Clara County. It was developed and adopted through a partnership between Santa Clara County, the Cities of San José, Morgan Hill, and Gilroy, Santa Clara Valley Water District (Valley Water), Santa Clara Valley Transportation Authority (VTA), USFWS, and CDFW. The Habitat Plan is intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in southern Santa Clara County. The Santa Clara Valley Habitat Agency is responsible for implementing the plan.

City of Santa Clara City Code

Chapter 12.35 of the Santa Clara City Code includes City policies for the purpose of preserving the City's urban forest, regulating the management of trees in public places, and encouraging the protection of trees for environmental, aesthetic, and economic purposes. The Santa Clara City Code restricts the removal of certain trees on private property without a permit, including trees with a diameter of 38 inches or more measured at 54 inches above natural grade, and all trees with a diameter of 12 inches or more when measured at 54 inches above natural grade of the following species:

- *Aesculus californica* (California buckeye)
- *Acer macrophyllum* (big leaf maple)
- *Cedrus deodara* (deodar cedar)
- *Cedrus atlantica* "Glauc" (blue Atlas cedar)
- *Cinnamomum camphora* (camphor tree)
- *Platanus racemosa* (western sycamore)
- *Quercus* (native oak tree species), including:
 - *Quercus agrifolia* (coast live oak)
 - *Quercus lobata* (valley oak)
 - *Quercus kelloggii* (black oak)
 - *Quercus douglasii* (blue oak)
 - *Quercus wislizeni* (interior live oak)
- *Sequoia sempervirens* (coast redwood); and
- *Umbellularia californica* (bay laurel or California bay)

The Santa Clara City Code Section 12.35.090 (7) requires a replacement ratio of 2:1 for 24-inch box replacement trees, or replacement ratio of 4:1 for a 15-gallon replacement trees for multi-family, commercial, and industrial properties. Based on City Code Section 12.35.090 (8), where it can be demonstrated that it is not feasible to provide replacement trees on site, the project applicant may work with the City to propose an alternative means of replacement, subject to the approval of the Director of Community Development.

City of Santa Clara General Plan

The Santa Clara 2010-2035 General Plan includes policies that address the preservation of biological resources during the planning horizon of the General Plan. The following goals, policies, and actions are applicable to the proposed project:

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 trees over 36 inches in circumference (approximately 11 inches or more in diameter) as measured from 48 inches above the ground surface.

4.4.1.2 *Existing Conditions*

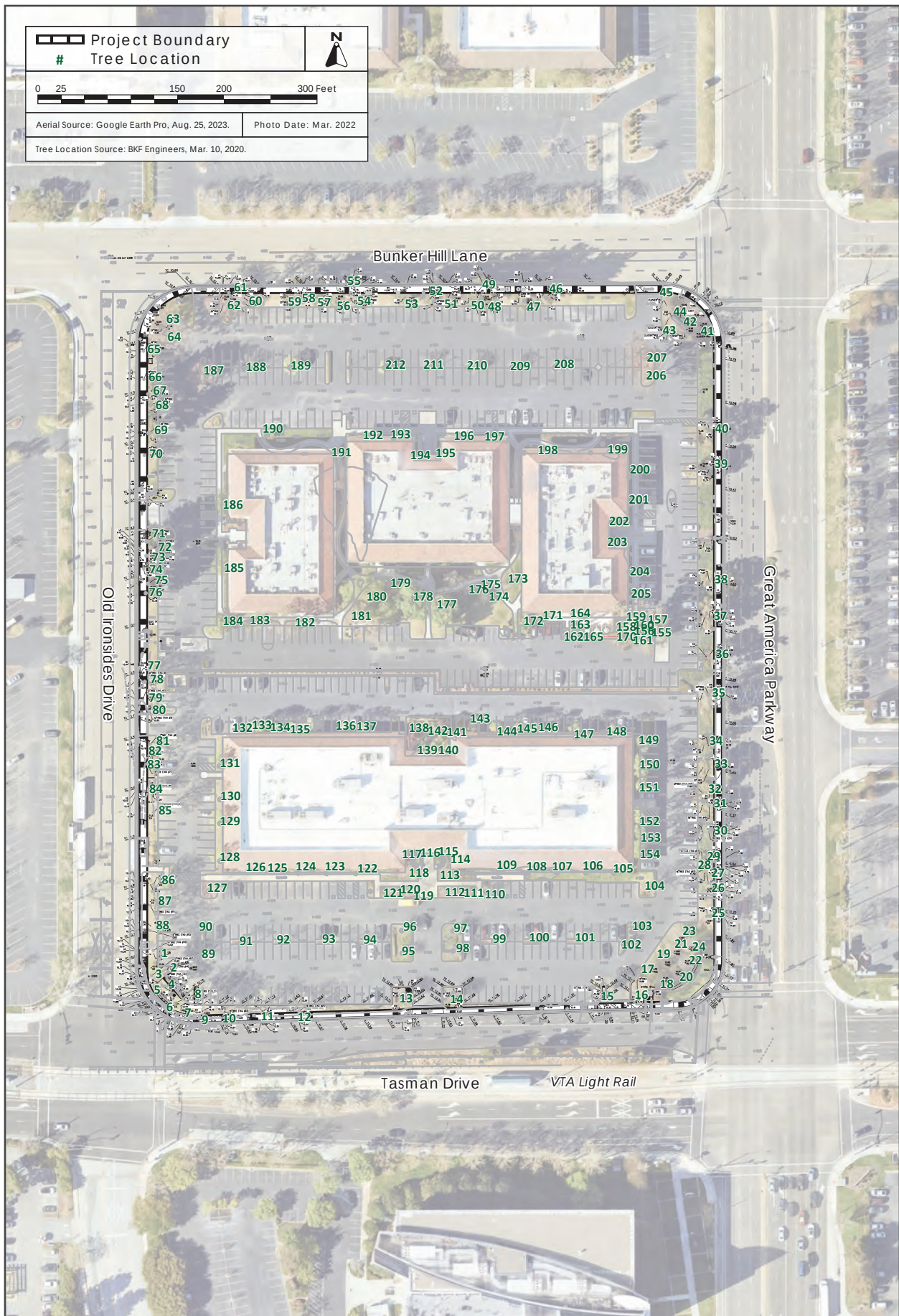
The project site is located within a developed area in the City of Santa Clara. Currently, the project site is developed with four, two-story office buildings and a paved surface parking lot. Vegetation on and adjacent to the site includes grass and a total of 212 trees. Special status plant and wildlife species are not present on the project site, although raptors (birds of prey) and other birds may use the trees on-site for nesting or foraging.

Mature trees (both native and non-native) are valuable to the human environment, as they reduce the impacts of global climate change through carbon dioxide absorption, reduce urban heat island effect, provide nesting and foraging habitat for raptors and other migratory birds, and provide visual enhancement. The goal of the City’s General Plan Policy 5.10.1-P4 and City Code, Chapter 12.35 is to protect all healthy cedars, redwoods, oaks, olives, bay laurel, and pepper trees of any size, and all trees over 36 inches in circumference (approximately 11 inches or more in diameter).

Of the 212 trees surveyed; 25 trees are classified as protected by the City. All 25 protected trees are native trees. The existing number of trees and tree species on-site are shown in Table 4.4-1. The location of the trees is shown on Figure 4.4-1.

Table 4.4-1: Tree Survey					
Species	Diameter			Total No. of Trees	Total No. of Protected Trees
	0-11.0 inches	11.1- 38 inches	Greater than 38 inches		
Blackwood acacia (<i>Acacia melanoxylon</i>)	---	8	---	8	---
Italian cypress (<i>Cupressus sempervirens</i>)	7	---	---	7	---
London plane (<i>Platanus hispanica</i>)	15	19	---	34	---
Liquidambar (<i>Liquidambar styraciflua</i>)	16	8	---	24	---
Evergreen pear (<i>Pyrus kawakamii</i>)	5	1	---	6	---
Crape myrtle (<i>Lagerstroemia sp.</i>)	18	21	---	39	---
Flowering pear (<i>Pyrus calleryana</i>)	13	6	---	19	---
Red ironbark eucalyptus (<i>Eucalyptus sideroxylon</i>)	---	8	---	8	---
Brush cherry (<i>Syzygium australe</i>)	5	---	---	5	---
Japanese maple (<i>Acer palmatum</i>)	7	---	---	7	---
Mayten (<i>Maytenus boaria</i>)	3	1	---	4	---
Silver dollar eucalyptus (<i>Eucalyptus polyanthemos</i>)	---	4	---	4	---
Cherry Laurel (<i>Prunus caroliniana</i>)	6	---	---	6	---
Raywood ash (<i>Fraxinus angustifolia</i>)	6	5	---	11	---

Table 4.4-1: Tree Survey					
Species	Diameter			Total No. of Trees	Total No. of Protected Trees
	0-11.0 inches	11.1- 38 inches	Greater than 38 inches		
Green ash (<i>Fraxinus uhdei</i>)	---	1	---	1	---
White ash (<i>Fraxinus americana</i>)	1	2	---	3	---
Redwood (<i>Sequoia sempervirens</i>)	1	24	1	26	25
Total Number of Trees: 212					



TREE LOCATION MAP

FIGURE 4.4-1

4.4.2 Impact Discussion

For the purpose of determining the significance of the project's impact on biological resources, would the project:

	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?	☐	☐	☒	☐
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?	☐	☐	☐	☒

4.4.2.1 *Project Impacts*

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)**

Special-Status Species

As discussed in Section 3.4.1.2, Existing Conditions, the project site does not contain habitat suitable for special-status plant and animal species. The project would result in the redevelopment of an already urbanized area of the City of Santa Clara and would not result in the modification of any habitat area. As a result, development of the proposed project would not adversely affect any candidate, sensitive, or special-status species. **(Less than Significant Impact)**

Nesting Birds/Migratory Birds

Impacts to Birds During Construction

The trees and shrubs within and bordering the project site could potentially 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. Construction activities on-site during the nesting season (February to August) could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that results in abandonment and/or loss of reproductive effort is considered a taking by the CDFW; any loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment would constitute an impact.

Mitigation Measure: In compliance with federal and state regulations and protocol, the project would implement the following mitigation measure to reduce impacts to a less than significant level.

MM BIO-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 1 through August 31.

If it is not possible to schedule construction and tree removal between September and January, then pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests shall be disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of grading, tree removal, or other demolition or 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 all tress and other possible nesting habitats within and immediately adjacent to the construction area of nests. If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist, in consultation with the California Department of Fish and Wildlife, shall determine the extent of a construction-free buffer zone to be established around the nest to ensure that nests of bird species protected by the Migratory Bird Treaty Act = or Fish and Game Code shall not be disturbed during project construction.

The project, with implementation of the above mitigation measure, would reduce impacts to nesting birds (if present) by avoiding construction during nesting bird season or completing pre-construction nesting bird surveys to minimize and/or avoid impacts to nesting birds. **(Less than Significant with Mitigation Incorporated)**

Impacts to Birds During Project Operation

The project site is surrounded by office/R&D and commercial development. There is no open space or wetland areas, where a substantial number of migratory birds are known to occur, surrounding the project site. In addition, the project site is one quarter mile west of San Tomas Aquino Creek and is separated from the creek by commercial and office development. The proposed design would be subject to the City's Development Review Hearing process for architectural review, including bird safe guidelines as applicable. Therefore, the project would not result in significant bird strikes/collisions. **(Less than Significant Impact)**

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. **(Less than Significant Impact)**

The project site is located approximately one quarter mile west of San Tomas Aquino Creek and is located within an area developed with commercial and office/R&D buildings. No riparian habitat or sensitive natural communities exist on or adjacent to the site. Therefore, the project would have a less than significant impact on riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations or by the CDFW or USFWS. **(Less than Significant Impact)**

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)**

No protected wetlands exist on or adjacent to the project site. Therefore, the project would not have a substantial adverse impact on a state or federally protected wetland. **(No Impact)**

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. **(No Impact)**

As mentioned under Impacts BIO-1, BIO-2 and BIO-3, no natural or sensitive habitats such as riparian, wetland or aquatic habitats exist on or adjacent to the site. The project site is not used as a wildlife corridor by any native resident or migratory fish or wildlife species. Therefore, implementation of the proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species. **(No Impact)**

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)**

There are 212 trees on the project site. Of the 212, 194 trees would be removed as part of the project and 18 trees (protected redwood trees) would remain. Of the 194 trees to be removed on-site, seven are coast redwood trees classified as protected by the City.

The City's General Plan (Policy 5.3.1-P10) requires new development to provide street trees at a minimum 2:1 on- or off-site replacement for removal of existing trees. Additionally, the Santa Clara City Code Section 12.35.090 (7) requires a replacement ratio of 2:1 for 24-inch box replacement trees, or replacement ratio of 4:1 for a 15-gallon replacement trees on commercial/office and industrial properties. Based on the City Code, the project would be required to plant a minimum of 386 trees, assuming 24-inch box replacement trees. However, in accordance with City Code Section 12.35.090 (8), where it can be demonstrated that it is not feasible to provide replacement trees on site, the project applicant may work with the City to propose an alternative means of replacement, subject to the approval of the Director of Community Development. Based on the project's Arborist Report (Appendix B of this Initial Study), the project site is not large enough to support 386 trees within the project's landscaped areas and planting this many trees would result in trees with poor structure. Therefore, consistent with City Code Section 12.35.090 (8), the project applicant will implement the following condition of approval.

Condition of Approval

- The project applicant shall replace trees permitted by the City for removal at a 2:1 ratio with 24-inch box specimen trees reviewed, or an equal alternative, as approved by the Director of Community Development.

The project would comply with the above condition of approval which requires the project applicant to replace trees on-site at a replacement ratio approved by the City. As a result, the overall loss of these trees would be less than significant. **(Less Than Significant Impact)**

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 located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state plan. Therefore, it would have no impact. **(No Impact)**

4.5 CULTURAL RESOURCES

This discussion is based in part upon the Archival Review of the project completed by Archaeological Resource Management on September 9, 2022. Given the sensitive information in the archaeological review, the report is available upon request at the City of Santa Clara, Community Development Department.

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.

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.

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.

Senate Bill 18 (2004)

The intent of SB 18 (2004) is to aid in the protection of traditional tribal cultural places through local land use planning by requiring city governments to consult with California Native American tribes on projects which include adoption or amendment of general plans (defined in Government Code Section 65300 et seq.) and specific plans (defined in Government Code Section 65450 et seq.). SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process.

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.

Local

City of Santa Clara General Plan

The Santa Clara 2010-2035 General Plan includes policies that address the preservation of cultural resources during the planning horizon of the General Plan. The following goals, policies, and actions are applicable to the proposed project:

Policies	Description
5.6.3-P1	Require that new development avoid or reduce potential impacts to archaeological, paleontological, and cultural resources.
5.6.3-P2	Encourage salvage and preservation of scientifically valuable paleontological or archaeological materials.
5.6.3-P5	In the event that archaeological/paleontological resources are discovered, require that work be suspended until the significance of the find and recommended actions are determined by a qualified archaeologist/paleontologist.

Policies	Description
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*

Historic Resources

The project site has been developed with the existing office buildings since 1979. Buildings surrounding the site were constructed in the 1970s or subsequent to this period. Prior to construction of the existing buildings, the site was used for agricultural purposes from 1939 until the existing buildings were constructed in 1979.

Based on General Plan Policy 5.6.1-P6, projects in the City are required to evaluate structures/potential resources over 50 years old to determine their eligibility for the City's list of Architecturally or Historically Significant Properties. The existing building on-site is approximately 43 years old (less than 50 years of age) and would not be eligible for listing under the CRHR, National Register of Historic Places (NRHP), or the City of Santa Clara Historic Architecturally or Historically Significant Properties list.

The site is located within an area of modern office/R&D and commercial development, and there are no known historic resources located on or adjacent to the project site. The office/R&D and commercial development to the north, west, and southwest of the site was constructed between 1979 and 1982. Development to the south and east was constructed in the 1980s, 1990s, and early 2000s.

Archaeological/Prehistoric Resources

The project site is located approximately one quarter mile west of San Tomas Aquino Creek. An archival review and records search was completed for the project site and the project area (within one quarter mile of the site) at the Northwest Information Center of the California Historic Resources Information System (CHRIS). Two cultural studies within one quarter of a mile were identified. One of the studies included the archival review and field study for a water recycling project which occurred along Bunker Hill Lane and Great America Parkway. The second study was for a fiber optics routes project in which a portion of the project was long Old Ironsides Drive, Bunker Hill Lane, and Great America Parkway. There were no significant cultural resources identified in these two studies. Archival research showed there were no previously recorded cultural resources within the project site or within a quarter mile of the site.

4.5.2 Impact Discussion

For the purpose of determining the significance of the project's impact on cultural resources, would the project:

	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?	☐	☒	☐	☐

4.5.2.1 *Project Impacts*

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. (No Impact)
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The existing office buildings were constructed in 1979 and are not of historic age. The buildings are not classified as historic resources nor are they listed on the CRHR, NRHP, or the City's list of historic properties.

The buildings in the immediate project area are not classified as historic by the City of Santa Clara and are not currently eligible for inclusion on the CRHR given they are less than 50 years of age and are of a common, modern architectural style. None of the adjacent buildings are listed on the City's list of historic properties.²¹ Development of the project site would not physically damage or materially impair the integrity of any historic building. Therefore, implementation of the proposed project would have no impact on any designated or eligible historic structures. **(No Impact)**

²¹ City of Santa Clara. 2010 -2035 General Plan, Table 8.9-1: Architecturally or Historically Significant Properties. Updated 2014.

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)**

No previously recorded cultural/archaeological resources were identified within the project site or within one quarter mile of the site. In addition, the project site has been identified as an area of low archaeological sensitivity. However, due to the known occupation of the broader project area, it is still possible that construction on-site could result in the exposure or destruction of as yet undiscovered subsurface prehistoric archaeological resources. If the exposure or destruction of subsurface prehistoric resources were to occur, it would be considered a significant impact.

Mitigation Measures: The following project-specific mitigation measures will be implemented during construction to avoid significant impacts to unrecorded subsurface archaeological resources:

MM CUL-2.1: Prior to commencement of any ground-disturbing activity on-site, the project applicant shall retain a registered professional archaeologist and a tribal monitor from a culturally affiliated tribe to be present during all ground-disturbing activities associated with the project. For the purposes of these conditions, ground-disturbing activities shall be defined as any ground disturbance, including but not limited to, excavation, grading, grubbing, scarring, drilling, scraping, blading, trenching, vegetation removal, or demolition of the existing structure or site improvements within the development area shown on the project plans. The registered professional archaeologist and tribal monitor shall be given five days' written notice prior to the start of any ground-disturbing activity. The project applicant shall document receipt of notification in writing.

MM CUL-2.2: In the event that buried, or previously unrecognized archaeological deposits or materials of any kind are inadvertently exposed during any construction activity, work within 50 feet of the find shall cease until a qualified archaeologist can assess the find and provide recommendations for further treatment in consultation with a culturally affiliated tribal representative, if warranted. The archaeologist, in consultation with the project applicant, shall make the necessary plans for treatment of the find(s) if the resource is eligible for listing on the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR). Construction within a radius determined by the archaeologist shall not recommence until the assessment is complete.

With implementation of these measures, impacts to unknown subsurface prehistoric and historic archaeological resources would be less than significant. **(Less Than Significant Impact with Mitigation Incorporated)**

Impact CUL-3: As mitigated, the project would not disturb any human remains, including those interred outside of dedicated cemeteries. **(Less than Significant Impact with Mitigation Incorporated)**

Although there are no known human remains on the site, construction on-site could result in the exposure or destruction of prehistoric human remains. If the exposure or destruction of these resources were to occur, it would be considered a significant impact.

Mitigation Measure: The following project-specific mitigation measures would be implemented during construction to avoid significant impacts to unknown human remains:

MM CUL-3.1: In the event that human remains are discovered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped. The Santa Clara County Coroner will 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 will notify the Native American Heritage Commission (NAHC) immediately. Once the 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.

With implementation of these measures, impacts to unknown human remains would be less than significant. **(Less Than Significant Impact with Mitigation Incorporated)**

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 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 CO₂ 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.²² Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.²³

²² California Building Standards Commission. "California Building Standards Code." Accessed March 2, 2022. <https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo>.

²³ California Energy Commission (CEC). "2019 Building Energy Efficiency Standards." Accessed March 2, 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.²⁴

Local

City of Santa Clara General Plan

The City of Santa Clara 2010-2035 General Plan includes goals, policies, and actions to protect and conserve energy resources in the City. The following goals, policies, and actions are applicable to the proposed project:

Policies	Description
5.10.3-P1	Promote the use of renewable energy resources, conservation, and recycling programs.
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.
5.10.3-P8	Provide incentives for LEED certified, or equivalent development.

Reach Code

The City of Santa Clara recently adopted “Reach Code” ordinance, effective January 1, 2022, which requires newly constructed buildings be all-electric and prohibits the installation of natural gas utilities. Exceptions to the Reach Code apply to certain uses such as non-residential kitchens or if a Building Official or designee determines that it is infeasible to meet the requirements (e.g., lack of commercially available technology).

²⁴ California Air Resources Board. “The Advanced Clean Cars Program.” Accessed March 2, 2022. <https://www.arb.ca.gov/msprog/acc/acc.htm>.

4.6.1.2 Existing Conditions

Total energy usage in California was approximately 7,802 trillion British thermal units (Btu) in the year 2019, the most recent year for which this data was available.²⁵ Out of the 50 states, California is ranked second in total energy consumption and 46th in energy consumption per capita. The breakdown by sector was approximately 19 percent (1,456 trillion Btu) for residential uses, 19 percent (1,468 trillion Btu) for commercial uses, 23 percent (1,805 trillion Btu) for industrial uses, and 39 percent (3,073 trillion Btu) for transportation.²⁶ 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.²⁷

Silicon Valley Power (SVP) is the City of Santa Clara's energy utility and would provide electricity service to the project site. As of 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.²⁸

California's total system electric generation in 2020 was approximately 272,576 gigawatt-hours (GWh), which was down two percent from 2019's total generation of approximately 277,704 GWh. California's in-state electric generation decreased by six percent to 190,913 GWh compared to approximately 200,475 GWh in 2019.²⁹ This decline was due to decreased generation from in-state large hydroelectric power plants, down 45 percent (15,207 GWh) from 2019.

In 2020, natural gas represented the largest portion of the state's energy sources (at 48 percent). Solar, wind, and hydro generation accounted for more than 33 percent of all renewable electricity generation.³⁰

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.³¹ In 2020, residential and commercial customers

²⁵ United States Energy Information Administration. "State Profile and Energy Estimates, 2019." Accessed March 2, 2022. <https://www.eia.gov/state/?sid=CA#tabs-2>.

²⁶ Ibid.

²⁷ California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed March 2, 2022. <http://ecdms.energy.ca.gov/elecbycounty.aspx>.

²⁸ Silicon Valley Power. "Did you Know." Accessed March 2, 2022. <https://www.siliconvalleypower.com/svp-and-community/about-svp/faqs>.

²⁹ CEC. "2020 Total System Electric Generation." Accessed March 2, 2022. <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation>

³⁰ Ibid.

³¹ California Gas and Electric Utilities. *2020 California Gas Report*. Accessed March 3, 2022.

in California used 34 percent of the state’s natural gas, the industrial sector used 34 percent, electric power plants used approximately 30.5 percent, the transportation sector used approximately one percent, and other sectors used approximately 0.5 percent natural gas.³² In 2019, Santa Clara County used approximately two percent of the state’s total consumption of natural gas.³³

The City of Santa Clara recently adopted an all-electric “Reach Code” ordinance, effective January 1, 2022, which prohibits the installation of natural gas utilities and meters in most new construction, including commercial structures.

Fuel for Motor Vehicles

In 2019, 15.4 billion gallons of gasoline were sold in California.³⁴ 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 2020.³⁵ 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 March 2020 to require all cars and light duty trucks achieve an overall industry average fuel economy of 40.4 mpg by model year 2026.^{36,37}

4.6.2 Impact Discussion

For the purpose of determining the significance of the project’s impact on energy, would the project:

	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?	☐	☐	☒	☐

https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf.

³² U.S. Energy Information Administration. *Natural Gas Consumption by End Use*. Accessed March 3, 2022.

https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SCA_a.htm.

³³ California Energy Commission. “Natural Gas Consumption by County.” Accessed March 3, 2022.

<http://ecdms.energy.ca.gov/gasbycounty.aspx>.

³⁴ California Department of Tax and Fee Administration. “Net Taxable Gasoline Gallons.” Accessed March 3, 2022.

<https://www.cdfta.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist>.

³⁵ 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?Dockkey=P1010U68.pdf>

³⁶ United States Department of Energy. *Energy Independence & Security Act of 2007*. Accessed March 3, 2022.

<http://www.afdc.energy.gov/laws/eisa>.

³⁷ Public Law 110–140—December 19, 2007. *Energy Independence & Security Act of 2007*. Accessed March 3, 2022. <http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf>.

