5200 Patrick Henry Drive
Arista Office Development Project

DRAFT INITIAL STUDY WITH PROPOSED
MITIGATED NEGATIVE DECLARATION

City of Santa Clara

Community Development Department

1500 Warburton Avenue

Santa Clara, CA 95050

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5200 PATRICK HENRY DRIVE ARISTA OFFICE DEVELOPMENT PROJECT

DRAFT INITIAL STUDY
WITH PROPOSED
MITIGATED NEGATIVE DECLARATION (MND)

Prepared For:
City of Santa Clara
Community Development Department
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Santa Clara, CA 95050

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May 2024

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All appendices are incorporated into this document by this reference. No other documents are incorporated by reference.

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1 Project Information

Project Title	5200 Patrick Henry Drive Arista Office Development Project
Lead agency contact and address	City of Santa Clara
Contact person and e-mail	Nimisha Agrawal, NAgrawal@santaclaraca.gov
File Number	PLN22-00556
Project Location	5200 Patrick Henry Drive, Santa Clara, CA 95054
Property Owner/Project Sponsor	Arista Networks
Property APN	APN 104-50-011
General Plan Designation	Low Intensity Office / R&D
Zoning	Light Industrial (ML)
Description of Project	The applicant proposes to demolish an existing one-story office building at the site and replace it with a new, four-story office building with one level of subsurface parking, and at-grade parking. The new building will be approximately 244,918 gross square feet and include an office and engineering building and a 10- megawatt (MW) data center with closed-loop cooling. The project would not include emergency power backup generators, cogeneration facilities, or electrical substations. Construction would be completed in one phase over approximately 23 months.

1.1 Project Location and Setting

The project site is in the southern portion of the nine-county Bay Area, within Santa Clara County. The project site is in northwest Santa Clara south of Highway State Route (SR)-237 and east of the Lawrence Expressway. The project location (also referred to as the project site) is 5200 Patrick Henry Drive in the City of Santa Clara ("the City" or "Santa Clara") (see **Figure 1-1**). The project site borders the City of Sunnyvale on the west end. Local access to the 5.6-acre project site is provided by Patrick Henry Drive from the east. Regional access to the project site is provided by SR-237 and Lawrence Expressway approximately 0.4 miles north and 0.6 miles west of the project site, respectively.

The project site is served by several transit options operated by the Santa Clara Valley Transportation Authority (VTA).[1] The closest bus stop is the ACE Green Shuttle stop located east of the project site on