4.6.2.1 Project Impacts

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)
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Estimated Energy Use of the Proposed Project

The project would demolish the four existing two-story buildings and associated parking lots to construct two, 12-story buildings. Energy would be consumed during the construction and operational phases of the project. Construction activities at the project site would take approximately 30 months and would consist of demolition, grading, excavation, and site preparation. Operation of the project would consume energy in the form of electricity primarily for building heating and cooling, lighting, and water heating. The project would be subject to the City's Reach Code and would not use natural gas. Table 4.6-1 below summarizes the estimated energy use of the proposed project.

Table 4.6-1: Estimated Annual Energy: Existing Use and Proposed Development		
Land Use	Electricity Use (kWh/yr)	Natural Gas Use (kBTU/yr)
Proposed Development		
Total Energy Use by Proposed Project (Proposed Office Building and Enclosed Parking with Elevator)	30,677,210	0
Existing Use		
Existing Office Buildings	3,480,190	3,283,580
Net Increase ¹	27,197,020	-3,283,580
Illingworth & Rodkin, Inc. Great America Parkway Office Project <i>Air Quality and GHG Assessment</i> . August 17, 2023.		
¹ The project's CalEEMod results in the project's Air Quality/GHG Assessment evaluated an existing office square footage of 202,690 square feet. The project site's existing office square footage is 209,194 square feet (which would use more energy than office space that totals 202,690 square feet). Therefore, the results shown in this table provide a conservative estimate of net energy use .		

The project would be built in accordance with the 2019 CALGreen requirements and Title 24 energy efficiency standards, which would improve the efficiency of the overall project. Based on the CalEEMod results, the total annual vehicle miles traveled (VMT) for the project would be approximately 12,852,837.³⁸ Using the U.S. EPA fuel economy estimates (25.4 mpg) the proposed project would result in the consumption of approximately 506,017 gallons of gasoline per year.³⁹ The existing VMT is estimated to be 3,250,875, which results in the consumption of approximately

³⁸ Ibid.

³⁹ 12,852,837 VMT / 25.4 mpg = 506,017.2 gallons of gasoline.

127,990 gallons of gasoline per year. The net increase in gasoline consumption would be approximately 479,145 gallons of gasoline per year.⁴⁰

New automobiles purchased by future employees and visitors of the proposed project would be subject to fuel economy and efficiency standards applied throughout the State of California, which means that over time the fuel efficiency of vehicles associated with the project site would improve. The project site is within 2,000 feet of major transit/bus stops which would be accessible to future employees and visitors. The project applicant would implement a TDM Plan which would which includes measures such as preferential carpool and vanpool parking, transit subsidies, and a telework options. In addition, the project would include secure bicycle storage for employees in the proposed buildings. These measures would help to reduce vehicle trips to and from the project site and, therefore, the project would not result in the wasteful use of fuel. Implementation of the proposed project would not result in a wasteful, inefficient, or unnecessary consumption of energy resources during operation. **(Less than Significant Impact)**

Energy Efficiency During Construction

The project is proposed to be constructed in approximately 25 months. The project would require demolition, site preparation, grading and excavation, trenching, paving, and building of interiors and exteriors of the buildings. Energy would not be wasted or used inefficiently by construction equipment, as the proposed project would include several measures to improve efficiency of the construction process. For example, construction waste management methods and processes would be employed to reduce the amount of trash and construction waste. The project would be required to prepare a Construction Waste Management Plan or utilize a waste management company to recycle, reduce and/or reuse construction waste (CALGreen Code Sections 4.408 and 5.408). Adherence to CALGreen Code would further reduce energy expenditures during the construction phase.

The overall construction schedule and process is already designed to be efficient in order to avoid excess monetary costs. That is, equipment and fuel would not be used wastefully on the site because of the added expense associated with renting the equipment, maintaining it, and fueling it. Additionally, the proposed project includes several measures that would improve the efficiency of the construction process. Implementation of BAAQMD best management practices (as detailed in Section 3.3, Air Quality) would restrict equipment idling times to five minutes or less and would require the applicant to post signs on the project site reminding workers to shut off idle equipment. The project site is in proximity to local sources of construction materials which would reduce fuel usage. Implementation of the proposed project would not result in a wasteful, inefficient, or unnecessary consumption of energy resources during construction. **(Less than Significant Impact)**

Energy Efficiency During Operation

Operation of the project would consume energy for multiple purposes including, but not limited to, building heating and cooling, lighting, appliances, and electronics. Operational energy would also be consumed during each vehicle trip generated by future employees. The buildings would meet or

⁴⁰ The project's CalEEMod results in the project's Air Quality/GHG Assessment evaluated an existing office square footage of 202,690 square feet that would generate 1,856 daily vehicle trips. The project site's existing office square footage is 209,194 square feet and generates 1,916 daily trips. Therefore, the results for the existing VMT and net gasoline usage discussed above provide a conservative estimate.

exceed the requirements of the California Building Energy Efficiency Standards. The project would not use energy or fuel in a wasteful manner, given the project features that reduce energy use, including the following:

- Access to public transit
- Bicycle facilities
- EV charging stations
- Construction in conformance with Title 24 and CALGreen requirements to promote energy and water efficiency
- Buildings constructed with low-emitting interior building materials (e.g., flooring and ceilings)
- Construction waste management
- Use of recycled materials during construction

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 commercial construction. The project would include landscaping comprised of large shade trees around the site boundary, parking lot, and courtyard areas. This would have the effect of providing shade and reducing the heat island effect of the project, thus reducing the energy demand required to cool the proposed buildings. For the reasons listed above, the proposed project would have a less than significant impact. **(Less Than Significant Impact)**

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)
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Electricity for the proposed project would be provided by SVP. Although the project would increase the project site's energy use, the proposed development would be completed in compliance with the current energy efficiency standards set forth in Title 24, CALGreen, the RPS Program, and the City Code. Therefore, the project would comply with state and local plans for energy efficiency. **(Less than Significant Impact)**

4.7 GEOLOGY AND SOILS

The following discussion is based, in part, upon a Soil Report generated from the Natural Resources Conservation Service's website in July 2020. A copy of the report is attached in Appendix C of this Initial Study.

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, and the current version is the 2019 CBC.

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 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

City Code

Title 15 of the Santa Clara City Code (SCCC) includes the City's adopted Building and Construction Code. These regulations are based on the CBC and include requirements for building foundations, walls, and seismic resistant design. Requirements for grading and excavation permits and erosion control are included in Chapter 15.15 (Building Code). Requirements for building safety and earthquake reduction hazard are addressed in Chapter 15.55 (Seismic Hazard Identification).

4.7.1.2 *Existing Conditions*

Regional Geology

The project site 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 Santa Clara Valley consists of a large structural basin containing alluvial deposits from the Diablo Range and Santa Cruz Mountains.

Native soil underlying the project site is classified as urban land. Mapped soils on the project site are documented as Urbanland-Hangerone complex and Urbanland-Clear Lake complex soils.⁴¹ Both Hangerone and Clear Lake soils are poorly drained clay-like soils with moderate to high water storage. Expansive near-surface soils are subject to volume changes during seasonal fluctuations in moisture content, which may cause movement and cracking of foundations, pavements, slabs, and below-grade walls. Based on information from the United States Department of Agriculture web soil survey, soils on-site have a moderate to high expansion potential. Due to the flat topography of the project site, the potential for erosion or landslide to occur on or adjacent to the site is low.

Seismicity

The San Francisco Bay Area is classified as Zone 4 for seismic activity, the most seismically active region in the United States. Based on a 2015 forecast completed by the United States Geological

⁴¹ United States Department of Agriculture. "Web Soil Survey." Accessed March 9, 2022.
<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>.

Survey (USGS), there is a 72 percent probability of experiencing at least a magnitude 6.7 earthquake during the next 30 years.⁴² The project area is not located within the Alquist-Priolo Earthquake Fault Zone⁴³ or the Santa Clara County Geologic Hazard Zone⁴⁴. There are no active faults within the City; therefore, fault rupture is very low. Active faults near the project site are shown in Table 4.7-1 below.

Table 4.7-1: Active Faults Near the Project Site	
Fault	Distance from Site
Hayward	8.0 miles north
Calaveras	10.6 miles east
San Andreas	10.3 miles west

Liquefaction

Liquefaction occurs when water-saturated soils lose structural integrity due to seismic activity. Soils that are most susceptible to liquefaction are loose to moderately dense, saturated granular soils with poor drainage. Based on the California Department of Conservation Earthquake Zones of Required Investigation Map, the project site is located within a liquefaction zone.⁴⁵

Lateral Spreading

Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal ground movement of flat-lying soil deposits towards a free face (i.e., a deep excavation, a river channel, or an open sea). The nearest waterway is San Tomas Aquino Creek, located approximately one quarter mile east of the project site. At this distance, the potential for lateral spreading is low.

Groundwater

Groundwater levels fluctuate seasonally depending on the variations in rainfall, irrigation from landscaping, and other factors. Groundwater has been encountered at the project site at approximately nine feet below the ground surface (bgs).

Paleontological Resources

As discussed in Section 3.7.1.1, paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. The project site is underlain by Holocene

⁴² United States Geological Survey. "UCERF3: A New Earthquake Forecast for California's Complex Fault System." Accessed March 9, 2022. <https://pubs.usgs.gov/fs/2015/3009/pdf/fs2015-3009.pdf>.

⁴³ California Department of Conservation. "CGS Information Warehouse: Regulatory Maps." Accessed March 9, 2022. <http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps>.

⁴⁴ Santa Clara County. *Santa Clara County Geologic Hazard Zones. Map 11*. Accessed March 9, 2022. https://stgenpln.blob.core.windows.net/document/GEO_GeohazardATLAS.pdf

⁴⁵ California Department of Conservation. Earthquake Zones of Required Investigation. Accessed March 28, 2022. <https://maps.conservation.ca.gov/EQZApp/>.

deposits.⁴⁶ Geologic units of Holocene age are generally not considered sensitive paleontological resources because biological remains younger than 10,000 years are not usually considered fossils; however, these recent sediments overlie sediments of older Pleistocene sediments with high potential to contain paleontological resources.⁴⁷ These older sediments, often found at depths of 10 feet or more below the ground surface, have yielded the fossil remains of plants and extinct terrestrial Pleistocene vertebrates.

Ground disturbing activities of 10 feet or more have the potential to impact undiscovered paleontological resources in older Pleistocene sediments. The City, including the project site, is underlain by alluvial fan deposits of Holocene age, made up of gravel, sand and finer sediments.

4.7.2 Impact Discussion

For the purpose of determining the significance of the project's impact on geology and soils, would the project:

	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?	☐	☐	☒	☐

⁴⁶ City of Santa Clara. Integrated Final EIR for the City of Santa Clara Draft 2010-2035 General Plan. January 2011. Figure 4.5-1.

⁴⁷ Ibid. City of Santa Clara. Integrated Final EIR for the City of Santa Clara Draft 2010-2035 General Plan. January 2011. Page 323.

	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?	☐	☐	☒	☐

4.7.2.1 *Project Impacts*

Impact GEO-1: 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)

The project site is located within a seismically active region and could experience intense ground shaking in the event of a large earthquake. There is a high probability of a strong earthquake occurring within the operational lifespan of the proposed project. While no active faults are known to cross the project site, ground shaking could damage the proposed buildings and result in ground failure, including liquefaction.

Consistent with the City's General Plan and City Code, to avoid and/or minimize potential damage from seismic shaking, the project would be built using standard engineering and seismic safety design techniques. The building foundation design would incorporate liquefaction control measures. Consistent with these requirements, the following condition of approval will be adhered to in order to ensure the proposed development is designed to address seismic hazards.

Condition of Approval

- To avoid or minimize potential damage from seismic shaking, the project would be built using standard engineering and seismic safety design techniques. Construction at the site shall be completed in conformance with the recommendations of a design-level geotechnical investigation, which will be included in a 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 buildings shall meet the requirements of applicable Building and Fire Codes, including the current California Building Code, as adopted or updated by the

City. The project shall be designed to withstand potential geologic hazards identified on the site 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.

Incorporation of the condition of approval would ensure the proposed development is designed to address seismic hazards. As a result, the proposed project would not expose people or property to significant impacts associated with seismically induced ground failures or other geologic conditions on-site. **(Less Than Significant Impact)**

Impact GEO-2: As mitigated, the project would not result in substantial soil erosion or the loss of topsoil. **(Less than Significant Impact with Mitigation Incorporated)**

The project would require ground disturbance due to grading, trenching for utilities, and excavation for construction of the footings and foundations of the new structures. Ground disturbance would expose soils and increase the potential for wind or water-related erosion and sedimentation until construction is complete.

Mitigation Measures: The following mitigation measures have been included in the project to reduce possible construction-related erosion impacts:

MM GEO-2.1: The project applicant shall schedule all excavation and grading work in dry weather months or construction sites shall be weatherized⁴⁸ to withstand or avoid erosion.

MM GEO-2.2: During construction, stockpiles and excavated soils shall be covered with secured tarps or plastic sheeting by the project applicant (or the project applicant's contractor).

MM GEO-2.3: Vegetation in disturbed areas shall be replanted as quickly as possible by the project applicant (or the project applicant's contractor) after construction.

Implementation of the identified mitigation measures would reduce erosion and sedimentation impacts to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

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)**

According to the most recent Alquist-Priolo Earthquake Fault Zoning map, the project site is not within a fault hazard zone or landslide hazard zone. The proposed project would be located in a liquefaction hazard zone. However, the site is not subject to lateral spreading and would not result in significant geological impacts due to lateral spreading. As stated under Impact GEO-1, the project

⁴⁸ Weatherized refers to measures that would protect exposed soils from rain and stormwater runoff.

would be required to adhere to the most recent CBC and a site-specific geotechnical report. As a result, the proposed project would not adversely affect local geology, increasing potential for off-site landslides, subsidence, liquefaction, or collapse. **(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)**

Soils on the project site have a moderate to high expansion potential. Hazards associated with expansive soils would be reduced and managed with City adopted regulations and policies, in combination with the state building requirements. As a result, development of the proposed project would not expose future occupants of the site or nearby properties to hazards related to expansive soils. **(Less Than Significant Impact)**

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 project would be connected to the city sewer system for wastewater disposal and would not require septic tanks or alternative waste-water disposal systems. For this reason, the project would not have a significant impact due inadequate wastewater disposal stemming from incapable soils. **(No Impact)**

Impact GEO-6: The project would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. **(Less than Significant Impact)**

The project would include trenching and grading to access utilities, reaching a maximum excavation of approximately six feet bgs. It is unlikely that paleontological resources would be discovered on-site given that the site was previously developed, shallow excavation is proposed, and that no paleontological resources have been discovered in this area of Santa Clara. **(Less Than Significant Impact)**

4.8 GREENHOUSE GAS EMISSIONS

The following discussion is based, in part, on an Air Quality and Greenhouse Gas Emission Assessment prepared for the project by Illingworth & Rodkin, Inc., dated October 2021. A copy of this report is included in Appendix A of this Initial Study.

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 CO₂ equivalents (CO₂e). The most common GHGs are carbon dioxide (CO₂) and water vapor but there are also several others, most importantly methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO₂ and N₂O are byproducts of fossil fuel combustion.
- N₂O is associated with agricultural operations such as fertilization of crops.
- CH₄ 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 SF₆ 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 (2006) and Senate Bill 32 (2016)

Under the California Global Warming Solutions Act of 2006, 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 CO₂e (MMTCO₂e). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 MMTCO₂e.

Scoping Plan (2022)

On December 15, 2022, CARB approved the 2022 Scoping Plan. The 2022 Scoping Plan provides a sector-by-sector guide on how to reduce man-made (i.e., anthropogenic) GHG emissions by 85 percent below 1990 levels and achieve carbon neutrality by 2045 over a 25-year horizon.⁴⁹ The primary focus of the 2022 Scoping Plan is to reduce the usage of fossil fuels by electricizing the transportation sector, procuring electricity from renewable resources, phasing out natural gas in land use developments, and building transit-oriented communities that encourage multi-modal transportation. If implemented successfully, the 2022 Scoping Plan would not only reduce GHG emissions but also reduce smog-forming air pollution (NO_x) by 71 percent and reduce fossil fuel demand by 94 percent. The 2022 Scoping Plan also details natural carbon capture and storage process along with mechanical carbon capture programs to address the remaining 15 of anthropogenic GHG emissions that will remain post-2045. To meet these goals, CARB also includes a revised goal of reducing state GHG emissions 48 percent below 1990 levels by 2030.

Senate Bill 375 (2008)

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

⁴⁹ CARB. *2022 Scoping Plan for Achieving Carbon Neutrality*. November 16, 2022. Page 5.

Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as Plan Bay Area 2050.

SB 100

SB 100, known as the 100 Percent Clean Energy Act of 2018, was adopted on September 10, 2018. The overall goal is to have all retail electricity sold in California be procured from 100 percent renewable and zero-carbon resources by the year 2045. SB 100 also modified the renewables portfolio standard to 50 percent by 2025 and 60 percent by 2030.

Executive Order B-55-18

Executive Order B-55-18 was issued in September 2018. It ordered a new statewide goal of achieving carbon neutrality no later than 2045 and to maintain net negative emissions thereafter.

Assembly Bill 1279

The California Climate Crisis Act was approved on September 16, 2022, and it codifies the statewide goal set by Executive Order B-55-18 of achieving net zero GHG emissions no later than the year 2045 and maintaining net negative emissions thereafter. In addition, this bill has a statewide goal of reducing anthropogenic GHG emissions by 85 percent below the 1990 levels by the year 2045. The bill requires CARB to work with relevant state agencies to ensure that updates to the scoping plan identify and recommend measures to achieve these policy goals and strategies that enable carbon dioxide removal solutions and carbon capture, utilization, and storage technologies in California. The bill requires CARB to submit an annual report.

Advanced Clean Cars II Regulation

To continue reducing air pollutants and GHG emissions in the transportation sector, CARB adopted the Advanced Clean Cars II Regulations (Resolution 22-12) on August 25, 2022. The new regulation requires that by 2035 all new passenger cars, trucks, and SUVs sold in California will have zero emissions. This regulation bans the sale of new gasoline or diesel passenger cars, trucks, and SUVs in California from automakers. Beginning in 2026, 35 percent of new vehicle sales must be zero-emission vehicles and plug-in hybrid EVs and that percentage will increase per year. By 2030, 70 percent of new vehicle sales will be zero-emissions vehicles and by the 2035 model year 100 percent of new vehicle sales will be zero-emissions. CARB will limit the use of plug-in hybrid EVs in the percentage requirements to keep the manufacturing of zero-emissions as the primary goal. Existing gasoline cars can continue to be driven and sold as used cars beyond 2035. CARB will be required to track and report on the zero-emissions vehicle market development annually.

California Building Standards Code – Title 24 Part 11 and Part 6

The CALGreen Code is part of the California Building Standards Code under Title 24, Part 11.⁵⁰ The CALGreen Code encourages sustainable construction standards that incorporate planning/design, energy efficiency, water efficiency resource efficiency, and environmental quality. These green

⁵⁰ California Department of General Services, Building Standards Commission. California Building Standards Code. Accessed May 10, 2023. <https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo>.

building standard codes are mandatory statewide and are applicable to residential and non-residential developments. The most recent CALGreen Code (2022 CALGreen Code) was effective as of January 1, 2023.

The California Building Energy Efficiency Standards (California Energy Code) is under Title 24, Part 6 and is overseen by the CEC. This code includes design requirements to conserve energy in new residential and non-residential developments. This Energy Code is enforced and verified by cities during the planning and building permit process. The 2022 Energy Code replaced the 2019 Energy Code as of January 1, 2023. There are new 2022 standards for single-family residences, multi-family residences, and non-residential uses.^{51,52,53} Major changes include electric-ready single-family and multi-family residence and solar photovoltaic systems and energy storage systems for residential and commercial developments.

Requirements for EV charging infrastructure are set forth in Title 24 of the California Code of Regulations and are regularly updated on a three-year cycle. The CALGreen standards consist of a set of mandatory standards required for new development, as well as two more voluntary standards known as Tier 1 and Tier 2. The 2022 CALGreen standards require deployment of additional EV chargers in various building types, including multi-family residential, hotel, and non-residential land uses. They include requirements for both EV capable parking spaces and the installation of EV supply equipment for multi-family residential and nonresidential buildings. The 2022 CALGreen standards also include requirements for both EV readiness and the actual installation of EV chargers. The 2022 CALGreen standards include both mandatory requirements and more aggressive voluntary Tier 1 and Tier 2 provisions:

- CALGreen Tier 1 standards require multi-family developments and hotels with less than 20 units to have 35 percent of the total number of parking spaces EV ready; if there are more than 20 units, 10 percent of the parking spaces must be provided with EV supply equipment. These standards also require 30 percent of total parking spaces to be EV capable and 33 percent of parking spaces to be EV capable with EV supply equipment for non-residential and non-hotel uses.
- CALGreen Tier 2 standards require multi-family developments and hotels with less than 20 units to have 40 percent of the total number of parking spaces EV ready; if there are more than 20 units, 15 percent of the parking spaces must be provided with EV supply equipment. For non-residential and non-hotel uses, 45 percent of total parking spaces require EV capable spaces and 33 percent of parking spaces require EV capable spaces provided with EV supply equipment.

⁵¹ California Energy Commission. “2022 Building Energy Efficiency Standards What’s New for Single-Family Residential.” Revised July 15, 2022. Accessed May 10, 2023. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Single-family_Whats_New_Summary_ADA.pdf.

⁵² California Energy Commission. “2022 Building Energy Efficiency Standards What’s New for Multifamily.” Revised August 4, 2022. Accessed May 10, 2023. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Multifamily_Whats_new_Summary_ADA.pdf.

⁵³ California Energy Commission. “2022 Building Energy Efficiency Standards What’s New for Nonresidential.” Revised August 4, 2022. Accessed May 10, 2023. https://www.energy.ca.gov/sites/default/files/2022-08/2022_Nonresidential_Whats_New_Summary_ADA.pdf.

CALGreen also requires new construction and demolition projects to have a diversion of at least 65 percent of the construction waste generated. CALGreen also allows a disposal reduction option that can be met when the project's disposal rate is 2.0 pounds per square foot or less for non-residential and high-rise residential construction or 3.4 pounds per square foot or less for low-rise residential construction.

Model Water Efficiency Landscape Ordinance and Water Service and Use Regulations

In 1993, the California Department of Water Resources adopted the Model Water Efficiency Ordinance (MWELo), requiring all local agencies to adopt a water efficient landscape ordinance unless proven unnecessary. In 2015, the State of California enacted major changes to the Water Efficient Landscape Ordinance, which required landscape design and management practices better suited to the state's climates and conditions. The MWELo was established to promote water efficiency for new and rehabilitated landscapes. In accordance with the MWELo Ordinance, in 2003, the City of Santa Clara adopted Water Service and Use Rules and Regulations, which has established standards to achieve reasonable reductions in water use by all users in the City.

Regional

2017 Bay Area 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.

CEQA GHG Thresholds and Guidelines Update

On April 20, 2022, the BAAQMD Board of Directors adopted the Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans. The report includes BAAQMD's thresholds of significance for use in determining whether a proposed project or plan will have a significant impact on climate change and provides substantial evidence to support of these thresholds. The April 2022 GHG threshold replaces the GHG thresholds set forth in the May 2017 BAAQMD CEQA Air Quality Guidelines. BAAQMD has analyzed what will be required of new land use development projects and plans to achieve California's long-term climate goal of carbon neutrality by 2045.

The threshold of significance for plans (e.g., General Plans, Climate Action Plans, and similar long-term community wide plans) is to meet the state's goals to reduce emissions to 40 percent below

1990 levels by 2030 and carbon neutrality by 2045 or be consistent with a local GHG reduction strategy that meets the criteria under CEQA Guidelines Section 15183.5(b).

The threshold of significance for land use development projects is to either A) incorporate project design elements and achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan or B) be consistent with a local GHG reduction strategy that meets the criteria of CEQA Guidelines Section 15183.5 (b).

Local

City of Santa Clara General Plan

The Santa Clara 2010-2035 General Plan includes the following GHG policies applicable to the project:

Policies	Description
5.10.2-P3	Encourage implementation of technological advances that minimize public health hazards and reduce the generation of air pollutants.
5.10.3-P1	Promote the use of renewable energy resources, conservation, and recycling programs.
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.
5.10.3-P8	Provide incentives for LEED certified, or equivalent development.
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-P14	Encourage TDM strategies and the provision of bicycle and pedestrian amenities in all new development greater than 24 housing units or more than 10,000 non-residential square feet, and for City employees, in order to decrease use of the single-occupant automobile and reduce vehicle miles traveled, consistent with the Climate Action Plan.
5.8.5-1	Require new development and City employees to implement TDM 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 TDM programs that provide incentives for the use of alternative travel modes to reduce the use of single-occupant vehicles.
5.10.4-P7	Require installation of native and low-water consumption plant species with landscaping new development and public spaces to reduce water usage.

City of Santa Clara Climate Action Plan 2022

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 and wellbeing. Consistent with the BAAQMD criteria, projects that comply with the policies and strategies outlined in the 2022 CAP would have a less than significant GHG impact.

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 project site is currently developed with four, two-story office buildings and associated surface parking lots. GHGs are currently generated on-site through energy use for heating, cooling, and lighting the existing buildings. GHGs are also generated by vehicles traveling to and from the project site.

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?	☐	☐	☒	☐

4.8.2.1 *Project Impacts*

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

GHG emissions associated with development of the proposed project would occur over the short-term from construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. There would also be long-term operational emissions associated with vehicular traffic within the project vicinity, energy, and water usage, and solid waste disposal.

Emissions for the proposed project were analyzed using CalEEMod and the methodology recommended in the BAAQMD CEQA Air Quality Guidelines and are discussed below.

GHG Reduction Targets

CARB has completed a Scoping Plan to achieve SB 32 GHG reduction targets, which will be utilized by BAAQMD to establish the 2030 GHG efficiency threshold. BAAQMD has yet to publish a quantified GHG efficiency threshold for 2030. In lieu of an updated efficiency threshold from BAAQMD, a Substantial Progress efficiency threshold of 2.8 MT CO₂e/service population/year threshold, which is a 40 percent reduction from the BAAQMD 2020 service population emissions target of 4.6 MT CO₂e /service population/year, is utilized in this Initial Study. An adjusted bright-line threshold of 660 MT CO₂e/year, which is 40 percent below BAAQMD 2020 bright-line threshold of 1,100 MT CO₂e, is also used in this Initial Study. The efficiency and adjusted bright-line thresholds were calculated based on the GHG reduction goals of SB 32 and EO B-30-15 for 2030.

Construction Emissions

GHG emissions associated with construction were computed to be 6,898 MT of CO₂e for the total construction period, including 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. BAAQMD also encourages the incorporation of best management practices to reduce GHG emissions during construction where feasible and applicable.

Operational Emissions

The City's 2022 CAP is a qualified GHG reduction strategy. Therefore, projects that are consistent with the General Plan can tier from the CAP. Although the project is consistent with certain measures in the 2022 CAP, the project requires a GPA that was not accounted for the 2022 CAP. Therefore, compliance with the CAP is not sufficient to conclude a less than significant impact and a quantitative operational GHG analysis was required.

As shown in Table 4.8-1, annual GHG emissions resulting from operation of the proposed project are predicted to be 9,411.46 MT of CO₂e in 2030, exceeding the adjusted BAAQMD bright-line threshold of 660 MT of CO₂e per year. The service population emission for 2030 is predicted to be 2.77 MT/CO₂e/year/service population. The project's annual GHG emissions are summarized in Table 4.8-1.

Table 4.8-1: Annual Project GHG Emissions (CO₂e) in Metric Tons	
Source Category	Proposed Project in 2030
Area	0.08
Energy Consumption	4,313.59
Mobile	4,279.65
Solid Waste Generation	499.80
Water Usage	318.33
Metric Ton Total	9,411.46
Service Population Emissions	2.77
Per Capita Significance Threshold	2.8 MT of CO₂e/year/service population
Exceeds Threshold?	No

To be considered significant, the project must exceed both the GHG significance threshold in metric tons per year and the service population threshold. The project's GHG emissions would exceed the adjusted BAAQMD bright-line threshold of 660 MT of CO₂e/year but not the 2.8 MT CO₂e/year/service population threshold. Therefore, the project would have a less than significant GHG emissions impact. **(Less than Significant Impact)**

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)

Consistency with the General Plan

The project is consistent with the General Plan policies identified in Section 4.7.1.1 Regulatory Framework to reduce GHG emissions by:

- Utilizing water conservation and energy efficiency measures included in the project
- Implementing TDM strategies and providing pedestrian amenities to decrease use of the single-occupant automobile and reduce vehicle miles traveled
- Diverting at least 65 percent of construction waste away from landfills
- Planting shade trees
- Providing bicycle parking

Santa Clara Climate Action Plan

As stated above, if a project is consistent with a qualified CAP, it can be presumed that the project would not have significant GHG emissions. The proposed project's consistency with the City's 2022 CAP measures is summarized below (refer to Appendix C for more details).

To be consistent with the 2022 CAP, development projects shall demonstrate consistency with the General Plan land use designation for the site and all applicable measures identified in the CAP

related to building and energy, transportation and land use, materials and consumption, natural systems and water resources and community resilience and wellbeing. The project requires a GPA and, therefore, is not consistent with the land use assumptions in the 2022 CAP. The project, however, will comply with the following measures in the 2022 CAP.

- Measure B-1-5 requires new developments to implement all reach codes, with some exceptions. The proposed project's buildings would be all-electric and EV charging stations will be included on-site. Therefore, the project would be consistent with this measure.
- Measure T-2-1 and T-3-5 requires projects to comply with the City's Pedestrian and Bicycle Master Plans as well as the recently adopted Transportation Analysis Policy. Consistent with the Pedestrian and Bicycle Master Plans, the project would include installation of new sidewalks along the project frontages and bicycle parking on-site.
- Measure T-3-1 requires a 25 percent reduction in project-based VMT through active TDM measures for large employers over 500 employees. The project would comply with the proposed TDM Plan (refer to Section 3.2.5 Transportation Demand Management Plan of this Initial Study for a list of the project's TDM measures) which includes preferential vanpool parking, transit/vanpool subsidies, pre-tax transit/parking payroll deductions, flexible work schedule, a Guaranteed Ride Home program, and bicycle repair. Implementation of the project's TDM measures would reduce project based VMT/trips by 25 percent.
- Measure T-3-4 encourages projects to expand telecommuting options through fiber infrastructure investment and expand TDM programs to include telecommuting. The project's office tenants would offer a telework/remote work option and the site would be designed with the appropriate fiber network.
- Measure T-3-5 requires all project to comply with the City's Transportation Policy adopted in June 2020. The project's effects on VMT were analyzed and the project is consistent with the City's Transportation Analysis Policy. The project meets the criteria of a transit-supportive project (refer to Section 4.17 Transportation) and, therefore, would have a less than significant impact on VMT.
- Measures T-2-2 and T-2-3 encourage the City to incentivize projects to optimize curbside areas for low-carbon modes of travel and increase public access to bicycles, respectively. The project would include on-site bicycle parking and charging stations for EVs and bicycles, consistent with CAP Measures T-2-2 and T-2-3.
- Measures M-1-1 and M-3-1 require projects to comply with State Solid Waste Ordinances and reuse salvageable building materials, respectively. As discussed in Section 4.6 Energy and Section 4.18 Utilities and Service Systems and consistent with these measures, the project would continue to be served by the City's solid waste collection and comply with the City's Construction and Demolition Debris recycling program by diverting a minimum of 65 percent debris from the landfill, thus the project would comply with State Solid Waste Ordinances.

- Measures N-2-3 and N-3-3 require projects to utilize water efficient landscaping and follow an adopted Sustainable Planting Guide. The project would comply with the State’s MWEL Ordinance and City’s Water Service and Use Rules and Regulations and would include native and climate-adaptive plants and reduce use of synthetic fertilizers, where possible, consistent with these measures. The project would connect to recycled water lines on Tasman Drive, Old Ironsides Drive, and Bunker Hill Lane for irrigation, consistent with Measure N-3-4, which encourages the increased use of recycled urban water.
- Measure C-2-2 requires projects to integrate natural stormwater systems within site and building design to reduce pollution to waterways, conserve water, and reduce flood risk. The project would include stormwater management features consistent with the Municipal Regional Stormwater NPDES Permit (MRP)/C.3 Requirements and Measure C-2-2.

For the reasons discussed above, the project is consistent with measures in the 2022 CAP and General Plan, and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. **(Less Than Significant Impact)**

4.9 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based, in part, on a Phase I Environmental Site Assessment (ESA) completed for the project by Ramboll US Corporation in April 2019. A copy of this report is included in Appendix D of this Initial Study.

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, 1986.⁵⁴

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.⁵⁵

Government Code Section 65962.5

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

⁵⁴ United States Environmental Protection Agency. "Superfund: CERCLA Overview." Accessed March 9, 2022. <https://www.epa.gov/superfund/superfund-cercla-overview>.

⁵⁵ United States Environmental Protection Agency. "Summary of the Resource Conservation and Recovery Act." Accessed March 9, 2022. <https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act>.

substance release sites identified by the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB).⁵⁶

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.

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.

Regional and Local

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

⁵⁶ California Environmental Protection Agency. "Cortese List Data Resources." Accessed March 9, 2022. <https://calepa.ca.gov/sitecleanup/corteselist/>.

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 Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (MRP) by the San Francisco Bay Regional Water Quality Control Board 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.⁵⁷ 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.

Local

City of Santa Clara General Plan

The Santa Clara 2010-2035 General Plan includes policies that address hazards and hazardous materials during the planning horizon of the General Plan. The following goals, policies, and actions are applicable to the proposed project:

Policies	Description
5.10.5-P22	Regulate development on sites with known or suspected contamination of soil and/or groundwater to ensure that construction workers, the public, future occupants and the environment are adequately protected from hazards associated with contamination, in accordance with applicable regulations.
5.10.5-P24	Protect City residents from 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.
5.10.5-P26	Survey pre-1980 buildings and abate any lead-based paint and asbestos prior to structural renovation and demolition, in compliance with all applicable regulations.
5.10.5-P33	Limit the height of structures in accordance with the Federal Aviation Administration Federal Aviation Regulations, FAR Part 77 criteria.

4.9.1.2 *Existing and Historic Conditions*

Site History and Current Uses

Based on a review of historic information as a part of the Phase I ESAs, the project site was used for agricultural purposes (such as hay or row crops) from the 1930s until 1974. No other uses of the property were identified until the construction of the existing on-site buildings at 5150 Great America Parkway, 2952 Bunker Hill Lane, and 5155 Old Ironsides Drive, which occurred between 1974 and 1979. The construction of the 2901 Tasman Drive building occurred between 1980 and

⁵⁷ California Regional Water Quality Control Board. *San Francisco Bay Region Municipal Regional Stormwater NPDES Permit*. November 2015.

1983. The property has been used, and is currently used, for office/R&D (e.g., computer and electronic companies) purposes.

The project site is approximately 50 feet above mean sea level (amsl) near the center of the site, and approximately seven feet amsl along the property boundaries. Based on previous groundwater monitoring activities, groundwater has been encountered at the site at approximately nine feet below ground surface (bgs). Groundwater in the project area flows in the northeast direction.

Potential On-Site Contamination Sources

A review of state and federal environmental database searches was completed for the project site and surrounding properties. The project site was listed on a number of environmental databases as shown in Table 4.9-1 below.

Table 4.9-1: Project Site Listings on Regulatory Databases		
Database Listing	Description	Potential Impact
Historic UST	Tristar Semiconductor, Inc. is listed at the on-site 5150 Great America Parkway building for a single-walled polypropylene 500-gallon sulfuric acid (oleum) UST that was installed in 1983.	Based on a Phase I ESA completed for the site in 2011, a closure plan for hazardous storage tanks was obtained from the Santa Clara Fire Department (SCFD). No evidence of USTs or subgrade features was observed during the site reconnaissance. The former 500-gallon UST is not considered a recognized environmental concern.
HAZNET; DTSC HWTS	Barber Lane Associates, LLP at the 2901 Tasman Drive building is listed on the HAZNET database for the disposal of 2.6 tons of inorganic solid waste and 0.08 tons of oxygenated (i.e., acetone, butanol, ethyl acetate) in 1999. IHS is also listed at this address on the HAZNET database for the disposal of aged or surplus organics in 2011.	The HAZNET listings at 2901 Tasman Drive were not considered a contamination concern to the site. No evidence of the releases were found.
RCRA-SQG; FINDS	The 5150 Great America Parkway (Trilogy Systems Corporation) is listed on the RCRA-SQG database as a small quantity generator (SQG) as of 1996. No violations noted. The site is listed in FINDS regarding its listing on the RCRA database.	The listing is for a former site occupant. The listing does not suggest a contamination concern to the site. No further review is warranted.
DTSC HWTS	Intel Corporation SC19 (5515 Old Ironsides Drive) is listed for the disposal of alkaline solution; off-spec, aged, or surplus organics and	The listing does not suggest a contamination concern to the site. No further review is warranted.

Table 4.9-1: Project Site Listings on Regulatory Databases		
Database Listing	Description	Potential Impact
	inorganics; and liquids with a pH less than two in 2015. Intel Corporation SC19 is listed with inactive status as of 2015.	
Notes: California Department of Toxic Substances Control = DTSC HAZNET = California Facility and Manifest Data HWTS = Hazardous Waste Tracking System FINDS = Facility Index System RCRA = Resource Conservation and Recovery Act SQG = Small Quantity Generator UST = Underground Storage Tank		

Previous Environmental Studies

Based on previous environmental studies, groundwater contaminated by chromium was discovered at the site in 1987, which was considered an environmental concern. The source of contamination was the release of VOCs and chromium from two former concrete sumps (removed from the site in 1994). The analysis of groundwater samples in 1987 and 1989 identified the presence of chromium above the maximum contaminant level (MCL) for drinking water established by the California Department of Public Health. Chromium did not exceed MCLs in groundwater samples in 1994. In June 2011, groundwater samples were collected from three on-site monitoring wells which showed that chromium concentrations were less than the MCL. As a result, chromium contaminated groundwater is no longer a recognized environmental concern. The three former on-site wells were destroyed in July 2011.

4.9.1.3 Surrounding Properties

The site was surrounded by agricultural uses and vacant land from the 1930s until the 1970s. By 1979, properties to the northwest and southwest contained office/R&D buildings. In 1982, the property to the north was developed with office/R&D buildings. By the early 1990s, the property to the east was developed with the hotel and convention center. The project site is currently surrounded by office/R&D uses to the north, west, and south, and a hotel and convention center use to the east.

Off-site Potential Contamination Sources

Several sites were listed in the regulatory databases within one mile of the site or identified in regulatory records reviews. Facilities adjacent/near the project site are listed in Table 4.9-2 based on their distance from the site, hydrologic gradient, and/or regulatory status.

Table 4.9-2: Off-Site Hazardous Materials Sites		
Database Listing, Site Address and Name	Description	Potential Impact
Surrounding Properties		
Spills, Leaks, Investigation, and Cleanup (SLIC) Bunker Hill Lane Elevator	The property is listed as a clean-up program site with a closed status on November 23, 2011. An elevator piston failed in 2010, causing release of 50 to 60 gallons of hydraulic fluid. During sampling, oil was present in soil and groundwater. The contamination is limited to “under the building.”	The listing indicates that soil and groundwater contamination is limited to under the building. Clean-up is listed as completed as of November 23, 2011. Because the incident has been closed, it is not considered to represent a contamination concern to the site, and no further review is warranted.
Environmental Database Resources (EDR) Historical Auto Stations 5001 Great America Parkway	EDR Historical Auto Stations: Auto Tow is listed as a historical automobile station in 2011 and 2012.	The listings, in and of itself, does not suggest a contamination concern to the site. A review of the property on Google Earth indicates this is a multi-level commercial building, and not an auto station. No further review is warranted.
UST, California Facility Inventory Database (CA FID) UST, Statewide Environmental Evaluation and Planning System (SWEEPS) UST 5201 Great America Parkway 220	UST: The property is listed on the UST database. CA FID UST: The property is listed as having an UST with active status. SWEEPS UST: The property is listed with a diesel UST with active status.	The listings, in and of itself, does not suggest a contamination concern to the site. No further review is warranted.
Notes: CA FID = California Facility Inventory Database HAZNET = California Facility and Manifest Data SLIC = Spills, Leaks, Investigation, and Cleanup SWEEPS = Statewide Environmental Evaluation and Planning System UST = Underground Storage Tank		

4.9.2 Impact Discussion

For the purpose of determining the significance of the project's impact on hazards and hazardous materials, would the project:

	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?	☐	☐	☐	☒

4.9.2.1 *Project Impacts*

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)**

The project proposes to construct two office buildings with associated parking structures. Operation of the proposed project could include the use and storage of small quantities of chemicals, if

manufacturing occurs on-site and for janitorial cleaning and landscape maintenance. Compliance with applicable federal, state, and local handling, storage, and disposal requirements would avoid significant hazards to the public or the environment created by the routine transport, use, or disposal of these substances. **(Less Than Significant Impact)**

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)**

Soil and Groundwater Contamination

VOCs and Chromium

As discussed in Section 3.9.1, Environmental Setting of this Initial Study, based on previous environmental studies, groundwater contaminated by chromium was discovered at the site in 1987. The source of contamination was the release of chromium from two former concrete sumps. In June 2011, groundwater samples were collected from three on-site monitoring wells which showed that chromium concentrations and VOCs were less than the MCL. As a result, the groundwater beneath the site does not contain levels of chromium that are hazardous to the public or environment.

Agricultural Chemicals and Metals

Given the project site and surrounding properties were used for agricultural purposes from the 1930s until the 1970s, there is potential that agricultural chemicals, such as pesticides, herbicides and fertilizers, were used on-site. Soils on-site and groundwater beneath the site could potentially be contaminated with agricultural chemicals, which could be released into the environment and expose construction workers and adjacent land uses to contamination.

Mitigation Measures: The following mitigation measures would be implemented to reduce the risk of exposure to residual agricultural contamination on construction workers and adjacent properties:

MM HAZ-2.1: Prior to demolition and excavation of the project site, a limited Phase II Environmental Site Assessment (Phase II ESA) shall be completed to determine if agricultural chemicals are present in the soil and groundwater at the site. The site will be sampled for CAM 17 Metals, pesticides. Phase II ESA sampling activities shall be coordinated with the Santa Clara Fire Department.

MM HAZ-2.2: Following demolition and removal of pavement, soil samples will be gathered from the site and sent for laboratory analyses to evaluate appropriate disposal alternatives. The analyses would include but not be limited to organochlorine pesticides, lead, petroleum hydrocarbons, and other metals. Sampling will occur prior to the issuance of grading permits.

MM HAZ-2.3: In the event that impacted soil is identified on-site, the Director of Community Development shall be notified and the lateral and vertical extent

of soil containing contaminant concentrations greater than the San Francisco Bay Regional Water Quality Control Board's (RWQCB's) environmental screening levels (ESLs) will be notified. Sample results shall be submitted to the Santa Clara Fire Department for review.

Contaminated soil shall be handled separately from "clean" soil. Common and potentially applicable remedial measures for the impacted soil may include: 1) excavation and off-site disposal at a permitted facility; 2) the use of engineering and administrative controls, such as consolidation and capping of the soil on-site and land use covenants restricting certain activities/uses; and 3) a combination of the above. Remedial activities at the site, if warranted, will be overseen by an appropriate regulatory agency, such as the Department of Toxic Substances Control (DTSC) or the Santa Clara County Department of Environmental Health (SCCDEH).

Implementation of the identified mitigation measures would reduce the risk of construction worker and adjacent land use exposure to residual agricultural contaminated soils and/or groundwater. For these reasons, adjacent land uses and construction workers would not be exposed to contaminated soils and/or groundwater. **(Less Than Significant Impact with Mitigation Incorporated)**

Asbestos-Containing Materials and Lead-Based Paint

The existing building on-site may contain asbestos and lead-based paint. An asbestos and lead-based paint survey was not completed as part of the environmental site assessment. Although the building on-site was built a year after the asbestos and lead-based paint ban, it is reasonable to assume that both asbestos and lead-based paint could be present within the structure.

Because the project proposes to demolish the existing structure, an asbestos survey must be completed under National Emission Standards for Hazardous Air Pollutants (NESHAP) guidelines. In addition, NESHAP guidelines require that all potentially friable ACMs be removed prior to building demolition or renovation that may disturb the ACMs.

Demolition of the existing building on the project site could expose construction workers to harmful levels of ACMs or lead. Based on the recommendations in the Phase I ESA, an asbestos and lead-based paint survey shall be completed prior to any sanding, grinding, or demolition activities.

The following conditions of approval would be implemented to reduce the risk of exposure to ACMs and/or lead-based paint:

Conditions of Approval

- In conformance with state and local laws, a visual inspection/pre-demolition survey, and possible sampling, shall be conducted prior to the demolition of on-site buildings to determine the presence of asbestos-containing materials and/or lead-based paint.
- Prior to demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal/OSHA Lead in Construction Standard, Title 8, California Code of Regulations 1532.1, including employee training, employee air monitoring, and dust

control. Any debris or soil containing lead-based paint or coatings would be disposed of at landfills that meet acceptance criteria for the waste being disposed.

- All potentially friable ACMs shall be removed in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to any building demolition or renovation that may disturb the materials. All demolition activities will be undertaken in accordance with Cal/OSHA standards contained in Title 8 of CCR, Section 1529, to protect workers from exposure to asbestos.
- A registered asbestos abatement contractor shall be retained to remove and dispose of ACMs identified in the asbestos survey performed for the site in accordance with the standards stated above.
- Materials containing more than one percent asbestos are also subject to BAAQMD regulations. Removal of materials containing more than one percent asbestos shall be completed in accordance with BAAQMD requirements.

With the implementation of the above conditions of approval and mitigation measures MM HAZ-2.1 through MM HAZ-2.3, the project would not create a significant hazard risk 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)**

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. **(No Impact)**

There are no schools within one quarter mile of the site. The nearest school to the site is Mission College located at 3000 Mission College Boulevard, approximately 1.5 miles south of the project site. Fairwood Elementary School is located at 1110 Fairwood Avenue in Sunnyvale, approximately two miles southwest of the site. Given the distance of the site from these schools, the project would not have a hazardous materials impact on nearby schools. **(No Impact)**

Impact HAZ-4: The project would not 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, create a significant hazard to the public or the environment. **(No Impact)**

As discussed in Section 3.9.1.2, the project site is listed on a number of environmental databases; however, the site is not listed on a hazardous materials site compiled pursuant to Government Code Section 65962.5.⁵⁸ **(No Impact)**

⁵⁸ California Environmental Protection Agency. Cortese List Data Sources. Accessed March 29, 2022. <https://calepa.ca.gov/sitecleanup/corteselist/>.

Impact HAZ-5: The project would not be 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. 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 not located within an airport land use plan or within two miles of a public airport. The nearest airport to the project site is the Norman Y. Mineta San Jose International Airport, approximately 2.8 miles southeast of the project site. Development within the AIA can be subject to hazards from aircraft and pose hazards to aircraft traveling to and from the airport. The project site is not located within the AIA nor the safety zones designated by the CLUP.

For the project site, any proposed structure more than 150 feet in height above the ground surface is required under FAR Part 77 to be submitted for airspace safety review by the FAA.⁵⁹ The maximum height of the proposed office buildings would be 177 feet above the ground surface. Therefore, the project applicant will be required to notify the FAA of the project for airspace safety review. With the issuance of a no hazards determination by the FAA, the project would be compatible with aircraft operations and would not result in a significant aircraft safety hazard to people residing or working in the project area. **(Less than Significant Impact)**

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)**

In June 2016, the City adopted an Emergency Response Plan, which addresses the planned response of the City of Santa Clara to emergency situations associated with natural disasters, technological incidents, and chemical, biological, radiological, nuclear, and explosive emergencies. The project would include construction at a site designated for light industrial uses, including office development and would comply with relevant building and fire codes. The proposed project would not, therefore, impair or interfere with the implementation of an adopted emergency response plan or emergency evacuation plan. **(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 project site is in a developed urban area and it is not adjacent to any wildland areas that would be susceptible to fire. The project site is not located in a fire hazard severity zone (FHSZ).⁶⁰ Therefore,

⁵⁹ Norman Y. Mineta San José International Airport. *Notice Requirement Criteria for Filing FAA Form 7460-1*. 2013.

⁶⁰ California Office of the State Fire Marshal. *Fire Hazard Severity Zones Maps*. Accessed January 7, 2022. <https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/>.

implementation of the proposed project would not expose people or structures in the project area to wildland fires. **(No Impact)**

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 SWRCB have been developed to fulfill the requirements of this legislation. EPA regulations include the National Pollutant Discharge Elimination System (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 Regional Water Quality Control Boards (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 State Water Resources Control Board (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 Storm Water 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 storm water 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 Municipal Regional Stormwater NPDES Permit (MRP) in May 2022 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.⁶¹ Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 5,000 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: (1) the post-project impervious surface area is less than, or the same as, the pre-project impervious surface area; (2) the project is located in a catchment that drains to a hardened (e.g., continuously lined with concrete) engineered channel or channels or enclosed pipes, which extend continuously to the Bay, Delta, or flowcontrolled reservoir, or, in a catchment that drains to channels that are tidally influenced; or (3) the project is located in a catchment or subwatershed that is highly developed (i.e., that is 70 percent or more impervious).⁶²

Water Resources Protection Ordinance and District Well Ordinance

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.

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

⁶¹ California Regional Water Quality Control Board San Francisco Region. Municipal Regional Stormwater NPDES Permit, Order No. R2-2022-0018, NPDES Permit No. CAS612008. May 11, 2022.

⁶² The Hydromodification Applicability Maps developed the permittees under Order No. R2-2009-0074 were prepared using this standard, adjusted to 65 percent imperviousness to account for the presence of vegetation on the photographic references used to determine imperviousness. Thus, the maps for Order No. R2-2009-0074 are accepted as meeting the 70 percent requirement.

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.⁶³

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.