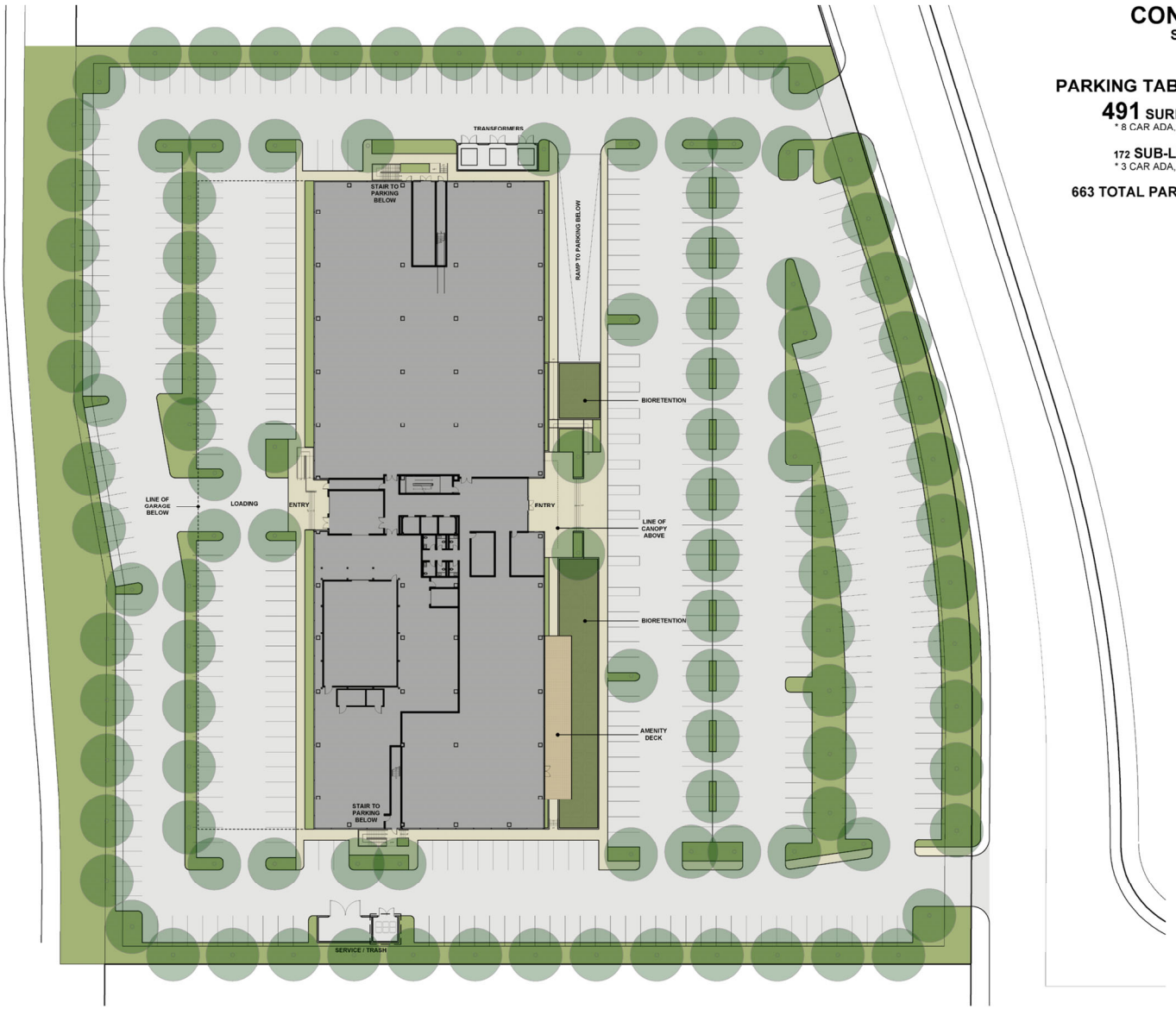
[1] Santa Clara Valley Transportation Authority (VTA). Main Map. Available: https://www.vta.org/sites/default/files/2019-11/VTA%20Transit%20Map.pdf. Accessed: July 3, 2023.

Patrick Henry Drive, near the corner of Bunker Hill Lane. The project site is located approximately 0.3-mile northwest of the Old Ironsides VTA light rail station and the VTA bus route 57 stop on Tasman Drive at Old Ironsides Drive.