Local

City of Santa Clara General Plan

The Santa Clara 2010-2035 General Plan includes policies that address hydrology and water quality. The following goals, policies, and actions are applicable to the proposed project:

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-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 runoff.
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 Associations, 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, and the Urban Runoff Management Plan.
5.10.5-P21	Require that storm drain infrastructure is adequate to serve all new development and is in place prior to occupancy.

4.10.1.2 Existing Conditions

Flooding

Based on the FEMA FIRMs (Map No. 06085C0063H, dated May 18, 2009), the project site is located in Flood Zone X. Zone X is defined as areas with 0.2 percent chance of flooding annually; areas with one percent chance of flooding annually with average depths of less than one foot or with

⁶³ California Department of Water Resources, Division of Safety of Dams. Accessed March 9, 2022. [https://water.ca.gov/Programs/All-Programs/Division-of-Safety-of-Dams#:~:text=Since%20August%2014%2C%201929%2C%20the,Safety%20of%20Dams%20\(DSOD\).](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).)

drainage areas less than one square mile; and areas protected by levees from the one percent annual flood.⁶⁴

Dam Failure

According to the Valley Water dam failure inundation hazard maps, the project site is located within the Lexington Dam failure inundation hazard zone and outside the Anderson Dam failure inundation zone.⁶⁵

Seiches and Tsunamis

A seiche is the oscillation of water in an enclosed body of water such as a lake or the San Francisco Bay. There are no landlocked bodies of water near the project site that would affect the site in the event of a seiche.

A tsunami is a sea wave generated by an earthquake, landslide, or other large displacement of water in the ocean. There are no bodies of water near the project site that would affect the site in the event of a tsunami.⁶⁶

A mudflow is the rapid movement of a large mass of mud formed from loose soil and water. The project area is flat and there are no mountains in proximity that would affect the site in the event of a mudflow.

Storm Drainage System

The City of Santa Clara owns and maintains the municipal storm drainage system which serves the project site. The lines that serve the project site drain into San Tomas Aquino Creek, which is located approximately one quarter mile east of the site. San Tomas Aquino Creek flows north, carrying the effluent from the storm drains into San Francisco Bay. Stormwater from urban uses contain metals, pesticides, herbicides, and other contaminants, including oil, grease, asbestos, lead, and animal wastes. Based on data from the SWRCB, San Tomas Aquino Creek is currently listed on the California 303(d) impaired waters list for diazinon.⁶⁷

Under existing conditions, the project site is approximately 85 percent impervious (i.e., the site consists of 373,763 square feet of impervious surfaces).

⁶⁴ Federal Emergency Management Agency. “FEMA Flood Map Service Center: Welcome!” Accessed March 9, 2022. Available at: <https://msc.fema.gov/portal>.

⁶⁵ Santa Clara Valley Water District. “Local Dams and Reservoirs.” Accessed March 9, 2022. <https://www.valleywater.org/your-water/local-dams-and-reservoirs>.

⁶⁶ Association of Bay Area Governments. “Tsunami Inundation Areas (Potential).” Accessed March 9, 2022. <https://mtc.maps.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=c51a48d574e24f7eb6470bf68f1ae08a>.

⁶⁷ California State Water Boards. “Final California 2010 Integrated Report (303(d) List/305(b) Report).” Accessed March 9, 2022. https://www.waterboards.ca.gov/water_issues/programs/tmdl/2012state_ir_reports/01829.shtml#20840.

Groundwater

Groundwater levels fluctuate seasonally depending on the variations in rainfall, irrigation from landscaping, and other factors. Groundwater has been encountered at the project site at approximately nine feet bgs.

NPDES Hydromodification

Based on the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) Watershed Map for the City of Santa Clara, the project site is within a subwatershed that drains into a hardened channel or tidal area. As a result, the project is not subject to the NPDES hydromodification peak runoff requirements.⁶⁸

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?	☐	☐	☒	☐

⁶⁸ Santa Clara Valley Urban Runoff Pollution Prevention Program. "Hydromodification Management Applicability Maps - City of Santa Clara." Accessed March 7, 2022. https://scvurppp.org/wp-content/uploads/2019/08/Santa_Clara_HMP_Map.pdf

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

4.10.2.1 *Project Impacts*

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 Water Quality Impacts

Construction activities on-site include demolition of the existing buildings, grading, and trenching for utilities. Implementation of the project would temporarily increase the amount of debris on-site and could increase erosion and sedimentation that could be carried by runoff into natural waterways. Because the proposed project would disturb one or more acres of land, the project would be required to comply with the NDPS General Construction Permit. Under the General Construction Permit, the proposed project would be required to develop and implement a SWPPP which would contain erosion and sediment controls designed to minimize stormwater pollution by reducing sediment loads in runoff from the site.

In addition, the following measures would be required by the City as conditions of project approval (best management practices) to further 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 periods of high winds;
- All exposed or disturbed soil surfaces would be watered at least twice daily to control dust as necessary;
- Stockpiles of soil or other materials that can be blown by the wind would be watered or covered;
- All trucks hauling soil, sand, and other loose materials 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 implementation of the identified conditions of approval and implementation of the SWPPP, the proposed project's construction stormwater pollution impacts would be reduced to a less than significant level. **(Less Than Significant Impact)**

Post Construction Water Quality Impacts

The existing and proposed square footages of pervious and impervious surfaces for the project site are shown below in Table 4.10-1. Implementation of the project would result in an approximately two percent (6,724 square feet) decrease in impervious surfaces on-site compared to existing conditions.

Table 4.10-1: Pervious and Impervious Surfaces On-Site				
Site Surface	Existing/Pre-Construction (sf)	%	Project/Post-Construction (sf)	%
Impervious				
Roof	108,000	24	253,066	57
Surface Parking	258,613	59		
Sidewalks, Streets, etc.	7,150	2	113,973	26
<i>Subtotal</i>	373,763	85	367,039	83
Pervious				
Landscaping	67,800	15	74,524	17
Total	441,563	100	441,563	100

Because the proposed project would replace more than 5,000 square feet of impervious surfaces, the project would be required to comply with the provisions of the NPDES MRP. Plans would be certified by engineers to ensure that the project incorporates appropriate and effective source control measures that meet LID requirements to prevent discharge of pollutants, reduce impervious surfaces, retain a percentage of runoff on-site for percolation, and incorporate treatment control measures to remove pollutants from runoff entering the storm drainage system. Stormwater runoff on-site would flow to bio-filtration swales and would be collected via on-site catch basins. Stormwater would be treated, then directed to the City's stormwater system.

The following measures, based on the RWQCB BMPs and City requirements, are included in the proposed project as conditions of project approval to ensure compliance with NPDES permit requirements to reduce post-construction water quality impacts.

Conditions of Approval

- When the construction phase is complete, a Notice of Termination (NOT) for the General Permit for Construction will be filed with the RWQCB and the City of Santa Clara. The NOT shall document that all elements of the SWPPP have been executed, construction materials and waste

have been properly disposed of, and a post-construction stormwater management plan is in place as described in the SWPPP for the project site.

- All post-construction Treatment Control Measures (TCMs) shall be installed, operated, and maintained by qualified personnel. On-site inlets will be cleaned out at a minimum of once per year, prior to the wet season.
- The property owner/site manager shall keep a maintenance and inspection schedule and record to ensure the TCMs continue to operate effectively for the life of the project. Copies of the schedule and record must be provided to the City upon request and must be made available for inspection on-site at all times.

The City will review the project's Stormwater Control Plan (SWCP) to ensure that the project would not exceed the capacity of the local drainage system and ensure compliance with the NPDES permit requirements to reduce post-construction water quality impacts. Therefore, installation and maintenance of the proposed stormwater treatment systems will result in a less than significant impact on water quality. **(Less Than Significant Impact)**

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)**

As mentioned previously, groundwater has been encountered at the project site at approximately nine feet bgs. Development of the proposed project would include trenching/grading for utilities but would not have any substantial excavations (approximately six feet bgs excavation is proposed). The project would not use groundwater, deplete groundwater supply, or interfere with groundwater recharge. Therefore, the impact to groundwater would be less than significant. **(Less than Significant Impact)**

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 would not substantially alter the existing drainage pattern of the site or area through the alteration of any waterway. As a result, the project would not substantially increase erosion or increase the rate or amount of stormwater runoff.

Under existing conditions, the storm drainage system has sufficient capacity to convey runoff from the site. Implementation of the project would result in an approximate two percent (6,724 square feet) decrease in impervious surfaces compared to existing conditions, which would reduce the volume of stormwater runoff. In addition, the project would be required to comply with the NPDES MRP requirements; therefore, runoff from the project site would not exceed the capacity of the local drainage system. With the implementation of the conditions of approval to reduce construction-related water quality impacts discussed under Impact HYD-1 and compliance with the post-construction NPDES MRP requirements to reduce or prevent discharge of pollutants from stormwater runoff, the project would not provide substantial additional sources of polluted runoff to the City's storm drainage systems. The project site is not in a flood hazard area, and, therefore, the project would not impede or redirect flood flows. **(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. **(No Impact)**

The project site is located within Flood Zone X and is not located in a flood hazard area. The project site is not subject to inundation by tsunami or seiche; therefore, there would be no risk of release of pollutants at the project site due to floods, tsunamis, or seiches. **(No Impact)**

Impact HYD-5: The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **(Less than Significant Impact)**

The proposed project would implement the best management practices/conditions of approval identified under Impact HYD-1, as well as requirements under the NPDES General Construction Permit, the Santa Clara Valley Nonpoint Source Pollution Control Program, the Santa Clara Valley Urban Runoff Pollution Prevention Program, and the Urban Runoff Management Plan. Therefore, the proposed project would not conflict or obstruct implementation of a water quality control plan. **(Less than Significant Impact)**

4.11 LAND USE AND PLANNING

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

Local

City of Santa Clara Zoning Ordinance

The City of Santa Clara Zoning Ordinance (Title 18 of the City Code) provides a regulatory framework for development and operation of uses within the City. The intent of the Zoning Ordinance is to encourage development of various kinds of living, working, and commercial activities in specific areas as defined in the General Plan and to accomplish the following purposes:

- To promote the public health, safety, comfort, and general welfare;
- To conserve the values of property throughout the City and to protect the character and stability of residential, commercial, professional and manufacturing areas, and to promote the orderly and beneficial development of such areas;
- To provide adequate light, air, privacy, and convenience of access to property;
- To minimize congestion on the public streets and highways;
- To provide for the elimination of incompatible and nonconforming uses of land, buildings, and structures which are adversely affecting the character and value of desirable development in each district;
- To establish official plan lines and building setback lines;
- To define the powers and duties of the administrative officers and bodies as provided herein.
- To promote efficient urban design arrangement and to secure economy in governmental expenditures; and
- To preserve landmarks which reflect the City's historical, architectural, cultural and aesthetic traditions and promote a sense of community identity and historic perspective.

City of Santa Clara General Plan

The Santa Clara 2010-2035 General Plan includes policies that address land uses during the planning horizon of the General Plan. The following goals, policies, and actions 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-P9	Require that new development provide adequate public services and facilities, infrastructure, and amenities to serve the new employment or residential growth.
5.3.5-P5	Allow the development of Office/Research and Development uses in varied configurations and intensities to meet the needs of existing and new businesses.

Policies	Description
5.3.5-P16	Protect the industrial land use designations from incompatible uses in order to maintain the City's strong fiscal health and quality services that are supported by new businesses and technologies and retention of well-established existing businesses.

4.11.1.2 *Existing Conditions*

The approximately 10.14-acre project site is comprised of two parcels (APNs 104-49-025 and -026) located at 2901 Tasman Drive, 5155 Old Ironsides Drive, 2952 Bunker Hill Drive, and 5150 Great America Parkway in the City of Santa Clara. The project site is currently developed with four, two-story office buildings and associated surface parking lots.

The site is currently designated Low Intensity Office/R&D under the City's General Plan and is zoned ML-Light Industrial.

General Plan Land Use Designation

The project site is designated Low-Intensity Office/R&D in the General Plan. The Low-Intensity Office/R&D designation is intended for campus-like office development that includes office and R&D, as well as medical facilities, free standing data centers, and limited manufacturing uses. This designation allows landscaped areas for employee activities and parking in either surface lots or structured parking (above or below grade). The maximum FAR for this designation is 1.00.

Zoning District

The project site is within the ML – Light Industrial zoning district. This district is intended to accommodate industries operating substantially within an enclosed building. The zoning designation limits building coverage to 75 percent and building height to 70 feet.

Surrounding Land Uses

The project site is in a commercial and office/R&D area and is bordered by two- and four-story office buildings to the north, a 14-story hotel, two-story convention center, and associated surface parking lot to the east, a five-story office building to the south, and two-story office buildings to the west.

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?	☐	☐	☒	☐

4.11.2.1 *Project Impacts*

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

The project area includes a mix of office/R&D and commercial uses. Examples of projects that have the potential to physically divide an established community include new freeways and highways, major arterial streets, and railroad lines. The project, which proposes to construct two, 12-story office buildings and a parking structure with amenity space, would not include the construction of dividing infrastructure. The project site is located in an area with similar uses and patterns of development, and, therefore, implementation of the project would not physically divide an established community. **(No Impact)**

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 discussed under Section 3.11.1.2 Existing Conditions, the project site is designated Low-Intensity Office/R&D in the General Plan. The Low-Intensity Office/R&D designation is intended for campus-like office development that includes office and R&D, as well as medical facilities, free standing data centers, and limited manufacturing uses. The maximum floor area ratio (FAR) for this designation is 1.00. The project proposes a GPA to change the site's designation to High Intensity Office/R&D. This designation allows for high-rise or campus-like developments for corporate headquarters, R&D and supporting uses, with landscaped areas for employee activities. The maximum FAR allowed for the High Intensity Office/R&D is 2.00, excluding any FAR devoted to supporting retail uses.

The project would have a FAR of 2.34, which is above the maximum FAR for this land use designation. As a part of the GPA, the City would add a policy to the General Plan to allow up to 2.5 FAR for the sites within one half mile of rail stations. The project site is approximately 70 feet north of the Old Ironsides Light Rail Station on Tasman Drive; therefore, the project would be consistent with the new General Plan Policy.

Approximately 441,565 square feet of office/R&D space would be allowed at the site under the current Low-Intensity Office/R&D General Plan designation and the project proposes 1,030,455 square feet of office space (under the proposed GPA). The project would result in 588,890 square feet of additional office space above what was assumed in the General Plan. High-intensity office/R&D development is consistent with the City's goals. The project would be consistent with General Plan Policy 5.3.5-P5, which allow the development of office/R&D uses in varied configurations and intensities to meet the needs of existing and new businesses.

The zoning designation for the project site is Light Industrial (ML), which accommodates industries operating primarily within an enclosed building. The project is not consistent with the zoning district's height requirements, which limits building heights to 70 feet above ground surface. The maximum height of the proposed buildings would be twelve stories tall (176.5 feet). Therefore, the

project applicant proposes to rezone the site to Planned Development Zoning to allow for the construction of the proposed office development.

The proposed project is consistent with surrounding land uses and would be compatible with the existing land uses in the project area. As a result, the proposed project would not conflict with the office/R&D and commercial uses that surround the site. With approval of the GPA and Planned Development Zoning, included as part of the proposed project, the project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation.

As discussed in Section 3.2, there are 22 other parcels, totaling 133 acres, designated as High Intensity Office/R&D within a half mile of existing LRT stations in the City. The High Intensity Office/R&D parcels are located north and south of Tasman Drive. The General Plan EIR analysis assumed these parcels would have a maximum FAR of 2.0. With the approval of the proposed GPA, it is possible these parcels could be redeveloped with a maximum FAR of 2.5. This would result in an approximate additional 2,900,000 square feet of High Intensity Office/R&D above what was assumed in the General Plan. However, these future projects would be consistent with surrounding land uses, would comply with General Plan Policies, and would not result in significant land use impacts. **(Less than Significant Impact)**

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*

Based on the City's General Plan, the City is located in an area zoned MRZ-1 for aggregate materials by the State of California. MRZ-1 zones are areas where no significant mineral deposits are present or where little likelihood exists for their presence. No significant mineral resources have been identified within the City.

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?	☐	☐	☐	☒

4.12.2.1 *Project Impacts*

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)

The project would not result in the loss of availability of a known mineral resource, and no mineral excavation sites are present within the general area. Therefore, the proposed project would not result in impacts to mineral resources. **(No Impact)**

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)

There are no locally important mineral resources identified in the City's General Plan. Therefore, the project would not result in the loss of a locally important mineral resource recovery site. **(No Impact)**

4.13 NOISE

The following discussion is based, in part, on a Noise and Vibration Assessment prepared for the project by Illingworth & Rodkin, Inc., dated September 2021. A copy of this report is included in Appendix E of this Initial Study.

4.13.1 Environmental Setting

4.13.1.1 *Background Information*

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.⁶⁹ 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.

⁶⁹ 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} .

4.13.1.2 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 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. <i>Transit Noise and Vibration Assessment Manual</i> . September 2018.			

State and Local

California Green Building Standards Code

For commercial uses, CALGreen (Section 5.507.4.1 and 5.507.4.2) requires that wall and roof-ceiling assemblies exposed to the adjacent roadways have a composite Sound Transmission Class (STC) rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when the commercial property falls within the 65 dBA L_{dn} or greater noise contour for a freeway or expressway, railroad, or industrial or stationary noise source. The state requires interior noise levels to be maintained at 50 dBA $L_{eq(1-hr)}$ or less during hours of operation at a proposed commercial use.

City of Santa Clara General Plan

The Santa Clara 2010-2035 General Plan includes policies that address noise and vibration during the planning horizon of the General Plan. The following goals, policies, and actions are applicable to the proposed project:

Policies	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 defined on Table 5.10-1.
5.10.6-P2	Incorporate noise attenuation measures for all projects that have noise exposure levels greater than General Plan “normally acceptable” levels, as defined on Table 5.10-1.
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.
5.10.6-P7	Implement measures to reduce interior noise levels and restrict outdoor activities in areas subject to aircraft noise in order to make Office/Research and Development uses compatible with the Norman Y. Mineta International Airport land use restrictions.

Based the noise standards listed in Table 8.14-1 of the General Plan, industrial uses are considered compatible in noise environments of 70 dBA CNEL.⁷⁰ Where noise levels are greater than 70 dBA CNEL and less than 80 dBA CNEL, the design of the project should include measures to reduce noise levels to acceptable levels. Noise levels exceeding 80 dBA CNEL at industrial land uses are incompatible.

Commercial land uses are considered compatible in noise environments of 65 dBA CNEL or less. Where noise levels are greater than 65 dBA CNEL and less than 75 dBA CNEL, the design of the project should include measures to reduce noise levels to acceptable levels. Noise levels exceeding 75 dBA CNEL at commercial land uses are incompatible.

Santa Clara City Code

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 commercial office buildings to 65 dBA during daytime hours (7:00 AM to 10:00 PM) and 60 dBA at night (10:00 PM to 7:00 AM). The noise limits are not applicable to emergency work, licensed outdoor events, City-owned electric, water, and sewer utility system facilities, construction activities occurring within allowable hours, permitted fireworks displays, or permitted heliports. Construction activities are not permitted within 300 feet of residentially zoned property except within the hours of 7:00 AM and 6:00 PM on weekdays and 9:00 AM and 6:00 PM on Saturdays. No construction is permitted on Sundays or holidays.

The City Code 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 City Code would identify the ambient base noise level criteria as an average or median noise level (L_{eq}/L_{50}).

⁷⁰ The Santa Clara General Plan considers industrial uses to be uses that have a General Plan land use designation of High Intensity Office/R&D, Low-Intensity Office/R&D, Light Industrial, and Heavy Industrial. Since the project site has a High Intensity Office/R&D General Plan designation, the project is considered an industrial use.

4.13.1.3 Existing Conditions

Existing Noise Environment

The noise environment at the site and in the surrounding area results primarily from vehicular traffic along Tasman Drive and Great America Parkway. Local traffic along the other surrounding roadways, VTA light rail train pass-bys, and aircraft associated with the Mineta San José International Airport also contribute to the noise environment.

A noise monitoring survey was completed at the site in September 2021. The noise monitoring survey included two long-term (LT) noise measurements and two short-term (ST) noise measurements. The locations of these measurements are shown in Figure 4.13-1. Long-term noise measurement LT-1 was made along Tasman Drive, approximately 75 feet from the roadway centerline. Hourly average noise levels at LT-1 ranged from 59 to 68 dBA L_{eq} during the day and from 50 to 64 dBA L_{eq} at night. The average community noise equivalent level (CNEL) for the 24-hour periods ranged from 64 to 67 dBA CNEL. Measurement LT-2 was made approximately 65 feet from the centerline of Great America Parkway. Hourly average noise levels at LT-2 ranged from 60 to 67 dBA L_{eq} during the day and from 51 to 64 dBA L_{eq} at night.

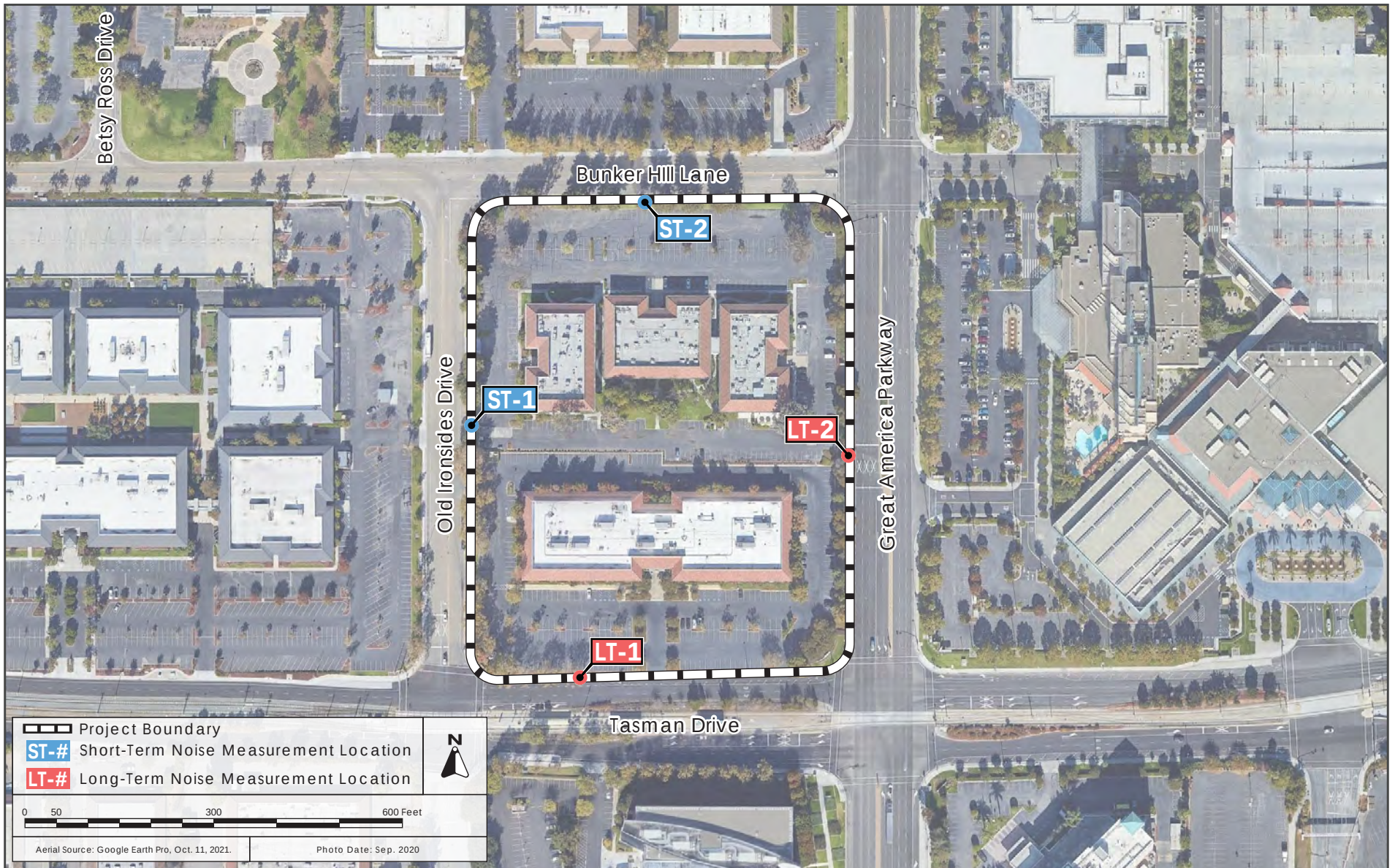
Measurement ST-1 was made approximately 50 feet from the centerline of Old Ironsides Drive. At ST-1, passenger vehicles generated noise levels ranging from 52 to 69 dBA, and buses generated noise levels of 62 to 75 dBA. Aircraft produced noise levels of 67 to 69 dBA. Additionally, mechanical equipment located at nearby buildings produced noise levels of 61 dBA. The 10-minute average noise level at ST-1 was 60 dBA L_{eq} (10-min).

Measurement ST-2 was made at 2952 Bunker Hill Lane, approximately 45 feet from the centerline of the roadway. At ST-2, passenger vehicles generated noise levels of 48 to 70 dBA, and heavy trucks generated noise levels of 75 to 77 dBA. One jet was observed at ST-2, which generated a noise level of 71 dBA. The 10-minute average noise level at ST-2 was 60 dBA L_{eq} (10-min).

Existing Vibration Environment

Estimated vibration levels generated by the light rail trains that pass by the Old Ironsides Light Rail Station across from the site are based on light rail vibration-level measurements collected at the Lick Mill Station on Tasman Drive, approximately 0.9 miles east of the site.⁷¹ Since vibration levels for individual train pass-bys would not have changed between 2016 and 2021, the 2016 measurements would adequately represent existing vibration levels due to light rail train pass-bys. During the 2016 study, light rail trains were monitored at distances of 55 to 88 feet north from the nearest track on

⁷¹ Due to the location of the tracks between the eastbound and westbound lanes of Tasman Drive, train vibration measurements were not made at the project site. The heavy vehicular traffic along Tasman Drive made it difficult to isolate vibration levels due solely to light rail trains. However, vibration levels generated by trains at the Lick Mill Station were collected in 2016 on Tasman Drive; vibration generated by trains at the Old Ironsides Light Rail Station are expected to generate similar vibration levels. Illingworth & Rodkin, Inc. "Tasman East Focus Area Plan Environmental Noise and Vibration Report." December 14, 2018.



NOISE MEASUREMENT LOCATIONS

FIGURE 4.13-1

Tasman Drive. Similar to the results of this previous study, single light rail train events at Old Ironsides Station produce overall vibration levels reaching 54 VdB at a distance of 55 feet from the tracks.

4.13.2 **Impact Discussion**

For the purpose of determining the significance of the project's impact on noise, would the project result in:

	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?	☐	☐	☒	☐

4.13.2.1 ***Project Impacts***

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)
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Temporary Construction Noise

The City Code 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 AM to 6:00 PM on weekdays and between the hours of 9:00 AM and 6:00 PM on Saturdays. No construction is permitted on Sundays or holidays. While residentially zoned property would not be located within 300 feet of the project site, there are two hotels to the east and southeast of the project site, which would be considered noise-sensitive uses.

Ambient noise levels at noise-sensitive receptors in the vicinity of the project site range from 59 to 68 dBA L_{eq} during daytime hours, based on the existing noise measurements made along Tasman Drive and Great America Parkway (LT-1 and LT-2, respectively).

Construction activities generate considerable amounts of noise, especially during earth-moving activities when heavy equipment is used. Construction for the proposed project is expected to last for approximately 25 months. Construction activities for the proposed project would be completed in phases. During each phase of construction, there would be a different mix of equipment operating, and noise levels would vary by phase and vary within phases, based on the amount of equipment in operation and the location at which the equipment is operating. The equipment that would be used in each construction phase is summarized in Table 4.13-2 along with the duration of each phase, and the estimated noise levels projected from the center of the project site to the property lines of the surrounding land uses. For the purpose of providing a conservative assessment of noise generated by construction equipment, all pieces of equipment shown per phase were assumed to be operating simultaneously. The range of levels shown for various phases represents noise levels for that individual phase and noise levels during the overlapping periods with other phases. Noise levels were estimated using the Federal Highway Administration's Roadway Construction Noise Model.

Table 4.13-2: Estimated Construction Noise Levels at Nearby Land Uses						
Phase	Construction Equipment (Quantity)	Calculated Hourly Average L_{eq} at Noise-Sensitive Receptors, dBA				
		East Hotel & Convention Center (460 feet)	Southeast Hotel (730 feet)	South Commercial (535 feet)	West Commercial (360 feet)	North Commercial (465 feet)
Demolition	Concrete/Industrial Saw (2), Excavator (4), Tractor/Loader/Backhoe (4)	71 dBA L _{eq}	67 dBA L _{eq}	69 dBA L _{eq}	73 dBA L _{eq}	70 dBA L _{eq}
Site Preparation	Grader (2), Rubber-Tired Dozer (2), Tractor/Loader/Backhoe (2)	68 dBA L _{eq}	64 dBA L _{eq}	67 dBA L _{eq}	70 dBA L _{eq}	68 dBA L _{eq}
Grading/Excavation	Grader (2), Rubber-Tired Dozer (2)	66 dBA L _{eq}	62 dBA L _{eq}	65 dBA L _{eq}	69 dBA L _{eq}	66 dBA L _{eq}
Trenching/Foundation	Tractor/Loader/Backhoe (6), Bore/Drill Rig (2)	69 dBA L _{eq}	65 dBA L _{eq}	68 dBA L _{eq}	71 dBA L _{eq}	69 dBA L _{eq}
Garage Structure	Crane (1), Forklift (2), Generator Set (1)	60 dBA L _{eq}	56 dBA L _{eq}	59 dBA L _{eq}	62 dBA L _{eq}	60 dBA L _{eq}
Building Structure	Crane (2), Forklift (4), Generator Set (1), Welder (4)	63 to 65 dBA L _{eq} ^a	59 to 61 dBA L _{eq} ^a	61 to 63 dBA L _{eq} ^a	65 to 67 dBA L _{eq} ^a	63 to 65 dBA L _{eq} ^a
Building Exterior	Crane (2), Forklift (4), Welder (2)	79 to 82 dBA L _{eq}	56 to 59 dBA L _{eq}	58 to 62 dBA L _{eq}	62 to 65 dBA L _{eq}	60 to 63 dBA L _{eq}
Building Interior/Architectural Coating	Air Compressor (10), Aerial Lift (10)	65 to 68 dBA L _{eq}	61 to 64 dBA L _{eq}	64 to 67 dBA L _{eq}	68 to 70 dBA L _{eq}	65 to 68 dBA L _{eq}
Paving	Cement and Mortar Mixer (1), Paver (1), Paving Equipment (1), Roller (1)	65 dBA L _{eq}	61 dBA L _{eq}	64 dBA L _{eq}	67 dBA L _{eq}	65 dBA L _{eq}

The predicted construction noise levels in Table 4.13-2 show that project construction could generate noise levels that exceed 60 dBA L_{eq} at the nearby hotels and 70 dBA L_{eq} at the nearby commercial uses. At times, the existing ambient noise levels would potentially be exceeded by five dBA L_{eq} or more. Since project construction is expected to last for a period exceeding one year, this is conservatively considered a significant impact.

Mitigation Measures: The following mitigation measures would be implemented to reduce construction noise levels emanating from the site and minimize disruption and annoyance at existing noise-sensitive receptors in the project vicinity.

MM NOI-1.1: The project applicant shall develop a construction noise control plan, including, but not limited to, the following available controls:

- Ensure that excavating, grading and filling activities, and other construction activities (including the loading and unloading of materials and truck movements) within 300 feet of residentially zoned property, including hotel properties, are limited to the hours of 7:00 AM to 6:00 PM on weekdays and between the hours of 9:00 AM and 6:00 PM on Saturdays. No construction is permitted on Sundays or holidays.
- Construct temporary noise barriers, where feasible, to screen stationary noise-generating equipment. Temporary noise barrier fences would provide a five dBA noise reduction if the noise barrier interrupts the line-of-sight between the noise source and receptor and if the barrier is constructed in a manner that eliminates any cracks or gaps.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Unnecessary idling of internal combustion engines shall be strictly prohibited.
- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used to reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors.
- Utilize "quiet" air compressors and other stationary noise sources where technology exists.
- Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.
- Locate material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from residential receptors.
- Route construction-related traffic along major roadways and as far as feasible from sensitive receptors.

- Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.
- The contractor shall prepare a detailed construction schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.
- 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 correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

Implementation of the above measures would reduce project construction noise levels by five to 10 dB, limit construction hours, and minimize disruption and annoyance. With the implementation of these measures and recognizing that noise generated by construction activities would occur over a temporary period, the temporary increase in ambient noise levels would be less than significant.

(Less than Significant Impact with Mitigation Incorporated)

Permanent Operational Noise

Project-Generated Traffic Noise

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 or was five dBA CNEL or greater for future ambient noise levels at or below 60 dBA CNEL. Existing ambient measurements made in the project site vicinity indicate that existing and future ambient noise levels at the noise-sensitive receptors in the project site vicinity would result in noise levels over 60 dBA CNEL. Therefore, a significant impact would occur if project-generated traffic increased levels by three dBA CNEL or more. For reference, a three dBA CNEL noise increase would be expected if the project would double existing traffic volumes along a roadway.

The Local Transportation Analysis (LTA) prepared for the proposed project (refer to Appendix F of this Initial Study) included existing peak hour traffic volumes and peak hour trips. When the trips were added to the existing volumes, an existing plus project traffic scenario was calculated. Comparing the existing plus project volumes to the existing volumes resulted in a two dBA CNEL noise level increase along all segments included in the LTA, except for three segments: along Old Ironsides Drive, north of Tasman Drive; along Old Glory Lane, east of Old Ironsides Drive; and along Bunker Hill Lane, west of Great America Parkway. These segments were estimated to experience a three to four dBA increase in noise level. However, none of these segments include residential land uses. Therefore, the project-generated traffic would not cause a substantial permanent noise increase at the surrounding noise-sensitive receptors.⁷²

⁷² The project's noise assessment is based on the assumption that the project would generate a net total of 828 AM peak hour trips and 820 PM peak hour trips. However, based on the most recent Local Transportation Analysis for

Mechanical Equipment

Various mechanical equipment for heating, ventilation, and cooling purposes, exhaust fans, emergency generators, and other similar equipment could produce noise levels exceeding the City's thresholds when located near existing land uses. The proposed buildings would have cooling towers at the center of each roof. Additionally, the emergency generator rooms would be located on the ground-level along the northern façades of each building.

The dominant source of noise at the cooling towers would be the fan operations. At 50 feet, noise levels would be up to 74 dBA under worst-case conditions. While the top of the cooling tower area would be open for ventilation, these areas are typically surrounded by mechanical screening, which would provide a minimum of 10 dBA reduction assuming no cracks or gaps from base to top of the screen. The front of the hotel to the east would be the nearest hotel receptor to the cooling tower at Building 2, approximately 355 feet away. At this distance, noise from the cooling tower would be 47 dBA. The hotel to the southeast is set back 425 feet from the nearest building façade. Noise generated by the cooling tower, at the hotel east of the site, would be below the City's nighttime threshold of 50 dBA for residential land uses (which is also the threshold used for hotels).

In accordance with the City's standards, at existing commercial/office and R&D land uses, noise levels from the project's mechanical equipment would be restricted to 65 dBA during daytime hours and to 60 dBA during nighttime hours. The commercial property lines to the west (approximately 130 feet from the nearest project building façade) to the south (approximately 200 feet from the nearest project building façade), and to the southwest (approximately 245 feet from the nearest project building façade) would have direct line-of-sight to the proposed office buildings, which would include rooftop cooling towers. At these commercial/office and R&D land uses, the mechanical equipment noise due to the cooling tower operations would be 51 dBA or lower. The commercial/office and R&D properties to the north would be shielded by the proposed parking garage and would be located 490 feet or more from the nearest office façade. The cooling towers would generate noise levels of 40 dBA or below at these distances. Therefore, the project's mechanical equipment noise would not exceed the City's noise standards at the surrounding commercial/office properties.

The project proposes to include two emergency diesel generators. Noise levels generated at both office buildings are assumed to be 75 dBA at 23 feet. Emergency generators are typically tested monthly for a period of one hour between 7:00 AM and 10:00 PM. Due to the location of both generator rooms being on the northern façades of the buildings, the existing land uses to the south would not be exposed to generator noise. Additionally, the parking structure would shield the existing land uses to the north from potential generator noise. The hotel and convention center to the east would be exposed to generator noise from the eastern project building located along Great America Parkway (Building 2). The generator room would be approximately 220 feet from the

the project, the project would generate 646 AM peak hour trips and 639 PM peak hour trips. Based on the noise consultant's (Illingworth & Rodkin's) review of the project's peak traffic volumes analyzed in the noise assessment compared to the proposed traffic volumes evaluated in the Local Transportation Analysis, the conclusion that project-generated traffic would not cause a substantial permanent noise increase at the surrounding noise-sensitive receptors would not change.

Personal Communications: Jarello, Carrie, Illingworth & Rodkin. RE: Great America Parkway/Tasman Drive Office Project - Santa Clara. May 24, 2023.

nearest property line of the hotel and convention center and approximately 405 feet from the sidewalk in front of the hotel where noise-sensitive receptors would be located. Assuming a conservative 20 dBA reduction due to the eastern façade of the proposed office building, emergency generator noise would be approximately 42 dBA during the one-hour testing period each month at the property line of the hotel and convention center and would be 37 dBA at the front sidewalk. These levels would meet the City's commercial and residential/hotel daytime noise limits.

The nearest property line of the existing commercial use to the west would be approximately 175 feet from the generator room located in the western project office building. At this distance and assuming a conservative 20 dBA reduction from the western façade of the building, emergency generator noise would be 44 dBA during the one-hour testing period each month. Therefore, the project's emergency generator noise would not exceed the City's noise standards at the nearby commercial/office and R&D or hotel properties.

Truck Loading and Unloading

As discussed under Section 3.12.1.2 Regulatory Framework, the City Code applies thresholds of 55 dBA during daytime hours and 50 dBA during nighttime hours for residential uses, and thresholds of 65 dBA during daytime hours and 60 dBA during nighttime hours for commercial uses. For truck deliveries, only the daytime thresholds apply.

The proposed office development would require weekly truck deliveries. Delivery zones would be located along the northern façades of each proposed office building, which would be the location of the trash enclosures. Due to the size of the proposed project, one to two deliveries per week would be expected. For purposes of this analysis, it is assumed that deliveries would be limited during daytime hours between 7:00 AM and 10:00 PM. Vendor delivery trucks typically generate maximum noise levels of 60 to 65 dBA L_{max} at a distance of 50 feet. Low speed truck noise results from a combination of engine, exhaust, and tire noise, as well as the intermittent sounds of back-up alarms and releases of compressed air associated with truck/trailer air brakes. The noise levels produced by backup alarms can vary depending on the type and directivity of the sound, but maximum noise levels are typically between 65 to 75 dBA L_{max} at a distance of 50 feet. Assuming a typical delivery would take about 15 to 20 minutes, the hourly average noise level from a delivery would be 67 to 68 dBA L_{eq} at a distance of 50 feet.

The loading zones are assumed to be located on the ground level just north of each proposed office building. Due to the location of the loading zones, the existing land uses to the south and to the north of the project site would be shielded from truck delivery noise associated with the proposed project.

The hotel and convention center to the east would have direct line-of-sight to truck deliveries occurring at the eastern office building and at the amenity building. The center of the loading zone would be approximately 255 feet from the nearest property line of the hotel and convention center and approximately 440 feet from the sidewalk in front of the hotel where noise-sensitive receptors would be located. Assuming no shielding due to project buildings, truck deliveries would generate maximum instantaneous noise levels ranging from 51 to 56 dBA L_{max} and hourly average noise levels of 53 to 54 dBA L_{eq} at the property line of the hotel and convention center. At the front sidewalk of the hotel, estimated noise levels would be 46 to 51 dBA L_{max} and 48 to 49 dBA L_{eq} . Truck deliveries would not exceed the City's daytime residential noise limits at the nearest hotel. The

nearest property line of the existing commercial use to the west would be approximately 160 feet from the center of the delivery zone located at the western office building. Assuming no shielding due to project buildings, truck deliveries would generate maximum instantaneous noise levels ranging from 55 to 60 dBA L_{max} and hourly average noise levels of 57 to 58 dBA L_{eq} at the property line of the existing commercial building to the west of the project site. Therefore, truck deliveries at the proposed project site would not result in noise levels exceeding the City Code threshold for hotel and office/R&D properties during daytime hours. The project would not generate a substantial temporary or permanent operational noise increase. **(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)

Project construction would generate vibration when heavy equipment or impact tools (e.g., jackhammers, hoe rams) are used. Construction activities would include grading, foundation work, paving, and new building framing and finishing. According to an equipment list provided by the applicant, drilling activities are expected to be conducted in place of impact or vibratory pile driving activities, which can cause excessive vibration.

For structural damage, the California Department of Transportation recommends a vibration limit of 0.5 in/sec PPV for buildings structurally sound and designed to modern engineering standards, 0.3 in/sec PPV for buildings that are found to be structurally sound but where structural damage is a major concern, and a conservative limit of 0.08 in/sec PPV for ancient buildings or buildings that are documented to be structurally weakened. No known ancient buildings or buildings that are documented to be structurally weakened adjoin the project area. Therefore, conservatively, groundborne vibration levels exceeding 0.3 in/sec PPV would have the potential to result in a significant vibration impact.

Table 4.13-3 summarizes the estimated vibration levels at the nearest existing buildings surrounding the project site. Construction vibration levels would depend on the specific location of individual pieces of equipment. That is, equipment scattered throughout the site would not generate a collective vibration level, but a vibratory roller, for instance, operating near the project site boundary would generate the worst-case vibration levels for the receptor sharing that property line. Further, construction vibration impacts are assessed based on the potential for damage to buildings on receiving land uses, not at receptors at the nearest property lines. Therefore, the distances used to propagate construction vibration levels, which are different than the distances used to propagate construction noise levels, were estimated under the assumption that each piece of equipment was operating along the nearest boundary of the project site, representing the worst-case scenario.

Table 4.13-3:Vibration Source Levels for Construction Equipment						
Equipment		Estimated Vibration Levels at Structures Surrounding the Project Site (in/sec PPV)				
		East Hotel & Convention Center (310 feet)	Southeast Hotel (390 feet)	South Commercial (210 feet)	West Commercial (200 feet)	North commercial (230 feet)
Clam shovel drop		0.013	0.010	0.019	0.021	0.018
Hydromill (slurry wall)	In soil	0.001	0.0004	0.001	0.001	0.001
	In rock	0.001	0.001	0.002	0.002	0.001
Vibratory roller		0.013	0.010	0.020	0.021	0.018
Hoe Ram		0.006	0.004	0.009	0.009	0.008
Large bulldozer		0.006	0.004	0.009	0.009	0.008
Caisson drilling		0.006	0.004	0.009	0.009	0.008
Loaded trucks		0.005	0.004	0.007	0.008	0.007
Jackhammer		0.002	0.002	0.003	0.004	0.003
Small bulldozer		0.0002	0.0001	0.0003	0.0003	0.0003
Source: Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration, Office of Planning and Environment, U.S. Department of Transportation, September 2018, as modified by Illingworth & Rodkin, Inc., January 2021.						

While vibration levels would not be high enough to cause cosmetic damage to any nearby buildings, vibration levels may still be perceptible. However, this is common with any construction project; vibration levels from construction 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). By use of administrative controls, such as notifying neighbors of scheduled construction activities and scheduling construction activities with the highest potential to produce perceptible vibration during hours with the least potential to affect nearby businesses, perceptible vibration would be kept to a minimum.

Since vibration levels would be below 0.3 in/sec PPV at all surrounding building façades during project construction and no historical buildings are located adjacent to the project site, the project would not result in generation of excessive groundborne vibration levels. **(Less than Significant Impact)**

Impact NOI-3: The project would not be 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. The project would not expose people residing or working in the project area to excessive noise levels. (Less than Significant Impact)

Norman Y. Mineta San José International Airport is a public-use airport located approximately 2.8 miles southeast of the project site. According to the new Airport Master Plan Environmental Impact Report, the project site is located along the 60 dBA CNEL contour line. Aircraft noise would result in exterior noise levels below the City's requirements for commercial land uses (60 dBA CNEL or less). Therefore, the proposed project would be compatible with the City's exterior noise standards for aircraft noise. **(Less than Significant Impact)**

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, in compliance with the City's General Plan Policy 5.10.6-P1 and Table 5.10-2, General Plan Noise Standards, which addresses noise compatibility standards for proposed projects.

Future Exterior Noise Environment

The project proposes an outdoor common use area in the central portion of the site that would be partially shielded by the proposed buildings. The center of the common use area would be approximately 400 feet north of the centerline of Tasman Drive and approximately 355 feet from the centerline of Great America Parkway. At these distances and assuming partial shielding from the surrounding project buildings, the future exterior noise levels at the center of the common use area would be below 65 dBA CNEL (which is the General Plan exterior noise standard for commercial uses).

A roof terrace connecting both buildings would be located on Level 12. The center of the roof terrace would be approximately 155 feet from the centerline of Tasman Drive. The center of the roof terrace would be shielded because of the elevation of this space with respect to the roadways below. Assuming partial shielding, the future exterior noise levels at the center of the roof terrace would be below 65 dBA CNEL.

The amenity building would also include a rooftop terrace. This space would be mostly shielded from traffic noise along Tasman Drive; however, this terrace would have direct line-of-sight to Great America Parkway. At a distance of approximately 260 feet from the centerline of Great America Parkway, and assuming partial shielding due to the elevation of the terrace with respect to the roadways below, future exterior noise levels would be below 65 dBA CNEL.

Common outdoor use areas proposed by the project would be compatible with the City's exterior noise limits.

Future Interior Noise Environment

The southern façades of the proposed office buildings would be set back approximately 100 to 155 feet from the centerline of Tasman Drive. At the exterior facades, the highest hourly average noise levels would range from 58 to 71 dBA L_{eq} during future daytime hours. The eastern façades of the office and amenity buildings nearest to Great America Parkway would be set back approximately 120 feet from the centerline of the roadway. At this distance, hourly average noise levels would range from 61 to 68 dBA L_{eq} during future daytime hours of operation.

Standard construction materials and methods for commercial uses would provide about 25 to 30 dBA of noise reduction in interior spaces. Standard office construction materials and methods, assuming the implementation of forced-air mechanical ventilation, would reduce noise levels indoors to between 28 to 41 dBA, which would be below the 50 dBA L_{eq} threshold established by the CALGreen Code.

Vibration and Land Use Compatibility

Prior measurements of light rail trains resulted in vibration levels up to 54 VdB at a distance of 55 feet from the tracks. Since the nearest buildings at the project site would be 100 feet or more from the nearest light rail tracks, vibration levels would be below 54 VdB. Light rail train vibration levels would not exceed any of the FTA thresholds. This would not change under future conditions. Therefore, the proposed project would be compatible with the future vibration environment at the project site.

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.⁷³ The City of Santa Clara Housing Element and related land use policies were last updated in 2014.

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.⁷⁴

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.

⁷³ California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed October 11, 2021. <http://hcd.ca.gov/community-development/housing-element/index.shtml>.

⁷⁴ Association of Bay Area Governments and Metropolitan Transportation Commission. *Plan Bay Area 2050*. October 21, 2021. Page 20.

4.14.1.2 Existing Conditions

According to a May 2021 estimate by the California Department of Finance, the City of Santa Clara has a total population of 130,746 persons.⁷⁵ There are estimated to be a total of 51,041 housing units in the City, with approximately 2.64 persons per household.⁷⁶ According to ABAG projections, the City's population is expected to grow to a total of 159,500 persons by 2040.⁷⁷ There are approximately 143,565 jobs in the City (estimated by ABAG for 2020). In 2040, it is estimated that the City will have approximately 170,575 jobs.⁷⁸

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 2010.⁷⁹ 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 2040.⁸⁰ 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.

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?	☐	☐	☐	☒

⁷⁵ California Department of Finance. *E-5 Population and Housing Estimates for Cities, Counties, and the State 2011-2020 with 2010 Census Benchmark*. Accessed on October 11, 2021.

<http://dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>.

⁷⁶ Ibid.

⁷⁷ Association of Bay Area Governments. "Projections 2040." Accessed October 11, 2021.

<http://projections.planbayarea.org/>.

⁷⁸ Ibid.

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

⁷⁹ City of Santa Clara 2010-2035 General Plan. December 2014. Appendix 8.12 (Housing Element). Page 8.12-25.

⁸⁰ City of Santa Clara 2010-2035 General Plan Final Environmental Impact Report. 2011.

4.14.2.1 *Project Impacts*

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 proposes to construct a new office development and does not include new residences. The project would result in a net increase in office space and a new amenity building. Therefore, the project would generate a net increase in businesses and jobs on-site. Given the project site's proximity to transit services and the City's current jobs to housing ratio, it is likely that future employees of the proposed offices and amenity building would consist of both Santa Clara residents and commuters from other cities. Under the site's existing Low-Intensity Office/R&D General Plan land use designation, up to 441,565 square feet of office/R&D would be allowed, which would accommodate approximately 1,325 employees.⁸¹ The number of employees the proposed 1,030,455 square foot office development would accommodate is 3,392.⁸² The project would result in an increase of 2,067 employees above what is allowed under the current General Plan designation. The additional workers on-site, however, would be incremental, would not substantially exceed the job growth projections, and would not significantly induce population growth. Employees of the project would occupy existing housing in the City or elsewhere. The project would not require new housing within the City nor would it extend roads or other infrastructure that would indirectly induce growth. For these reasons, the project would not directly or indirectly result in substantial unplanned population growth.