*Figure not to scale

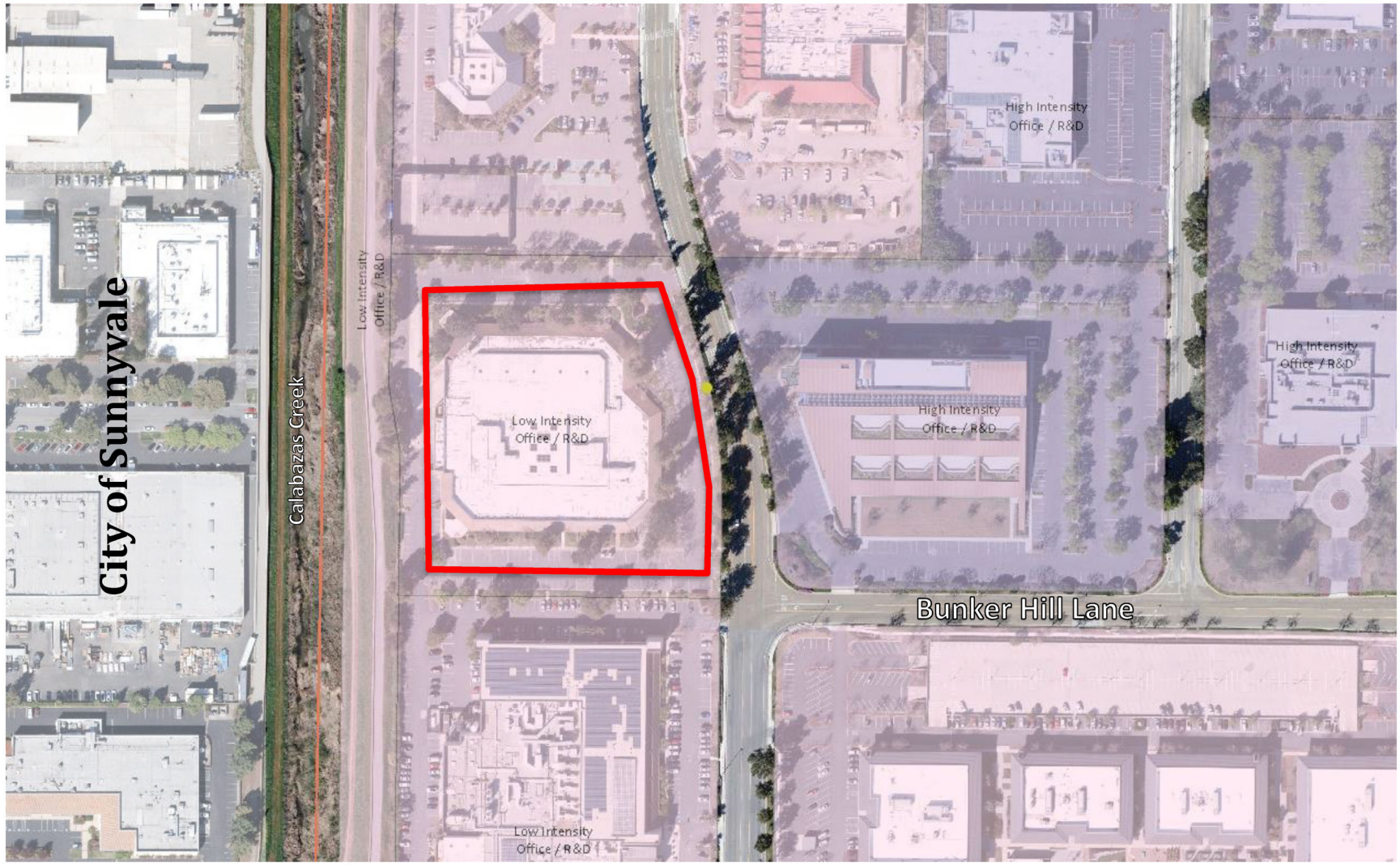
Project Location Figure 1-1

Source: Circlepoint, 2022



Project Site Plan Figure **1-2**

Source: Arista, 2022



Land Use Map Figure **1-3**

Source: City of Santa Clara, 2022

Project Site Characteristics

The project site is currently developed with a vacant single-story 95,580-square-foot light industrial building with walkways and elevated landscape areas. The existing building is set back from the roadway and parcel lines on all sides, and is surrounded on the west, north, and eastern sides with surface parking, trees, and landscaping.

Land Use Setting

The land use designation of the project site is Low Intensity Office/Research and Development (R&D); surrounding land uses include Regional Commercial, High Intensity Office/R&D, and Parks/Open Space. The project site is bound to the north, east, and south by industrial buildings and parking areas, and to the west by the Calabazas Creek Trail. The City of Santa Clara 2010-2035 General Plan (City's General Plan) land uses are shown in **Figure 1-3**.

The closest sensitive receptors are the residential uses located approximately 925 feet south of the project site at the Adobe Wells Mobile Home Park.

1.2 Project Description

This section provides an overview of existing conditions at the project site, the surrounding environment, changes to the existing environment proposed as a part of the project and required permits and approvals.

The project will be privately funded. Because the project is considered discretionary, the California Environmental Quality Act (CEQA) applies. The determination of a lead agency under CEQA is outlined in the 2023 CEQA Guidelines, and states that where multiple agencies are involved the lead agency shall be the agency carrying out the project. The City of Santa Clara will be the agency approving and carrying out the project and is therefore the lead agency under CEQA.