The proposed GPA could result in up to 2,896,740 square feet of High Intensity Office/R&D at other sites within one half mile of LRT stations. This would result in approximately 8,690 employees more than assumed in the General Plan. Any future projects would be subject to environmental review which would address specific impacts from each project. The increase in employees would be incremental relative to the total number of jobs within the City (approximately 143,565 jobs in 2020) and would not result in significant population impacts. **(Less than Significant Impact)**

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 project site does not currently contain any housing. Therefore, implementation of the project would not result in the displacement of existing people or housing. There would be no need to construct replacement housing elsewhere. **(No Impact)**

⁸¹ The number of employees allowed based on the existing General Plan land use designation is based on the standard three employees per 1,000 square feet assumption.

⁸² The 3,392 employees that would occupy the proposed office development was provided by the project applicant.

4.15 PUBLIC SERVICES

4.15.1 Environmental Setting

4.15.1.1 *Regulatory Framework*

State

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.

Quimby Act and Mitigation Fee Act

The Quimby Act (Government Code Section 66477) and Mitigation Fee Act (Government Code Section 66000 et seq.) authorizes local governments to require that developers set aside parkland and open space for recreational purposes. The two laws provide 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 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 parks, pay a fee in lieu of parkland dedication, or perform a combination of the two at the discretion of the City. The Mitigation Fee Act contains similar provisions for developments not involving a subdivision.

Regional and Local

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.

Santa Clara General Plan

Public services-related General Plan policies applicable to the project include the following:

Policies	Description
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 of the General Plan.
5.9.3-P1	Encourage design techniques that promote public and property safety in new development and public spaces.
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.

4.15.1.2 *Existing Conditions*

Fire Protection Services

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 while it is relocated) consisting of eight engines, two trucks, one rescue/light unit, two ambulances, one hazardous materials unit and one command vehicle. The nearest station to the project is Station 7, located at 3495 Benton Street, located approximately 0.4 miles south of the site.

The SCFD maintains a City-wide response time of less than six minutes to 90 percent of all high-level emergency calls. Response time is measured from time of dispatch to the time of arrival at the call.⁸³

Police Protection Services

Police protection services are provided by the City of Santa Clara Police Department (SCPD). The SCPD consists of 239 full-time employees and a varying number of part-time or per diem employees, community volunteers, police reserves and chaplains. There are currently two police stations, the headquarters located at 601 El Camino Real and a substation located at 3992 Rivermark Parkway. The distance between the project site and the police headquarters is approximately three miles. The distance between the project site and substation is approximately four miles.

The General Plan identifies a public service goal to maintain the SCPD response time average of three minutes for all areas of the City.⁸⁴

⁸³ City of Santa Clara. "Emergency Services." Accessed February 16, 2022.
<https://www.santaclaraca.gov/services/emergency-services>.

⁸⁴ City of Santa Clara. *City of Santa Clara 2010-2035 General Plan*. Section 5.9.3. November 2010.

Schools

Schools that serve children in grades K-12 who reside in the City of Santa Clara are operated by six school districts: the Santa Clara Unified School District (SCUSD), San José Unified School District, Cupertino Union School District, Fremont Union High School District, Campbell Union School District, and Campbell Union High School District. The project site is within the school attendance boundaries of the SCUSD.

Parks

The Santa Clara Parks and Recreation Department (SCPRD) provides parks and recreational services in the City. The SCPRD 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 May 2023, the SCPRD 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 (125.57 acres improved and 5.22 acres unimproved resulting in 130.79 acres), 13 mini parks (2.59 acres improved and 3.19 acres unimproved resulting in 5.78 acres), public open space (16.13 acres improved and 40.08 acres unimproved resulting in 56.21 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 269.41 improved acres and 83.62 unimproved acres. Community parks are over 15 acres, neighborhood parks are one to 15 acres, and mini parks are typically less than one acre in size.

The City is meeting the standard of three acres per 1,000 residents per the Quimby provisions of the City Code and 2.60 acres per 1,000 residents per the MFA provisions of the City Code with regard to neighborhood parks.

The nearest neighborhood park to the project site is Fairway Glen Park, a four-acre neighborhood park located at 2051 Calle De Primavera, more than one and a half miles southeast of the project site. The park includes a children's playground, open space, two tennis courts and picnic facilities. There are no City Parks within walking distance (a 10-minute walk) of the project site.

Libraries

There are three libraries in the City of Santa Clara. Central Park Library is the largest Santa Clara City Library facility located at 2635 Homestead Road, approximately three miles south of the project site. The Northside Branch Library is located at 695 Moreland Way, approximately two miles northeast of the project site. The Mission Library Family Reading Center is located at 1098 Lexington Street, approximately 3.25 miles southeast of the project site.

4.15.2 Impact Discussion

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:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Fire Protection?	☐	☐	☒	☐
2) Police Protection?	☐	☐	☒	☐
3) Schools?	☐	☐	☐	☒
4) Parks?	☐	☐	☒	☐
5) Other Public Facilities?	☐	☐	☐	☒

4.15.2.1 *Project Impacts*

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 project site is developed with an office/R&D building and is currently served by the SCFD. The project proposes to construct two, 12-story office buildings totaling approximately 1,030,455 square feet and a seven-level, above-grade parking structure with an attached 38,185 square foot, two-story amenity building. As stated in Section 3.14, Population and Housing of this Initial Study, the project would increase the number of employees by 2,067 above what was assumed in the General Plan. The proposed project would increase the total population of Santa Clara during standard business hours but would not permanently increase the resident population because housing is not proposed as part of the project. Therefore, the proposed development would increase the total population of Santa Clara during regular business hours but would not permanently increase the resident population.

The Santa Clara General Plan EIR concluded that additional SCFD officers, if needed to serve build out of the General Plan, would be housed in existing facilities and no new or expanded facilities would be necessary. While this project would result in additional workers beyond what was assumed in the General Plan, the SCFD determined that no new facilities or expansion of current facilities would be required to provide adequate fire protection services to the project site and meet the City's overall service goals. The proposed project would be reviewed by the SCFD and be built to

applicable Fire Code standards in use when construction permits are issued, including sprinklers and smoke detectors, and would include features that would reduce potential fire hazards.

As discussed in Section 4.14, other High Intensity Office/R&D sites could result in up to 8,690 employees, above what was assumed in the General Plan. The future development would be located in an area that is already served by the SCFD and would comply with Fire Code standards. As with the proposed project, any future individual project under the GPA would not be sufficient in size, by itself, to require the construction or expansion of facilities to support the SCFD. If, at any time, the cumulative increase in the worker population requires the construction or expansion of facilities to support the SCFD, then environmental review for those facilities would be required. Therefore, the future projects would not result in significant impacts to fire protection services. **(Less Than Significant Impact)**

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)
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The existing office/R&D development is currently served by the SCPD. As stated under Impact PS-1, the proposed project would increase the total population of Santa Clara during standard business hours but would not permanently increase the resident population because housing is not proposed as part of the project. The project would be constructed in conformance with current codes and the project design would be reviewed by the SCPD to ensure that it incorporates appropriate safety features to minimize criminal activity. The General Plan EIR concluded that additional officers, if needed to serve the buildout of the General Plan, would utilize the existing facilities and no new or expanded facilities would be necessary. New facilities or expansion of existing facilities would not be required to provide adequate police services to serve the proposed project and meet the City's overall service goals.

As discussed above, other High Intensity Office/R&D sites could result in up to 8,690 employees, above what was assumed in the General Plan. The future development would be located in an area that is already served by the SCPD. As with the proposed project, any future individual project under the GPA would not be sufficient in size, by itself, to require the construction or expansion of facilities to support the SCPD. If, at any time, the cumulative increase in the worker population requires the construction or expansion of facilities to support the SCPD, then environmental review for those facilities would be required. Therefore, the future projects would not result in significant impacts to police services. **(Less Than Significant Impact)**

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. (No Impact)
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The proposed project would construct a new office development and would not include any residential uses. New students are generated by a project when new housing units are proposed. As stated under Impact PS-2, future employees of the project would occupy existing housing in the City or elsewhere. Implementation of the proposed office development would not generate new students, and, therefore, would not increase the student population within the City of Santa Clara. Therefore, the proposed project and other High Intensity Office/R&D parcels within one half mile of LRT stations would have no impact on school facilities or capacities in the City. **(No Impact)**

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)
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The project would construct new office buildings and would not include any residential uses. An increase in the daily employee population in the City would not result in a substantial increase in usage of local recreational facilities. The proposed project would include a large amphitheater, a barbeque area, and multiple outdoor meeting and dining locations. Additionally, there would be rooftop terraces on the bridge linking the office buildings and the roof of the amenity building. Each office building would have a large second-fourth level balcony with sufficient space for large meetings or gatherings. The proposed on-site recreational facilities would offset the use of off-site recreational facilities by future employees of the site.

No City parks or trails are within walking distance of the proposed development and, therefore, the number of future employees that would use these facilities would not be substantive. Although future employees at the project site and other High Intensity Office/R&D sites within one half mile of LRT stations might use City parks or trails, weekday employees would not place a substantial physical burden on these facilities. Therefore, the proposed project and future High Intensity Office/R&D projects under the GPA would not have a significant impact on park facilities in the City of Santa Clara. **(Less Than Significant Impact)**

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. (No Impact)**

The proposed project would construct new office buildings and would not include any residential uses. Therefore, the proposed project and other High Intensity Office/R&D parcels within one half mile of LRT stations would have no impact on library and other similar public facilities in the City of Santa Clara. **(No Impact)**

4.16 RECREATION

4.16.1 Environmental Setting

4.16.1.1 *Existing Conditions*

As discussed in Section 4.15 Public Services, the SCPRD provides parks and recreational services in the City. The SCPRD 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 May 2023, the SCPRD 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 (125.57 acres improved and 5.22 acres unimproved resulting in 130.79 acres), 13 mini parks (2.59 acres improved and 3.19 acres unimproved resulting in 5.78 acres), public open space (16.13 acres improved and 40.08 acres unimproved resulting in 56.21 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 269.41 improved acres and 83.62 unimproved acres. Community parks are over 15 acres, neighborhood parks are one to 15 acres, and mini parks are typically less than one acre in size.

The nearest neighborhood park to the project site is Fairway Glen Park, a four-acre neighborhood park located at 2051 Calle De Primavera, more than one and a half miles southeast of the project site. There are no City Parks within walking distance (a 10-minute walk) of 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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

4.16.2.1 *Project Impacts*

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 project would construct a new office development and would not include any residential uses. An increase in the number of employees in the City would not result in a substantial increase in usage of local recreational facilities.

The proposed office development would include an amphitheater (to be used as a meeting area), a barbeque area, and multiple outdoor meeting and dining locations. Additionally, there would be rooftop terraces on the bridge linking the office buildings and the roof of the amenity building. Each office building would have a large second-fourth level balcony with sufficient space for large meetings or gatherings. The proposed on-site recreational facilities would offset the use of off-site recreational facilities by future employees of the site.

No City parks or trails are within walking distance of the proposed development and, therefore, the number of future employees that would use these facilities would not be substantive. Although future employees might use City parks or trails, weekday employees would not place a major physical burden on these facilities. Therefore, the proposed project and future High Intensity Office/R&D projects at other sites under the GPA would not have a significant impact on park facilities in the City of Santa Clara. **(Less Than Significant Impact)**

Impact REC-2: The project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. (Less than Significant Impact)

As discussed in response to Impact REC-1 above the project would include the construction of on-site recreational areas. The impacts (e.g., construction related water quality impacts, trees/nesting birds, construction noise, hazards and hazardous materials, and hydrology and water quality) from construction of these areas would be reduced to less than significant with the implementation of standard measures, best management practices, and mitigation measures described throughout the Initial Study and environmental documents for future High Intensity Office/R&D projects at other sites. Therefore, construction of on-site recreational facilities would not result in an adverse physical effect on the environment. **(Less than Significant Impact)**

4.17 TRANSPORTATION

The following discussion is based, in part, on the Local Transportation Analysis prepared by Hexagon Transportation Consultants (Hexagon) on August 21, 2023 and the TDM Plan prepared by TDM Specialists, Inc. on October 7, 2022. A copy of these reports are included in Appendix F of this Initial Study.

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 2021, 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, which was approved by the California Governor in 2013, 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. As discussed, in this section under "Regional and Local," the City adopted such a policy on June 23, 2020.

Regional and Local

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 one half mile of an existing major transit stop or an existing transit stop along a High-Quality Transit Corridor 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 development 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 (LOS). The City's VMT policy also establishes LOS as an operational measure of intersection efficiency, which is not defined as 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.

Santa Clara Pedestrian Master Plan

The Pedestrian Master Plan is a forward-looking plan to capture the benefits of walking as the City anticipates growth and redevelopment. Pedestrian Master Plan Goals include developing safe, comfortable, convenient, active, and implementable pedestrian facilities in the City of Santa Clara. This plan was adopted by City Council on February 25, 2020 and designated nine Priority Pedestrian Zones to help the City focus on areas with the highest potential for increasing walkability.

Congestion Management Program

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.

Santa Clara General Plan

All future development allowed by the proposed GPA shall be in conformance with adopted City plans and policies. General Plan policies applicable to transportation/traffic include, but are not limited to, the following listed below.

Policies	Description
General Mobility and Transportation Policies	
5.8.1-P3	Identify opportunities to connect people to supportive services, public amenities, and transit.

Policies	Description
Roadway Network Policies	
5.8.2-P2	Discourage widening of existing roadway or intersection rights-of-way without first considering operational improvements, such as traffic signal modifications, turn-pocket extensions, and intelligent transportation systems.
5.8.2-P3	Encourage undergrounding of utilities and utility equipment within the public right-of-way and site these facilities to provide opportunities for street trees and adequate sidewalks.
5.8.2-P9	Require all new development to provide streets and sidewalks that meet City goals and standards, including new development in employment areas.
5.8.3-P9	Require new development to incorporate reduced on-site parking and provide enhanced amenities, such as pedestrian links, benches, and lighting, in order to encourage transit use and increase access to transit services.
5.8.3-P10	Require new development to participate in public/private partnerships to provide new transit options between Santa Clara residences and businesses.
Bicycle and Pedestrian Network Policies	
5.8.4-P6	Require new development to connect individual sites with existing and planned bicycle and pedestrian facilities, as well as with on-site and neighborhood amenities/services, to promote alternate modes of transportation.
5.8.4-P7	Require new development to provide sidewalks, street trees and lighting on both sides of all streets in accordance with City standards, including new developments in employment areas.
5.8.4-P8	Require new development and public facilities to provide improvements, such as sidewalks, landscaping, and bicycling facilities, to promote pedestrian and bicycle use.
5.8.4-P9	Encourage pedestrian- and bicycle-oriented amenities, such as bicycle racks, benches, signalized mid-block crosswalks, and bus benches or enclosures.
5.8.4-P10	Encourage safe, secure, and convenient bicycle parking and end-of-trip, or bicycle “stop” facilities, such as showers or bicycle repair near destinations for all users, including commuters, residents, shoppers, students, and other bicycle travelers.
5.8.4-P13	Promote pedestrian and bicycle safety through “best practices” or design guidelines for sidewalks, bicycle facilities, landscape strips and other buffers, as well as crosswalk design and placement.
Transportation Demand Management Policies	
5.3.1-P14	Encourage TDM strategies and the provision of bicycle and pedestrian amenities in all new development greater than 25 housing units or more than 10,000 non-residential square feet, and for City employees, in order to decrease use of the single-occupant automobile and reduce vehicle miles traveled, consistent with the Climate Action Plan.
5.8.5-P1	Require new development and City employees to implement TDM 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 TDM programs that provide incentives for the use of alternative travel modes to reduce the use of single-occupant vehicles.

4.17.1.2 *Existing Conditions*

Existing Roadway Network

Freeways

US 101 is an eight-lane freeway that extends north through San Francisco and south through Gilroy. Regional access to the project site is provided via its interchanges with Great America Parkway/Bowers Avenue and Lawrence Expressway.

SR 237 is a six-lane freeway within the vicinity of the study area that extends west to El Camino Real and east to I-880 in Milpitas. SR 237 provides access to the study area via its interchanges at Great America Parkway and Lawrence Expressway.

Expressways/Roadways

Lawrence Expressway is a north-south, eight-lane expressway that begins at Saratoga Avenue in the south, crosses through Sunnyvale, and extends northward where it transitions into Caribbean Drive at SR 237. High-occupancy vehicle (HOV) lanes are designated on Lawrence Expressway south of Oakmead Parkway during AM and PM commute hours.

Montague Expressway is an east-west, eight-lane expressway that begins at US 101 and extends northeastward to Milpitas where it transitions into Landess Avenue at I-680. Full interchanges are located at I-680, I-880, and US 101. Montague Expressway transitions to San Tomas Expressway at US 101. Between McCarthy Boulevard and Lafayette Street, Montague Expressway has HOV lanes in both directions during both the AM and PM peak commute hours.

Central Expressway is a six-lane, east-west expressway that begins at De La Cruz Boulevard and extends westward to San Antonio Road where it transitions into Alma Street in Mountain View. The expressway has HOV lanes east of Lawson Lane during both the AM and PM commute hours.

Great America Parkway is a north-south thoroughfare that is primarily a six-lane roadway with an additional northbound lane between Mission College Boulevard and Tasman Drive. Great America Parkway begins at US 101 and extends northward to SR 237. Great America Parkway borders the eastern boundary of the project site and provides access to and from the project site via its intersections with Tasman Drive and Bunker Hill Lane.

Bowers Avenue is a six-lane north-south street north of Kifer Road, and a four-lane street south of Kifer Road. It transitions from Great America Parkway north of US 101 and extends southerly to El Camino Real, where it transitions to Kiely Boulevard.

Mission College Boulevard to the west of Great America Parkway is a loop road circumnavigating Mission College and the Mercado Shopping Center. The eastern portion of Mission College Boulevard is a four-lane, east-west thoroughfare, running between Great America Parkway and Montague Expressway.

Tasman Drive is an east-west, four-lane roadway in the project vicinity. Tasman Drive begins at Morse Avenue from the west, extends east past I-880, and transitions into Great Mall Parkway. Access to the project is provided via its intersection with Old Ironsides Drive.

Patrick Henry Drive is a two-lane roadway with a two-way left-turn lane that runs between Old Mountain View-Alviso Road and Great America Parkway. Patrick Henry Drive provides access to the project site via its intersection with Bunker Hill Lane.

Old Ironsides Drive is a two-lane north-south roadway with a center two-way left-turn lane that runs between Bunker Hill Lane and Patrick Henry Drive. Old Ironsides Drive provides direct access to and from the project site.

Old Glory Lane serves as the primary entrance to the Great America Amusement Park east of Great America Parkway. West of Great America Parkway, Old Glory Lane is a two-lane roadway with a raised center median that connects to Old Ironsides Drive.

Bunker Hill Lane is a two lane, east-west roadway with a two-way left-turn lane that extends between Patrick Henry Drive and Great America Parkway. Bunker Hill Lane provides direct access to the project site.

Existing Pedestrian Facilities

Pedestrian facilities consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections. In the project vicinity, Great America Parkway and Tasman Drive have sidewalks on both sides of the street. Bunker Hill Lane and Old Ironsides Drive provide limited sidewalk connectivity, as sidewalks are missing along the project frontage.

Crosswalks are provided on all approaches of all signalized intersections in the vicinity of the project site. All of the crosswalks at the nearby signalized intersections include pedestrian signal heads and push buttons. Sidewalks and crosswalks in the project vicinity provide adequate access to the nearby transit facilities. Additionally, pedestrians are permitted to use the shared-use paths such as the San Tomas Aquino Creek Trail, which can be accessed via Great America Parkway and Tasman Drive, as well as other trails described below.

Existing Bicycle Facilities

The bicycle facilities that exist in the project vicinity include multi-use trails/paths (Class I bikeway), striped bike lanes (Class II bikeway), and shared bike routes (Class III bikeway). Class I Trail or Path is an off-street path with exclusive right-of-way for non-motorized transportation used for commuting as well as recreation. Within the project vicinity, there are five Class I trails:

- San Tomas Aquino Creek Trail, extends from Sunnyvale Baylands Park, north of SR 237, south near Levi's Stadium to San Tomas Expressway
- Calabazas Creek Trail, connects Mountain View-Alviso Road to Mission College
- John W. Christian Greenbelt, extends from the Calabazas Creek Trail west into Sunnyvale to Blazingwood Drive near the Lawrence Expressway/Lakehaven Drive/Sandia Avenue intersection

- Guadalupe River Trail, begins at Gold Street in North San José, extends south, and connects to downtown San José
- Baylands Park Trail, runs from Baylands Park in Sunnyvale and runs parallel to SR 237

Class II Bike Lanes are lanes on roadways designated for use by bicycles with special lane markings. Within a one-mile radius of the project site, striped bicycle lanes are present along the following roadway segments:

- Great America Parkway, south of Great America Way (except for a small segment just north and south of Mission College Boulevard)
- Tasman Drive, east of Patrick Henry Drive and west of the Calabazas Creek Trail to Reamwood Avenue
- Stars and Stripes Drive between Great America Parkway and north of Gianera Street
- Mission College Boulevard, from Wyatt Drive to east of Great America Parkway at Marriott Driveway
- Mission College Boulevard Loop south of the intersection at Mission College Boulevard
- Bowers Avenue, from Chromite Drive extending onto Great America Parkway
- Lafayette Street, from Gold Street Connector to Agnew Road
- Old Mountain View-Alviso/Lawrence Station Road, from Elko Drive to Great America Parkway
- Agnew Road, from San Tomas Aquino Creek Trail to Montague Expressway
- Elko Drive, from Reamwood Avenue to Lawrence Expressway
- Reamwood Avenue, from Tasman Drive to Elko Drive
- Scott Boulevard, from Monroe Street to Arques Avenue
- Lakeside Drive, from Scott Boulevard to Arques Avenue
- Oakmead Parkway, from Central Expressway to Lawrence Expressway
- Octavius Drive, from Scott Boulevard to Montgomery Drive
- Hope Drive, from Lafayette Street to Lick Mill Boulevard
- N. First Street, from Liberty Street to Charcot Avenue

Class III Bike Routes are streets designated for bike travel and shared with motor vehicles. Within a one-mile radius of the project site, bike routes are present along the following roadway segments:

- Great America Way, from Great America Parkway to Lafayette Street
- Tasman Drive, north side of the street between Patrick Henry Drive and Calabazas Creek Trail
- Augustine Drive between Bowers Avenue and Coronado Place

The location of existing bicycle facilities is shown on Table 4.17-1 and Figure 4.17-1.

Transit Facilities

Existing transit services to the project area are provided by the VTA's bus service, VTA's shuttle service to the Great America Station, and VTA light rail transit (LRT) service. Transit services in the project vicinity as of July 2021 are summarized in Table 4.17-1 and shown on Figure 4.17-2.