Project Components

As part of the project, the existing office building would be demolished, and 125 trees on the site would be removed. A four-story (244,918 gross square-foot) office and engineering building with one floor dedicated to a 10-megawatt (MW) data center would replace the existing uses on the site. An electrical transformer would be installed adjacent to the north side of the project (see **Figure 1-2**). The data center portion of the project would house computer servers with closed-loop cooling system and other supporting equipment, storage areas, a conference room, and electromagnetic compatibility (EMC) chamber.

The project would also involve installation of landscaping, exterior lighting, and bioretention facilities.

Major Equipment

Table 1-1 provides a list of the major equipment that would be located onsite as part of the project. The project would not include the implementation of emergency power backup generators, cogeneration facilities, or electrical substations.

Cooling equipment would be required for two primary purposes: (1) to regulate temperatures within the office spaces, and (2) to keep servers in the data center portion of the project from overheating. Air

handling units located on the roof would provide ventilation and cooling to the building. No combustion would be required for dedicated outdoor air systems (DOAS) or air handling units (AHU); heating of the air will be provided by air source heat pumps located on roof. A DOAS unit located on the roof with internal refrigeration cycle for cooling would provide air ventilation to the data center. All the proposed plumbing fixtures would be low-flow and WaterSense Labeled (where applicable), and the building design will follow Leadership in Energy and Environmental Design (LEED) guidelines. The cooling system for the data center use would require a one-time fill of approximately 11,000 gallons of water. Because the system would not utilize evaporative chilling, replacement water would be negligible.

Table 1-1 Major Equipment

Equipment	Quantity	Location
Air-cooled chillers	4	Rooftop
Sycool refrigerant condensing units	16	Rooftop
Air-handling units (AHUs)	4	Rooftop
Air-source heat pumps	3	Rooftop
Dedicated outdoor air system (DOAS)	1	Rooftop

Source: Arista, 2022.

Building Design

All materials used for constructing the project would conform to the City's standard details, standard specifications, and general requirements. The building would be 70 feet in height and employ steel frame construction and insulated panel cladding with fire protection-rated glazing. **Figure 1-4** shows a rendering of the building exterior. Interior finish materials for walls, ceilings, and floors would be applied to meet the fire performance standards and smoke development limitations prescribed in Chapter 7 of the California Building Code. The building will include systems for heating and cooling, lighting, appliances, and water use, which will consume electricity. Consistent with the City's Reach Code, the project would not use natural gas. Per the City's 2022 Climate Action Plan, the data center portion of the project would be required to operate on 100 percent carbon neutral energy, with offsets as needed.

Project Exterior Rendering Figure **1-4**

Source: Arista 2023

Parking and Site Access

Access to the project site via automobile is currently provided at the northeastern and southeastern portions of the site along Patrick Henry Drive. Pedestrian facilities including sidewalks exist around the project site, providing pedestrian access; additionally, the Calabazas Creek Trail to the west adjacent to the site is a designated Class I bicycle lane and would provide bicycle and pedestrian access.[2] The project would not involve the altering or removal of the existing vehicle, pedestrian, or bicycle facilities providing access to the site described above. All sitework will be in conformance with Title 24 of the California Code of Regulations (the California Building Standards Code), the American with Disabilities Act (ADA) Accessibility Guidelines, and any local or state amendments thereof.

The project site currently has on-site surface parking facilities surrounding the existing building. Implementation of the project would involve the reconstruction of existing surface parking facilities on-site and the construction of subsurface parking facilities underneath the building. The project would include a total of 649 parking stalls, 426 of which would be surface parking and 223 of which would be underground. Consistent with the City's Reach Code, 103 of the spaces would be Level 2 electric vehicle (EV) charging stations (i.e., charging stations with 208/240 volt, 40-ampere capacity) and 33 would be Level 3 EV charging stations (i.e., charging stations with at least 80 kilowatts [kW] of output) as required under the City's Reach Code (City Ordinance Number 2056).[3] The project would further include a short-term bicycle rack at-grade with space for 4 bicycles, as well as a long-term bicycle storage room subsurface with space for up to62 bikes.

Landscaping and Trees

Construction of the new office and engineering building and parking lot would require removal of 125 trees on site, 67 of which are protected under the City's Heritage Tree Inventory in the City's General Plan. Trees would be replaced both on-site and off-site. Per the replacement plan, 250 replacement trees are required at a ratio of 2:1 as specified in City Code Chapter 12.35 and the City's General Plan Policy 5.3.1-P10. The project would plant 96 on-site trees, 73 @36" box trees and 23@ 48"box trees. The project contractor will retain the services of a qualified arborist on-site during project construction and will follow the qualified arborist's recommendations and specifications for the removal of trees.

The project will follow the City's General Plan Policy to use recycled water for landscape irrigation. The recycled water is available to the project through the City's recycled water pipeline system which surrounds the project site and the surrounding area.

[2] City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan, Chapter 5: Goals and Policies*. Available: https://www.santaclaraca.gov/our-city/departments-a-f/community-development/planning-division/general-plan. Accessed: July 7, 2023.

[3] The City's Reach Code requires that 35 percent of total parking stalls to be Level 2 EV charging stations, and another 35 percent to be EV-ready stations. Level 3 EV charging stations may be substituted for Level 2 EV charging stations may be substituted for Level 2 EV charging stations at a ratio of 1:11. Therefore, the 33 Level 3 EV charging stations provided by the project would be equivalent to 363 Level 2 EV charging stations. In total, the project would provide the equivalent of 466 Level 2 EV charging stations and would therefore comply with the City's Reach Code.

1.3 Project Operation

Cooling

Servers convert electrical energy into heat as they operate and run their computations but need to be kept cool. Therefore, cooling systems are a critical component of data center operation. Cooling systems would be installed to remove heat from the servers so that they can operate safely and effectively. As shown in **Table 1-1** above, the project would include four air-cooled chillers and 16 Sycool refrigerant condensing units located on the roof to cool the data center. The cooling system would require a one-time fill of approximately 11,000 gallons of water from the potable supply and make-up water during operation would be negligible.

Employees

It is anticipated that up to 700 employees would typically work in the building daily.

Vehicle Trips

Truck trips would occur during project construction and operation to deliver and remove materials and equipment as needed. During operations, passenger vehicle trips to and from the site would primarily comprise employees traveling to the site for work and as needed, occasional client visits, and technical support personnel visits.

Energy Usage

Major sources of energy demand for project operations would be servers and the cooling system. The project would use a maximum of 10 MW for a maximum load of 240,000 kilowatt (kW) hours daily. Overall, the daily power usage would vary depending on how many servers are up and running and how intensely the servers are running. Lighting, heating, and cooling would also be required for office use.

1.4 Construction

Construction is anticipated to start as soon as entitlements and building permits are in hand. For the purposes of this analysis, construction was assumed to begin in October 2023. While this may no longer be feasible, this assumption presents a conservative analysis scenario because construction impacts tend to become less severe over time as new technologies are adopted and new regulations go into effect. Construction would be completed in one phase over approximately 23 months. Major construction phases would include:

- Demolition (1.5 month)
- Site Preparation (1.5 month)
- Grading (1 month)
- Building Construction (18 months)
- Asphalt Paving (1 month)

Conventional construction equipment would be used, such as excavators, backhoes, and both light- and heavy-duty trucks. Truck trips are expected to reach the project site via US-101 and SR 237. Truck trips

for off haul of excavated materials are expected to travel along these same routes and arterials to dispose of construction demolition debris.

1.5 Required Permits

The project will be subject to the City's protected tree ordinance for the removal of trees as described in Chapter 12.35.090 of the City Code. The project will also be subject to the City's architectural review process, including a publicly noticed Development Review Hearing conducted by the Director of Community Development, as required by Chapter 18.76 of the City Code.

2 Evaluation of Environmental Impacts

This Initial Study evaluates impacts based on the CEQA Guidelines Appendix G Environmental Checklist:

- "No Impact" indicates that there is no impact.
- "Less than Significant Impact" indicates that, while there is some impact, the impact does not exceed identified thresholds.
- "Less than Significant with Mitigation Incorporated" indicates that a potentially significant and/or significant impact has been identified in the course of this analysis and mitigation measures have been provided to reduce a potentially significant impact and/or significant impact to a less -than -significant level.
- "Significant Impact" indicates that not all impacts have been reduced to less-than-significant and an Environmental Impact Report (EIR) will be required. As noted previously, mitigation measures developed for this project would reduce any significant impacts to a less-than-significant level and an EIR will not be required.
- Section XVIII, Mandatory Findings, discusses cumulative impacts. Cumulative impacts are two or more individual effects, which when combined, are considerable or which compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant projects taking place over time. If a significant cumulative impact is identified, the project's contribution to the significant cumulative impact is considered.