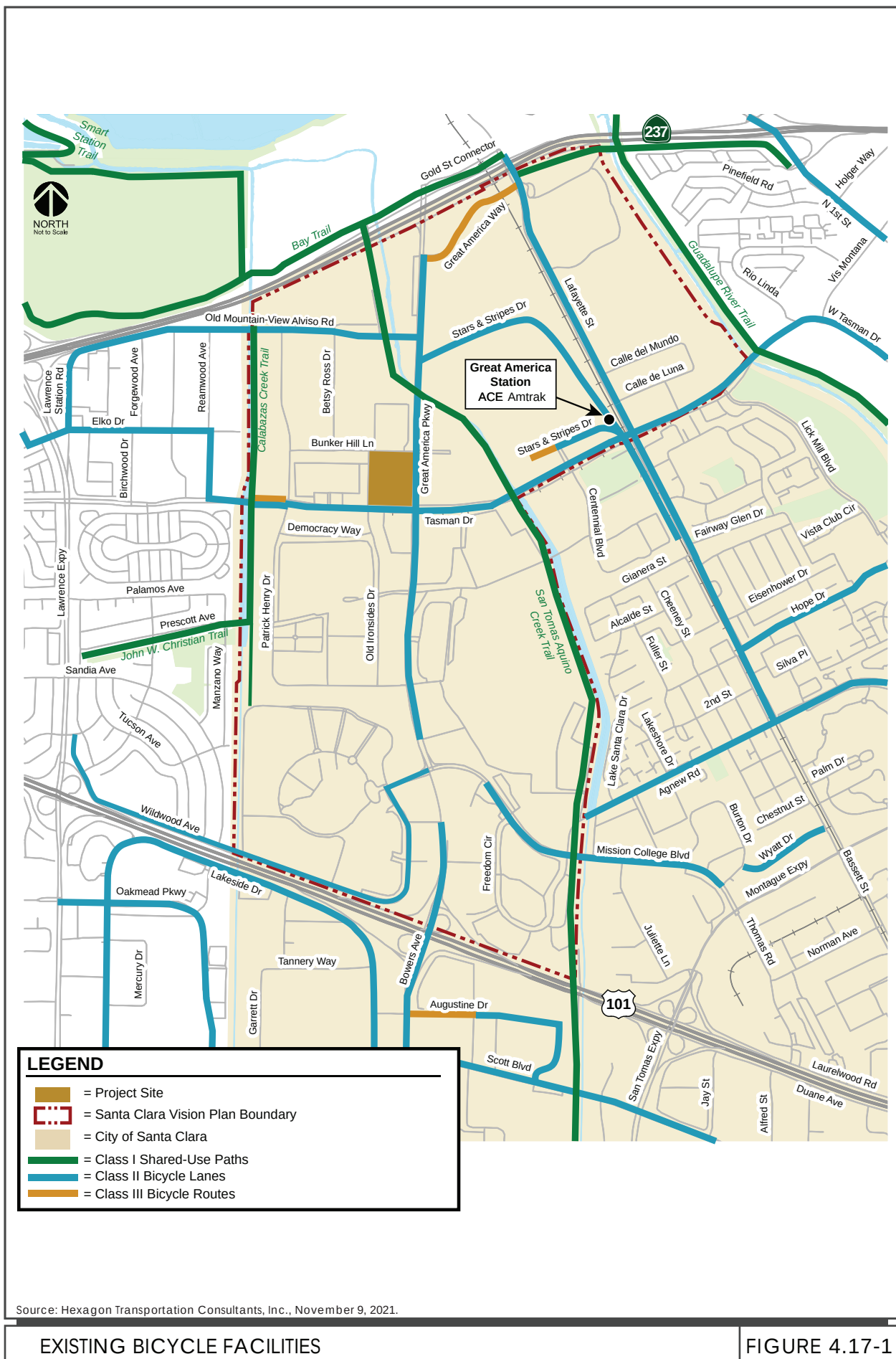
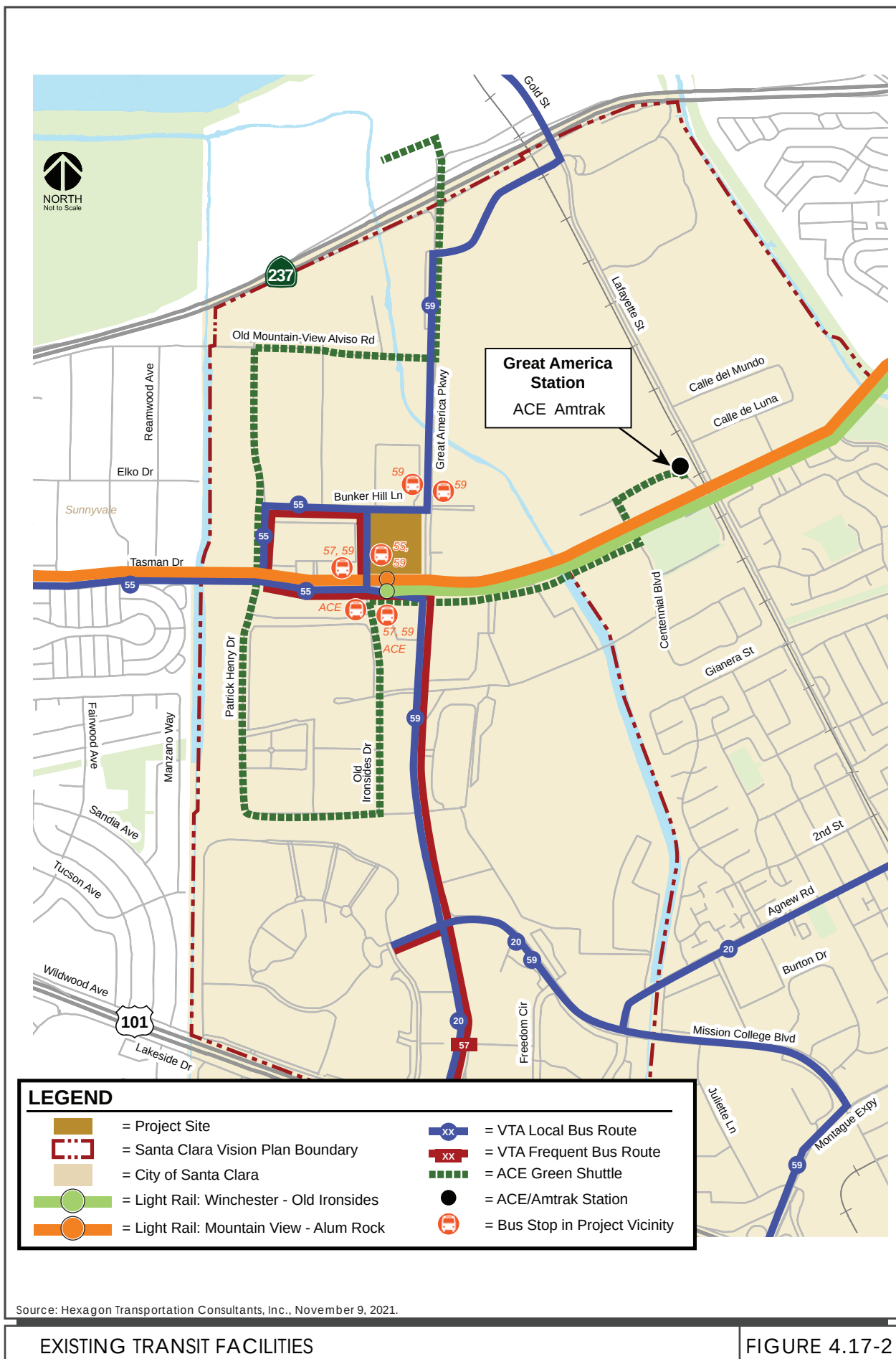


FIGURE 4.17-1



EXISTING TRANSIT FACILITIES

FIGURE 4.17-2

Table 4.17-1: VTA Bus, Shuttle and Light Rail Transit in the Project Area				
Route	Route Description/Weekday Hours of Operation	Headway (min)¹	Location of Nearest Bus or Transit Stop	Walking Distance from Nearest Stop to Project Site (feet)
Local Route 55	Old Ironsides Station - De Anza College 6:20 AM - 10:50 PM	30	Project Frontage/ Old Ironsides Drive	50
Frequent Route 57	West Valley College - Old Ironsides Station 6:20 AM - 10:50 PM	20	Tasman Drive at Old Ironsides Drive	250
Local Route 59	Valley Fair - Baypointe Station via Alviso 6:20 AM - 7:40 PM	30	Project Frontage/ Old Ironside Drive	50
ACE Green Shuttle ²	Great America Station - America Center 6:15 AM - 9:26 AM (Westbound) 3:24 PM - 6:40 PM (Eastbound)	45 - 55	Old Ironsides Road south of Tasman Drive	455
LRT Route Orange Line	Mountain View - Alum Rock 5:00 AM - 1:00 AM (next day)	15	Old Ironsides Station	450
LRT Route Green Line ³	Old Ironsides - Winchester	15	Old Ironsides Station	450
Notes: 1. Headways during weekday peak periods. 2. Limited hours of operation and daily runs. The ACE Green Shuttle has three westbound busses in the morning and three eastbound busses in the afternoon peak hours. Source: VTA Service Schedule, July 2021.				

4.17.1.3 VMT Methodology

The City of Santa Clara's VMT Policy establishes screening criteria for various types of developments such as infill developments, small projects, and/or transit supportive projects near major transit corridors are considered to have a less than significant impact on VMT under CEQA and are not required to prepare further VMT analysis. If projects meet the following screening criteria, they are considered to have a less than significant VMT impact:

- The project is located within one half mile of a major transit stop, or a transit stop along a high-quality transit corridor
- A minimum 0.75 FAR for office/R&D uses
- The project promotes multimodal transportation
- The project incorporates transit-oriented design elements
- The project does not propose excessive parking.

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?	☐	☐	☐	☒

4.17.2.1 Project Impacts

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)

The project is consistent with the policies of the City's General Plan to improve sidewalk connectivity and expand pedestrian and transit opportunities. The project's consistency with these policies is described below.

Impacts to Bicycle, Pedestrian, and Transit Facilities

Pedestrian Facilities

The project would generate an increase of pedestrian traffic in the project vicinity. Although the project site is surrounded primarily by office/employment land uses, various bus stops are located along Bowers Avenue and Kifer Road, within a reasonable walking distance.

The project would construct a crosswalk across the south leg of the Old Ironsides Drive and Bunker Hill Lane intersection with ADA curb ramps and truncated domes at the southeast corner of the intersection. The following condition of approval will be implemented to improve pedestrian access to the crosswalk at this intersection.

Condition of Approval

- Prior to project occupancy, the curb ramp on the southwest corner of the Old Ironsides Drive/Bunker Hill Lane intersection shall be relocated to connect to the proposed crosswalk across the south leg of the intersection and improve the crosswalk alignment.

The three other intersections, Great America Parkway and Bunker Hill Lane, Great America Parkway and Tasman Drive, and Tasman Drive and Old Ironsides Drive, which surround the site have existing crosswalks.

Consistent with General Plan Policies 5.8.4-P7 and 5.8.4-P8, the project would construct new 10-foot wide sidewalks along the project frontages on Tasman Drive and Great America Parkway. The project would also include new six-foot pedestrian paths against the garage building along Bunker Hill Lane and Old Ironsides Drive with a section of a 10-foot sidewalk along the curb at the southeast corner of Old Ironsides Drive and Bunker Hill Lane and the northeast corner of Old Ironsides Drive and Tasman Drive.

The project would improve the four corners of the site, including updating the southwest corner of the Great America Parkway and Bunker Hill Lane intersection, the northwest corner of the Great America Parkway and Tasman Drive intersection, and the southeast corner of the Old Ironsides Drive and Bunker Hill Lane intersection with ADA curb ramps built to ADA standards. The sidewalks and ADA curb ramps would facilitate pedestrian movements between the project site and nearby bus stops.

To improve pedestrian safety at the project's garage entrances along Old Ironside Drive and Bunker Hill Lane, the following condition of approval will be implemented.

Condition of Approval

- Prior to project occupancy, the project applicant shall provide 10-foot sidewalks along Old Ironside Drive and Bunker Hill Lane by the curb.

With the existing and proposed pedestrian facilities within and in the vicinity of the project site, as well as the implementation of the above conditions of approval, pedestrian access to and from the

project site would be adequate. For these reasons, implementation of the proposed project would not conflict with any policy or plans, including the General Plan policies listed above, regarding pedestrian facilities. **(Less than Significant Impact)**

Bicycle Facilities

The project would provide 280 secure bicycle storage for employees in bicycle rooms on the ground level along the north side of the building to be located on Tasman Drive and the northwest corner of the building that would be located on Great America Parkway. The project would also provide 39 bicycle racks.

Consistent with General Plan Policy 5.8.4-P10 which encourages project to provide safe, secure, and convenient bicycle parking, the following condition of approval will be implemented.

Condition of Approval

- Prior to project occupancy, the project applicant shall install the proposed bicycle racks at visible locations near the office building entrances and along the pedestrian walkway within the courtyard.

Assuming bicycle trips would comprise approximately two percent of the total project-generated trips (according to the 2018 BMP) the project would generate up to 20 new bicycle trips during the peak hours. The increase in bicycle trips by the area (shown in the City's Bicycle Master Plan Update 2018) could utilize the existing bicycle lanes on surrounding streets and would not require new off-site bicycle facilities. The project would not require the removal of bicycle lanes or facilities. Therefore, with the implementation of the above condition of approval, the project would not conflict with a program, plan, ordinance or policy addressing the bicycle lanes/facilities. **(Less than Significant Impact)**

Transit Services

Due to the proximity of bus stops to the project site, it is assumed that some employees of the proposed project would utilize the existing transit services. Assuming a commute hour transit mode share of two percent (as recommended by VTA guidelines), the project would generate up to 60 new transit riders during the peak hours. Given that the project site is served by three local bus routes, Altamont Commuter Express (ACE) shuttle route, three local bus routes, and two LRT routes, an average of four new transit riders would access each of the available routes during the peak hours. Therefore, projected transit riders associated with the project could be accommodated by the existing transit services.

An evaluation of the effects of project traffic on transit vehicle delay was also completed as part of the traffic study. The analysis shows that for most routes, the traffic associated with the project would increase delay to transit vehicles by 30 seconds or less per vehicle. The VTA has no established policies or significance criteria related to transit vehicle delay. These results, therefore, are presented for informational purposes only. The proposed project would not interfere with the construction of planned transit facilities, nor would the project exceed the capacity of the existing

system. The project would not conflict with a program plan or policy addressing transit. **(Less than Significant Impact)**

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

As discussed in Section 3.17.1, Environmental Setting, the City’s VMT Transportation Analysis Policy sets forth screening criteria that allows various types of developments, such as infill developments, small projects, and/or transit supportive projects near major transit corridors, to be considered as having a less than significant impact on VMT. The project would qualify as a transit supportive project since it meets the criteria.

Proximity to Transit

Transit supportive projects must be located within one half mile of an existing major transit stop or an existing transit stop along a high-quality transit corridor. A “high-quality transit corridor” is defined as a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours. A “major transit stop” is defined as a location containing any of the following:

- An existing rail or bus rapid transit station
- 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; or
- A major transit stop that is included in Plan Bay Area 2040.

The project site is approximately 70 feet north of the Old Ironsides Light-Rail Station, which is a major transit stop.

Density

The proposed project would have a FAR of 2.34. Therefore, the development intensity meets the minimum 0.75 FAR requirement for office/R&D uses to be considered a transit supportive project.

Multimodal Transportation and Transit-Oriented Design Elements

The City Policy requires that transit supportive projects promote multimodal transportation and include transit-oriented design elements. The project would include the following design features that support safe, active, and sustainable travel options for employees:

- Construct new 10-foot-wide sidewalks along the project frontages on Tasman Drive and Great America Parkway, as well as Tasman Drive and Old Ironsides Drive (as a condition of approval). The sidewalks would facilitate pedestrian movements between the project site and surrounding points of interest, such as bus stops.
- Include pedestrian paths throughout the project site, providing connections between sidewalks along the adjacent streets, the proposed buildings, parking garage, and amenities on-site.

- Provide long-term and short-term bicycle parking. The short-term spaces would be racks located near the main entrance to each of the office buildings and the amenity building. The long-term spaces would be in secure bike rooms located on the ground floor of the office buildings. These bicycle parking locations are convenient for cyclists.
- Provide showers/changing rooms for employees to use after biking or walking to the office.
- Provide fewer vehicle parking spaces than the City requirement (as described below).
- Implement the proposed TDM plan that complies with the City’s requirements, promotes sustainable modes of transportation, and reduces vehicle miles traveled prior to the issuance of a building occupancy permit.

Parking

Transit supportive projects may not include more parking than required by the City Code. Under City code, the project would be required 3,435 parking spaces. The project would provide 3,313 parking spaces, which is 122 spaces fewer parking spaces than what is ordinarily required by the City Code. (The City has the discretion to approve the reduced parking as a part of the PD zoning.) Therefore, the project meets this requirement.

Given the project is transit supportive per the City’s VMT Policy, the project would have a less than significant VMT impact. **(Less Than Significant 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 project proposes the construction of two office buildings and a parking garage in a developed, urban area of Santa Clara. Vehicle access to the site would be provided via two full access driveways on Old Ironsides Drive and one driveway on Bunker Hill Lane. All driveways would provide access to the parking structure. The project driveways would provide two-way flow and would be 26 to 32 feet wide. Based on the City Code, Chapter 18.74 (Parking Regulations), two-way driveways providing access to all properties other than residential should be a minimum width of 22 feet and a maximum width of 30 feet. The driveway on Bunker Hill Lane would be 32 feet wide, which would exceed the maximum allowed width.

Condition of Approval

- Prior to issuance of a grading permit, the project applicant shall modify the 32-foot-wide two-way driveway on Bunker Hill Lane to 30 feet wide on the site plan, in accordance with the City’s maximum width requirement of 30 feet.

The project would comply with the above condition of approval. The project would not result in the construction of dangerous intersections or sharp corners that could result in safety hazards; nor does the project propose incompatible uses, such as farm equipment. The proposed project would be compatible with the land uses of the surrounding area.

The final design of roadways, driveways, and access points shall be approved by the City. The project would not substantially increase hazards due to a design feature or incompatible land use. **(Less than Significant Impact)**

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

Emergency vehicles would access the project site from Great America Parkway, Tasman Drive, the truck access driveway on Old Ironsides Drive, and the driveway on Bunker Hill Lane. The truck access driveway on Old Ironsides Drive would be located south of the southern parking garage driveway, and would provide access to the service yard for the building that would front Tasman Drive. The Bunker Hill Lane driveway, which would provide access to the parking garage, would also provide truck access to the service yard for the building that would front Great America Parkway. Based on the locations of the driveways and service yards, the project would provide adequate access for fire trucks/emergency vehicles. For these reasons, the project would not result in inadequate emergency access. **(No Impact)**

4.17.3 Non-CEQA Effects

While the evaluation of project CEQA impacts on the transportation system is based on VMT, for informational purposes, an LTA, which includes an analysis the project's effects on intersection and freeway operations, was completed in accordance with the City's and VTA's level of service (LOS) standards and methodologies (see Appendix F of this Initial Study). Additional non-CEQA operational traffic topics are discussed below.

Driver Sight Distance

The proposed driveway locations were evaluated to determine if the sight distance at each driveway would be adequate. Adequate sight distance reduces the likelihood of a collision at driveways and provides drivers with the ability to locate sufficient gaps in traffic to exit a driveway. Sight distance of a driveway is evaluated based on the stopping sight distance recommended by Caltrans for a given speed.

For the driveways on Bunker Hill Lane, which has a posted speed limit of 25 miles per hour (mph), the Caltrans stopping sight distance is 200 feet (based on a speed of 30 mph). Therefore, a driver must be able to see 200 feet in both directions of Bunker Hill Lane to locate a sufficient gap to turn out of the driveways.

The driveway on Bunker Hill Lane would be located 90 feet west of Great America Parkway. Although there are no roadway curves or on-street parking present on Bunker Hill Lane, vehicles turning from the traffic signal at Great America Parkway to westbound Bunker Hill Lane are expected to travel at lower speeds while making turns. Given that vehicles turning onto Bunker Hill Lane from Great America Parkway are more likely to travel at a speed of 10 mph, the recommended stopping sight distance would be 100 feet (based on a design speed of 15 mph), which would be greater than the distance between the driveway and Great America Parkway. Therefore, the sight distance would not be adequate for vehicles turning from Great America Parkway to spot the outbound left-turn vehicles at the project driveway and the inbound vehicles queuing on westbound

Bunker Hill Lane at the project driveway. Furthermore, vehicle queues on the eastbound approach to the Great America Parkway/Bunker Hill Lane intersection could interfere with visibility to and from the proposed driveway. To address the Bunker Hill Lane driveway's proximity to the Great America Parkway/Bunker Hill Lane, the driveway shall be restricted to right-in and right-out only, as discussed below. The following condition of approval shall be implemented by the project applicant to improve driver sight distance.

Condition of Approval

- Prior to the issuance of a grading permit, the Bunker Hill Lane driveway shall be modified to right-in and right-out only access on the site plan.

For the driveways on Old Ironsides Drive, which has a posted speed limit of 25 miles per hour (mph), the Caltrans stopping sight distance is 200 feet (based on a speed of 30 mph). Therefore, a driver must be able to see 200 feet in both directions of Old Ironsides Drive to locate a sufficient gap to turn out of the driveways.

The two driveways on Old Ironsides Drive would be located 315 feet from each other and there are no roadway curves on Old Ironsides Drive, which gives adequate sight distance between the two driveways. The northern driveway would be located 125 feet south of Bunker Hill Lane. Vehicles turning from Bunker Hill Lane are expected to travel at lower speeds while making turns. Given that vehicles turning onto southbound Old Ironsides Drive from Bunker Hill Lane are more likely to travel at a speed of 10 mph, the recommended stopping sight distance would be 100 feet (based on a design speed of 15 mph), which would be a sufficient sight distance for exiting vehicles at the northern driveway. The southern driveway would be located 285 feet north of Tasman Drive, which is adequate for being able to see traffic turning from Tasman Drive.

There would be no on-street parking allowed on Old Ironsides Drive. Most of the road along the project frontage on Old Ironside Drive would have a red curb. A fire hydrant would be located to the south of the southern driveway, and parking within 15 feet of a fire hydrant is prohibited. As a result, there would be no obstructions to driver sight distance; there would be sufficient sight distance for driveways on Old Ironsides Drive.

4.18 TRIBAL CULTURAL RESOURCES

4.18.1 Environmental Setting

4.18.1.1 *Regulatory Framework*

State

Assembly Bill 52 (2014)

AB 52 (2014), 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 grounds⁸⁵.

The Tamien Nation has requested notification of projects in the City of Santa Clara under AB 52. The City submitted a notification of the project to the Tamien Nation tribe on October 7, 2021. On November 5, 2021, Tamien Nation requested a formal AB 52 consultation with the City about the project. A cultural resources record search/archival review was completed based on Tamien Nation's request for supporting documentation (refer to Section 4.5 Cultural Resources for the results of this record search). The City held a formal consultation with Tamien Nation on September 26, 2023. Tamien Nation did not identify any tribal resources within the project site or one quarter mile of the site.

A request for a Sacred Lands File Check with the Native American Heritage Commission (NAHC) was submitted on July 20, 2022. The response from the NAHC indicated there are no sacred lands known within the immediate project area. All tribal contacts provided by the NAHC which were not already in discussion with the City were contacted.

⁸⁵ City of Santa Clara. General Plan 2010-2035 Integrated EIR. Page 327. January 2011.

As a result of the additional outreach, a response from the Amah Mutsun Tribal Band of Mission San Juan Bautista was received in August 2022. The response from the tribal contact did not identify tribal resources within the project site or one quarter mile of the site.

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:				
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.	☐	☐	☒	☐

4.18.2.2 ***Project Impacts***

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)**

Neither the Sacred Land Files search nor tribal outreach identified known tribal resources are in the project area.

As discussed in Section 4.5 Cultural Resources, while no known resources are present, unrecorded resources could be found during construction. Any subsurface artifacts found on-site would be addressed consistent with Mitigation Measures MM CUL-2.1, MM CUL-2.2, and MM CUL-3.1. Therefore, with the implementation of mitigation measures, the proposed project would have a less

than significant impact on tribal cultural resources. **(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)**

As discussed under Impact TCR-1, there are no known tribal cultural resources on-site, and the project includes measures to reduce potential impacts to a less than significant level. For this reason, the project would not cause a substantial adverse change in the significance of a tribal cultural resources that is determined by the lead agency. **(Less than Significant Impact)**

4.19 UTILITIES AND SERVICE SYSTEMS

The following analysis is based, in part, on a Sanitary Sewer Study prepared by Woodard & Curran on December 7, 2021. In addition, the following analysis is also based on a Water Supply Assessment prepared by the City of Santa Clara. These reports are included as Appendix G and H to this document.

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 (2011)

AB 341 (2011) 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. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Senate Bill 1383 (2016)

SB 1383 (2016) 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

In January 2010, the State of California adopted the California Green Building Standards Code, establishing 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.

4.19.1.2 *Existing Conditions*

Water Services

Water is provided to the site by the City of Santa Clara Water Utility. The system consists of more than 335 miles of water mains, 21 active wells, and seven storage tanks with approximately 28.8 million gallons of water capacity.⁸⁶ Drinking water is provided by an extensive underground aquifer (accessed by the City's wells) and by two wholesale water importers: Valley Water (imported from the Sacramento-San Joaquin Delta) and the San Francisco Hetch-Hetchy System (imported from the Sierra Nevada). The three sources are used interchangeably or are blended together. A water recharge program administered by Valley Water from local reservoirs and imported Sacramento-San Joaquin Delta water enhances the dependability of the underground aquifer.

The project site is currently developed with four office buildings totaling approximately 209,194 square feet and a surface parking lot. Water use for the existing uses on-site total approximately 15,045 gallons of water per day.⁸⁷

Wastewater Services

The City of Santa Clara Department of Public Works and Water and Sewer Utilities are responsible for the wastewater collection system within the City. Wastewater is collected by sewer systems in Santa Clara and is conveyed by pipelines to the Regional Wastewater Facility (RWF) located in San José. The RWF 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.⁸⁸ The RWF has available capacity to treat up to 167 million gallons per day (mgd). The RWF presently operates at an average dry weather flow of 110 mgd, which is 57 mgd (or

⁸⁶ City of Santa Clara. *2020 Urban Water Management Plan*. June 2021. Page 5.

⁸⁷ City of Santa Clara. *Water Supply Assessment 2901 Tasman Drive*. January 2022.

⁸⁸ City of San José. "San José-Santa Clara Regional Wastewater Facility." Accessed February 18, 2022. <https://www.sanjoseca.gov/home/showpublisheddocument/32061/637267825445900000>.

35 percent) under the facility's 167 mgd treatment capacity. Approximately 10 percent of the plant's effluent is recycled for non-potable uses and the remainder flows into San Francisco Bay.⁸⁹

The project site currently generates approximately 30,405 gallons per day (gpd) of wastewater.⁹⁰ Wastewater flow from the project site enters the City's sanitary sewer system via existing pipes along Bunker Hill Lane, Great America Parkway, Tasman Drive, and Old Ironsides Drive.

Storm Drainage

The City of Santa Clara owns and maintains the municipal storm drainage system. There are existing storm drain lines along Bunker Hill Lane, Great America Parkway, Tasman Drive, and Old Ironsides Drive.