The environmental factors checked below would be potentially affected by the project, involving at least one impact that is a potentially significant or significant impact as indicated by the checklist on the following pages. Mitigation measures have been provided for each significant impact, reducing all to a less-than-significant level.

- ☐ Aesthetics
- ☒ Air Quality
- ☒ Cultural Resources
- ☒ Geology & Soils
- ☒ Hazards & Hazardous Materials
- ☐ Land Use & Planning
- ☐ Noise & Vibration
- ☐ Public Services
- ☐ Transportation
- ☐ Utilities & Service Systems
- ☒ Mandatory Findings of Significance
- ☐ Agriculture & Forestry Resources
- ☒ Biological Resources
- ☐ Energy
- ☐ Greenhouse Gas Emissions
- ☐ Hydrology & Water Quality
- ☐ Mineral Resources
- ☐ Population & Housing
- ☐ Recreation
- ☒ Tribal Cultural Resources
- ☐ Wildfire

Determination

On the basis of this Initial Study:

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

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

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

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

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

_____ _____

Reena Brilliot Date
Acting Director of Community Development
City of Santa Clara

2.1 Aesthetics

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

Regulatory Setting

State

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.

The Caltrans Scenic Highway Program has not designated any scenic highways or potentially eligible scenic highways in Santa Clara.[4] In the 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.

[4] California Department of Transportation (Caltrans). 2023. *California State Scenic Highway System Map*. Available: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed: July 3, 2023.

Local

Santa Clara 2010-2035 General Plan

The Santa Clara 2010-2035 General Plan (General Plan) is the primary source for identifying and determining scenic vistas and scenic resources throughout the City. The General Plan does not identify any scenic vistas or view corridors within the City. The General Plan Integrated Environmental Impact Report lists the Santa Cruz Mountains, Diablo range, Ulistac Natural Area, San Tomas Aquino Creek, and the Guadalupe River as 'visual resources' within the City. However, the project site is not within or near these visual resources. The project site is not located near any natural or historic features that are considered scenic resources by the City.

Scenic viewsheds are also important factors to consider when analyzing the aesthetic character of a project site. While a scenic vista is typically a singular scene or view, scenic viewsheds are areas of scenic or historic value deemed worthy of preservation against development and other changes. According to the General Plan, the project site is not located within or near any scenic viewsheds.

Environmental Setting

The project site is within a fully developed, industrial area of the City. The surrounding development consists of one- to five-story office, industrial, and commercial buildings. The closest residences are located approximately 925 feet south of the project site in the Adobe Wells Mobile Home Park. Land uses adjacent to the project site include a medical research facility to the north, a medical device manufacturing facility to the south, and corporate office buildings to the east and west. The buildings are generally set back from the street by landscaped areas, and surface parking.

The Calabazas Creek trail is located to the west and is directly adjacent to the project site. The Calabazas Creek trail is not a designated scenic resource. Across the trail is a medical supply store. Trees border the east side of the Calabazas Creek trail generally blocking full views of the project site from the trail. Street trees also occur intermittently throughout the area, often breaking up views of existing buildings from the street. Due to existing development, trees, urban infrastructure such as power lines, and slight topographical changes throughout the area, views are generally limited to one or two blocks in each direction when traveling on foot or in a vehicle.

The visual character of the project site is an urban built environment. The project site is flat with trees and perimeter landscaping along Patrick Henry Drive. The site is currently occupied by a one-story office building and paved parking areas. The existing one-story building is set back from the roadway by a landscaped area featuring trees, small grass areas and light vegetation. Due to the presence of vegetation and intervening development, the site is only visible from the immediate vicinity from Patrick Henry Drive to the west and from Bunker Hill Lane to the southeast.