Solid Waste

Solid waste collection in the City of Santa Clara is provided by Mission Trail Waste System through a contract with the City. Mission Trail Waste System also has a contract to implement the Clean Green portion of the City's recycling plan by collecting yard waste. All other recycling services are provided through Stevens Creek Disposal and Recycling. The City has an arrangement with the owners of the Newby Island Landfill, located in San José, to provide disposal capacity for the City of Santa Clara through 2024. The City of San José approved expansion of Newby Island Landfill in August 2012 and the landfill could continue to provide disposal capacity to Santa Clara beyond 2024. Prior to 2024, the City would need to amend their contract with Newby Island or contract with another landfill operator, which would be subject to environmental review. The City also owns property outside its jurisdictional boundaries that could provide for solid waste disposal. The Newby Island Landfill has a remaining capacity of 13.7 million cubic yards.⁹¹ Newby Island Landfill is currently in the process of seeking authorization from San José to expand the permitted capacity and accept an additional 15.1 million cubic yards.⁹² If the landfill is not available to accept waste, the City will prepare a contract with another landfill, such as Guadalupe Mines in San José, which is anticipated to close in 2048.

As discussed in Section 3.19.1.1 Regulatory Framework, 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. In addition to the state targets, the City of Santa Clara has a construction debris diversion ordinance which requires all projects over 5,000 square feet to divert a minimum of 50 percent of construction and demolition debris from landfills. Landscaping/tree maintenance would occur on the project site that would generate yard waste. Minimal soil waste is generated from site maintenance.

⁸⁹ Ibid.

⁹⁰ Woodard & Curran. *Sanitary Sewer Capacity Evaluation for Proposed Development at 2901 Tasman Drive*. December 2021.

⁹¹ Personal Communication. North, Daniel, General Manager, Republic Services. Re: NSIL-remaining capacity and est. closure date. April 19, 2021.

⁹² The Mercury News. "San Jose to Study Odors from Newby Island Landfill Before Considering Any Expansion." Accessed February 18, 2022. <https://www.mercurynews.com/2016/01/14/san-jose-to-study-odors-from-newby-island-landfill-before-considering-any-expansion/>

The existing uses on-site currently generate approximately 1,220 pounds per day of solid waste.⁹³

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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

4.19.2.1 *Project Impacts*

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)

The project would connect to the City's existing stormwater, electric, natural gas, telecommunications, waste, and wastewater system infrastructure. The proposed project would incrementally increase the demand on existing facilities in the City of Santa Clara. The analysis in the following sections discusses the potential impacts of the project on existing facilities. Based on

⁹³ The solid waste generation is based on a solid waste generation rate of six pounds per 1,000 square feet per day for office uses. CalRecycle. Estimated Solid Waste Generation Rates. Accessed April 4, 2022. <https://www2.calrecycle.ca.gov/wastecharacterization/general/rates>.

the following analysis, no relocation of existing or construction of new facilities are needed to serve the proposed project. Future High Intensity Office/R&D projects under the GPA at other sites would require environmental review, which would evaluate impacts to the above utility systems. **(Less than Significant Impact)**

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)

The project would demolish the existing office uses totaling 209,194 square feet and construct two office buildings, totaling approximately 1,030,455 square feet, and a 38,185 square foot amenity building. The proposed development would include 74,525 square feet of landscaping. Based on the water supply assessment (WSA) prepared for the proposed project which assumed a water demand rate of 0.11 gallons of water per day/square foot for office uses and 0.077 gallons of water per day per square foot for irrigation, the proposed development would use approximately 115,550 gallons of water per day for office uses and 5,738 gallons per day for irrigation, resulting in a net increase of 106,243 gallons of water per day when compared to existing conditions. Assuming a water demand rate of 0.11 gallons of water per day/square foot (based on the WSA), the water demand assuming the maximum development under existing General Plan designation (with 441,565 square feet of office/R&D space) would be 48,572 gallons per day; the increase in water demand when the project is compared to the development under the existing General Plan designation would be 57,671 gallons of water per day.

The project would connect to the City's existing recycled water distribution system, with recycled water lines located on Bunker Hill Lane, and utilize recycled water for irrigation, dual-plumbing, and industrial cooling. The WSA concluded that the increase in water demand would not exceed the capacity of the Santa Clara Water Utility to provide water services to the project. In July 2021, City Council adopted a Water Shortage Contingency Plan, which requires up to a 20 percent reduction in water usage for projects. As a result, the project would be subject to water supply and capacity fees, additional water efficiency standards, establishment of annual water budgets, and may be required to utilize to the maximum extent possible, alternative water supplies (refer to Appendix H of this Initial Study).

For future High Intensity Office/R&D projects at other sites (within one half mile or LRT stations), assuming 0.11 gallons of water per day/square foot, the future projects could result in a water demand increase of 318,640 gallons per day. An analysis of water supply would be required as a part of the environmental review for the future projects to evaluate the impacts to water supply. **(Less Than Significant Impact)**

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)

Based on the City's General Plan, the RWF has the capacity to treat 167 million gallons of wastewater a day. Based on 2009 data,⁹⁴ the City's average dry weather flow is 14.5 mgd, while the City's allocated treatment capacity is 23 mgd. The proposed project would generate approximately 160,300 gpd of wastewater.⁹⁵ The proposed project would not increase the need for wastewater treatment beyond the capacity of the RWF. The RWF has the ability to treat wastewater generated by the proposed project and, as a result, the project would not have a significant impact on the capacity of the RWF.

The proposed project would connect to existing sewer lines on Great America Parkway. Wastewater would be directed to the Rabello and Northside pump stations on Lafayette Street and would then be pumped to the RWF for treatment. Based on the unit flow factor of 0.15 gallons of wastewater per day per square foot for office uses, the wastewater flow rate for the site is approximately 31,340 gpd under existing conditions and 66,235 gpd with the maximum development allowed under the existing General Plan designation. Construction of the project would increase the wastewater flow rate to 160,552 gpd, a net increase of 129,212 gpd of wastewater flow compared to existing conditions and 94,317 gpd when compared to the maximum development allowed under existing General Plan. Based on the sanitary sewer capacity evaluation, the proposed project would increase peak wet weather flow to the Rabello and Northside pump stations by approximately 0.22 mgd which would not significantly change the projected pump station inflows (when compared to existing peak wet weather flows). City staff have concluded that no capacity improvement would be needed to serve the proposed development. Therefore, the City's sanitary sewer system and RWF would have adequate capacity to serve the project. **(Less Than Significant Impact)**

Based on the unit flow factor of 0.15 gallons of wastewater per day/square foot for office uses wastewater generated by the future High Intensity Office/R&D projects at other sites (within one half mile or LRT stations) could result in an increase of 434,510 gallons per day above what was assumed in the General Plan. An analysis of impacts to wastewater treatment would be required as a part of the environmental review for the future projects.

⁹⁴ City of Santa Clara. *2010-2035 General Plan Integrated Final Environmental Impact Report*. SCH# 2008092005. January 2011.

The wastewater unit flow factor for office uses is 0.15 gallons of wastewater per day. 1,068,640 square feet (1,030,455 square feet of office and 38,185 square feet of amenity space)*0.15 gallons per day = 160,296 gallons of wastewater per day.

⁹⁵ Woodard & Curran. *Sanitary Sewer Capacity Evaluation for Proposed Development at 2901 Tasman Drive*. December 2021.

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)

The Newby Island Landfill, located in San José, has an agreement with the City to provide disposal capacity through 2024. The proposed project would generate a total of approximately 6,415 pounds of solid waste per day.⁹⁶ This is 5,195 pounds per day more than the solid waste currently generated on-site and 3,765 pounds per day more than the solid waste that would be generated under the existing General Plan designation (assuming maximum build out).

The proposed project would comply with the City’s construction debris diversion ordinance and state waste diversion requirements. If the Newby Island Landfill is not available to accept waste after 2024, the City will prepare a contract with another landfill with capacity, such as Guadalupe Mines in San José, which is not anticipated to close until 2048. Because the project can be served by a landfill with capacity and would not result in a significant increase in solid waste or recyclable materials above what was assumed in the General Plan, the project’s impacts related to solid waste and landfill capacity would be less than significant.

Based on the solid waste generation rate of six pounds per 1,000 square feet per day, solid waste generated by the future High Intensity Office/R&D projects at other sites (within one half mile or LRT stations) could result in an increase of 17,400 pounds per day above what was assumed in the General Plan. The additional solid waste would not cause landfills to exceed capacity. As mentioned above, if Newby Island Landfill is not available to accept wastes after 2024, the City will prepare a contract with another landfill with capacity. An analysis of solid waste impacts would be required as a part of the environmental review for the future projects. **(Less than Significant Impact)**

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)

The proposed project would not adversely affect the provision of solid waste services and would comply with AB 341, which requires all businesses in California that generate four or more cubic yards of garbage per week (approximately 6,740 pounds per week) to recycle. Future occupants of the site and future High Intensity Office/R&D projects at other sites (within one half mile or LRT stations) would be required to recycle waste consistent with federal, state, and local requirements. Thus, the project would not impair the attainment of solid waste reduction goals. **(Less than Significant Impact)**

⁹⁶ The solid waste generation is assumed to be six pounds per 1,000 square feet per day for office uses.

4.20 WILDFIRE

4.20.1 Environmental Setting

The California Department of Forestry and Fire Protection (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 (FHSZ), these maps influence how people construct buildings and protect property to reduce risk associated with wildland fires. The project site is not located in a FHSZ.⁹⁷

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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

4.20.2.1 *Project Impacts*

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. **(No Impact)**

⁹⁷ California Board of Forestry and Fire Protection. *Fire Hazard Severity Zones Maps*. Accessed March 10, 2022. <https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/>

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)**

As discussed in the previous sections of this Initial Study, the proposed project would not degrade the quality of the environment with implementation of identified Conditions of Approval and mitigation measures. As discussed in Section 3.4, Biological Resources, with the implementation of Mitigation Measure MM BIO-1.1, the project would not significantly impact migratory bird or nesting raptor populations. The project site is developed, is within an urban area, and does not contain suitable habitat for special-status plant or wildlife species. As discussed in Section 3.5, Cultural Resources, with implementation of the Mitigation Measures MM CUL-2.1, MM CUL-2.2, and MM CUL-3.1, the project would not result in less than significant impacts to archaeological and tribal cultural resources. **(Less than Significant Impact with Mitigation Incorporated)**

Impact MFS-2: As mitigated, the project does not have impacts that are individually limited, but cumulatively considerable. (Less than Significant Impact with Mitigation Incorporated)

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.” This Initial Study evaluates the environmental impacts of the proposed office development project. This Initial Study also takes into account other past, pending, and probable future projects whose impacts could combine to produce cumulative impacts.

Based on the City’s pending and approved list of projects, there is one approved project adjacent to the project site, a 150,000 square foot office development at 3001 Tasman Drive (approximately 100 feet west of the site). Additional projects within one-half mile of the site include: an approved 140,000 square feet, new retail development at California’s Great America Amusement Park located at 1 Great America Parkway (approximately 2,000 feet southeast of the site), a pending mixed-use development project at 3005 Democracy (approximately 455 southwest of the site), and an approved mixed-use urban center at 5155 Stars and Stripes (approximately 2,000 feet northeast of the site). While these individual projects may result in significant impacts in particular issue areas, it is assumed that the projects will comply with existing regulations and statutes and will incorporate measures to reduce potential impacts to a less than significant level, if necessary. For example, all projects are required to incorporate best management practices and comply with local and regional regulations to reduce impacts to water quality to the maximum extent feasible. With the proposed project’s adherence to the aesthetics, biological resources, cultural resources, energy, geology and soils, hydrology, land use, population and housing, public resources, recreation, and tribal cultural resources described in federal and state, as well as local regulations such as the City’s General Plan (with approval of a General Plan Amendment) and City Code, project impacts would not contribute to cumulatively considerable impacts. The project would have no impact on agricultural, mineral resources, and wildfire hazards; therefore, the project has no potential to combine with other projects to result in cumulative impacts to those resources. Cumulative impacts air quality, GHG emissions, hazardous materials, noise, transportation/traffic, and utilities are discussed in further detail below.

Cumulative Air Quality Impacts

By its nature, air pollution is largely a cumulative impact. The geographic area for cumulative air quality impacts is the San Francisco Bay Area Air Basin. No single project is sufficient in size by itself to result in nonattainment of ambient air quality standards. Instead, a project’s individual emissions contribute to existing cumulatively significant adverse air quality impacts. The project would emit criteria air pollutants and contribute to the overall regional emissions of these pollutants. The project-level thresholds identified by BAAQMD (which the project’s impacts were compared to in Section 3.3, Air Quality) are the basis for determining whether a project has a cumulatively considerable contribution to the existing cumulatively significant air quality impact. The project’s construction (with the implementation of best management practices to reduce fugitive dust

emissions) and operational criteria air pollutant emissions would be below BAAQMD thresholds for these pollutants. No sensitive receptors are located within 1,000 feet of the site and, therefore, the project would not contribute to a significant community health risk to sensitive receptors. Therefore, the project's incremental contribution to regional air quality impacts and localized community health risks would not be cumulatively considerable, resulting in a less than significant cumulative impact. **(Less Than Significant Cumulative Impact)**

Cumulative Greenhouse Gas Emissions and Energy Impacts

The proposed project and past, present, and future development projects worldwide contribute to global climate change. No single project is sufficient in size by itself to change the global average temperature. Therefore, due to the nature of GHG impacts, a significant project impact is a significant cumulative impact. As discussed in Section 3.8, Greenhouse Gas Emissions, the project's service population GHG emissions for 2030 is predicted to be 2.77 MT/CO₂e/year/service population, which is below the 2.8 MT CO₂e/year/service population threshold. Therefore, the project would not result in a cumulatively considerable contribution toward a significant GHG impact. **(Less than Significant Cumulative Impact)**

The geographic area for cumulative energy impacts is the State of California. Past, present, and future development projects contribute to the state's energy impacts. If a project is determined to have a significant energy impact, it is concluded that the impact is cumulatively considerable. The project would not result in significant energy impacts nor would it conflict with or obstruct a state or local plan for energy efficiency. The project, therefore, would not have a cumulatively considerable contribution to a significant cumulative energy impact. **(Less Than Significant Cumulative Impact)**

Hazards and Hazardous Materials Impacts

The geographic area for hazards and hazardous materials is the project site and adjacent parcels. The potential for on-site hazardous materials contamination to affect adjacent properties in combination with other development in the project vicinity is limited. Based on previous investigations at the site, chromium was detected in groundwater below regulatory screening levels, which is not considered a hazard to the public or environment. Groundwater contamination was localized and has limited potential to affect off-site properties. Given the history of agricultural uses in the project area, the areas of the site's soils could be contaminated with pesticides. With the proposed project's and the 3001 Tasman Drive project's implementation of mitigation measures to reduce impacts of contaminated soil, the projects would not result in cumulative hazardous materials impacts. Therefore, the project, in combination with cumulative projects in the area, therefore, would not result in a cumulative hazardous materials impact. **(Less Than Significant Cumulative Impact with Mitigation Incorporated)**

Cumulative Noise Impacts

The geographic area for cumulative noise impacts is an approximately 1,000 feet radius from the site. There is a 150,000 square foot office development at 3001 Tasman Drive (approximately 100 feet west of the site). However, with the implementation of mitigation measures to reduce construction noise, the proposed project and 3001 Tasman Drive project would not result in significant cumulative construction noise impacts.

A significant cumulative traffic noise increase would occur if two criteria are met: 1) if the cumulative traffic noise level increase is three dBA CNEL or greater for future levels exceeding 60 dBA CNEL or was five dBA CNEL or greater for future levels at or below 60 dBA CNEL; and 2) if the project would make a “cumulatively considerable” contribution to the overall traffic noise increase. A “cumulatively considerable” contribution would be defined as an increase of one dBA CNEL or more attributable solely to the proposed project.

The LTA included cumulative traffic volumes, with and without the project. When both of these scenarios were compared to the existing traffic volumes, a noise level increase of three dBA CNEL or more was calculated along multiple segments under both scenarios (with and without the project). There were four segments, however, that did result in increases in noise under the cumulative plus project scenario, which were one dBA CNEL or more than the increases calculated under the cumulative no project scenario. These segments included Old Ironsides Drive, north of Tasman Drive and north of Old Glory Lane; Old Glory Lane, between Old Ironsides Drive and Great America Parkway; and along Bunker Hill Lane, west of Great America Parkway. However, no residential uses were in proximity to these segments. As a result, the project would not result in a cumulatively considerable contribution toward traffic noise impacts on noise-sensitive receptors. **(Less Than Significant Cumulative Impact)**

Cumulative Traffic Impacts

The geographic area for cumulative transportation resource impacts is the City of Santa Clara. Since the project is transit-supportive and would result in a less than significant VMT impact, the project would result in a less than cumulatively considerable contribution to the significant Citywide VMT impact. The project is consistent with the General Plan and, therefore, would not cause an increase in VMT beyond the General Plan projections. **(Less than Significant Cumulative Impact)**

Cumulative Utility and Service System Impacts

The geographic area for cumulative utility and service system impacts is the City of Santa Clara. The project, by itself, would have a less than significant impact on utilities and service systems (refer to Section 3.19 Utilities and Service Systems). As discussed in Section 3.19 Utilities and Service Systems, there is sufficient water supply to meet the projected water demands of the City and the proposed project.

Build-out of the General Plan and projects that require General Plan Amendments would result in an increase in sewage generated within the City. As discussed in the certified General Plan EIR, the average dry weather flows projected from the full build-out of the General Plan were projected to be within the City’s allocated treatment capacity at the RWF, which at the time of the certification of the General Plan EIR was 20.1 mgd⁹⁸ and below the City’s 2017 flow allocation of approximately 20.5 mgd.

Since the certification date of the General Plan EIR, however, the City has approved development applications that have included General Plan Amendments, each of which have incrementally increased the potential sewage generation at full build-out. The proposed project would also require a

⁹⁸ City of Santa Clara. 2010-2035 *General Plan Integrated Final Environmental Impact Report*. SCH# 2008092005. January 2011. Page 228.

General Plan Amendment. Consequently, it is conceivable that at some point prior to 2035, the City could exceed its current capacity allocation, and the proposed project is anticipated to generate an additional 0.3 mgd.⁹⁹ However, the RWF has excess flow capacity of approximately 59.7 mgd, and the City has a process to obtain additional capacity rights at the RWF, without the need for any physical improvements to the RWF, should the need arise.¹⁰⁰

Based on the above discussion, there is sufficient treatment capacity at the RWF to serve the build out of the General Plan and the cumulative projects (including the proposed project). The cumulative projects would not result in a significant cumulative impact on wastewater treatment capacity.

Wastewater flow from the site to the City's pump stations would not cause the facilities to exceed capacity. The cumulative projects would not cause the City's pump stations to exceed capacity, as the City is planning for future capacity improvements as additional developments are proposed, for which environmental analysis would be conducted. The project would, therefore, not result in cumulative impacts to pump stations or sanitary sewer facilities. **(Less than Significant Cumulative Impact)**

The project would not relocate natural gas, electricity, or telecommunications lines. The project would not combine impacts to these utility lines with other projects, therefore, no cumulative impacts to these utilities would result from the combined projects. **(No Cumulative Impact)**

Build out of the City and the proposed project would generate solid waste that would need to be disposed of appropriately. Consistent with the conclusion in the certified General Plan EIR and City Place Santa Clara Project EIR,¹⁰¹ without a specific plan for disposing of solid waste beyond 2024, the solid waste generated by development in the City post-2024 (including waste from the proposed project and other cumulative projects such as City Place Santa Clara) would result in a significant unavoidable cumulative impact.

The proposed project, by itself, would not have a cumulatively considerable contribution towards solid waste. **(Less than Significant Cumulative Impact)**

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

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. Pursuant to 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

⁹⁹ V&A Consulting Engineers. *City of Santa Clara Gateway Crossing Mixed Use Sewer Capacity Study*. June 2017.

¹⁰⁰ The total flow capacity at the RWF is 167 mgd, and the joint owners (Santa Clara and San José) have agreements with several tributary agencies, which have capacity rights of approximately 35 mgd. Pursuant to Section V.B.3 of the 1983 agreements with the tributary agencies, Santa Clara can purchase additional capacity from those tributary agencies.

¹⁰¹ City of Santa Clara. *City Place Santa Clara Project Draft Environmental Impact Report*. SCH# 2014072078. Certified June 2016. Pages 3.14-38 and 3.14-39.

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 the best management practices, standard permit conditions, mitigation measures, and adherence to General Plan, City Code, and state and federal regulations described in these sections of the report, would avoid significant impacts. No other direct or indirect adverse effects on human beings have been identified. **(Less Than Significant Impact)**

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SECTION 6.0 LEAD AGENCY AND CONSULTANTS

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SECTION 7.0 ACRONYMS AND ABBREVIATIONS

ABAG	Association of Bay Area Governments
ACE	Altamont Commuter Express
ACM	Asbestos-containing material
amsl	above mean sea level
BAAQMD	Bay Area Air Quality Management District
Basin Plan	Water Quality Control Plan for the San Francisco Bay Basin
bgs	Below ground surface
BMPs	Best management practices
Btu	British thermal units
CalEEMod	California Emissions Estimator Model
CalARP	California Accidental Release Prevention
CalEPA	California Environmental Protection Agency
CAFID	California Facility Inventory database
CALFIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards code
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFCs	Chlorofluorocarbons
CGS	California Geological Survey
CH ₄	Methane
CMP	Congestion Management Program
CNEL	Community noise equivalent level
CO	Carbon monoxide
Construction General Permit	NPDES General Construction Permit for the State of California

CO ₂	Carbon dioxide
CO ₂ e	CO ₂ equivalents
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency California
DSOD	Department of Water Resources, Division of Safety of Dams
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
ESL	Environmental screening levels
EV	Electric vehicle
FAA	Federal Aviation Administration
FAR	Floor area ratio
FAR Part 77	Federal Aviation Regulations, Part 77 Objects Affecting Navigable Airspace
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zones
FIRM	Flood Insurance Rate Maps
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHG	Greenhouse gas
GPA	General Plan Amendment
gpd	Gallons per day
GWh	Gigawatt hours
GWP	Global warming potential
Habitat Plan	Santa Clara Valley Habitat Plan/Natural Community Conservation Plan
HFCs	Hydrofluorocarbons
HSWA	Federal Hazardous and Solid Waste Amendments
kW	Kilowatt
LEED	Leadership in Energy and Environmental Design
LID	Low Impact Development
LOS	Level of Service
LRT	Light rail transit

LT	Long-term noise measurement
MBTA	Migratory Bird Treaty Act
ML	Light Industrial
MND	Mitigated Negative Declaration
mpg	Miles per gallon
mph	Miles per hour
MRP	San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit
MT	Metric tons
MTC	Metropolitan Transportation Commission
NAHC	Native American Heritage Commission
NCP	National Contingency Plan
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act of 1966
NOD	Notice of Determination
NOI	Notice of Intent
NOT	Notice of Termination
NO _x	Nitrogen oxides
NO ₂	Nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
N ₂ O	Nitrous oxide
OPR	Office of Planning and Research
O ₃	Ground-level ozone
PCBs	Polychlorinated biphenyls
PDA	Priority Development Areas
PFCs	Perfluorocarbons
PM	Particulate matter
PM _{2.5}	Fine particulate matter
PM ₁₀	Coarse particulate matter
PPV	Peak Particle Velocity
RCRA	Resource Conservation and Recovery Act

RHNA	Regional Housing Need Allocation
ROG	Reactive organic gases
RWF	Regional Wastewater Facility
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCCC	Santa Clara City Code
SCCDEH	Santa Clara County Department of Environmental Health
SCEC	Southern California Earthquake Center
SCFD	Santa Clara Fire Department
SCPRD	Santa Clara Parks and Recreation Department
SCPD	Santa Clara Police Department
SCS	Sustainable Communities Strategy
SCUSD	Santa Clara Unified School District
SCVURPPP	Santa Clara Valley Urban Runoff Pollution Prevention Program
SFHA	Special Flood Hazard Areas
SF ₆	Sulfur hexafluoride
SHMA	Seismic Hazards Mapping Act
SLIC	Spills, Leaks, Investigation, and Cleanup
SMARA	Surface Mining and Reclamation Act
SMGB	State Mining and Geology Board
SO _x	Sulfur oxides
SQG	Small quantity generator
SR	State Route
ST	Short term noise measurement
SVP	Silicon Valley Power
SWCP	Stormwater Control Plan
SWEEPS	Statewide Environmental Evaluation and Planning System
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TACs	Toxic Air Contaminants
TCM	Treatment Control Measures
TCR	Tribal Cultural Resources
TDM	Transportation Demand Management Plan

TSCA	Toxic Substances Control Act
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban water management plan
Valley Water	Santa Clara Valley Water District
VMT	Vehicle miles traveled
VTa	Santa Clara Valley Transportation Authority
Williamson Act	California Land Conservation Act
WSA	Water supply assessment
2017 CAP	Bay Area 2017 Clean Air Plan