Viewers of the project would include drivers along Patrick Henry Drive, Bunker Hill Lane, and Betsy Ross Road, as well as employees and visitors of nearby businesses. The sensitivity of these viewers is considered low because their views of the project site would be brief and intermittent.

Impact Discussion

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

No Impact. The General Plan does not designate scenic vistas within the City. Additionally, views from the project site are dominated by other office and industrial buildings. Long range views from the project site are obscured by existing development. Therefore, the project would not result in impacts to a scenic vista.

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

No Impact. According to Caltrans' state scenic highway maps, there are no designated or eligible scenic highways in the City.[5] Additionally, the project improvements would be entirely confined to the previously developed site. As mentioned, the Calabazas Creek Trail borders the project site to the west, however the trail is not a designated scenic resource, and the portion of the creek that runs adjacent to the project site is lined with concrete and surrounded by industrial development. Therefore, implementation of the project would not affect the viewership of scenic resources, and the project would not impact scenic resources.

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

Less than Significant Impact. The project would be consistent with the existing industrial character of the site and is in an urbanized area. The four-story office and engineering building with one floor dedicated to data center use would be three stories taller than the existing building but would be visually consistent within the larger urban context of contemporary office/research buildings and data centers surrounding the site and found throughout the City. There is one three-story building east of the project site across Patrick Henry Drive, and a two-story building directly to the south. **Figure 1-4** demonstrates the proposed design of the project, while the existing site and vicinity and land are shown in **Figure 1-1**. The exterior design of the project would be like other office buildings in the City including those adjacent to the project site. The project would be subject to review by the City's architectural review process, including a public hearing before the Director of Community Development, which would ensure the project conforms to the City's adopted Community Design Guidelines.[6] The guidelines were developed to support community aesthetic values, preserve neighborhood character, and promote a sense of community and place throughout the City.

New landscaping including trees, shrubs, and groundcover would be included along the sidewalk facing Patrick Henry Drive. Perimeter landscaping along Patrick Henry Drive would create a setback condition resembling the surrounding areas. Like existing conditions, views of the project from the street and adjacent parcels would be broken up by trees and landscaping. The visual character of the streetscape

[5] California Department of Transportation. *California Scenic Highway Mapping System*. Available: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed: June 5, 2023.

[6] Available: https://www.santaclaraca.gov/home/showpublisheddocument/46963/636078214396230000.

would continue to consist of industrial buildings set back from the roadway with fencing and intermittent trees and vegetation.

With implementation of the project, the building height would be increased and views through the site would be further obstructed. However, obstructed views are consistent with visibility in the project vicinity. Furthermore, there are no scenic views or sensitive viewers in the project vicinity.

Employees of the nearby businesses are likely to be the most frequent visitors to the project area and therefore would be the most affected by the aesthetic change resulting from the project. Workers driving past the project site would generally perceive it briefly and within the context of surrounding, similar buildings. Other viewers of the project include pedestrians and cyclists using the Calabazas Creek trail. However, the addition of the project would not obstruct views of the channel from the trail and would be consistent with the existing visual character of the area. Therefore, the project would not adversely affect viewership. There are no residential areas with views of the project site. Views from the project site of the larger surrounding area are generally obstructed by existing industrial buildings. This would not change because of project implementation. Therefore, the project's impact on the visual character and quality of the site and vicinity would be less than significant and no mitigation would be required.

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

Less than Significant Impact. Under existing conditions, there is exterior lighting throughout the project site and vicinity. Existing exterior lighting is typical of industrial areas and is primarily on buildings and in parking lots for safety purposes. Nighttime light conditions are consistent with those generally found in urban environments, and include streetlights, ambient light from adjacent light from adjacent development, and exterior safety lighting. Project operation would require exterior safety lighting like the safety lighting found at nearby industrial buildings. Exterior lighting would be limited to safety lighting in the parking lot, building exterior, and along pathways. Lightning would be designed and installed consistent with the City's design requirements for exterior lighting.

The exterior design of the project does not include large, continuous expanses of uninterrupted glazing which are generally associated with glare, and new major sources of glare are not anticipated. The project design includes glazing spanning from the base of the building to the roofline, broken up at each level by exterior decorative elements that also provide shading. Therefore, the glazing is non-continuous and not anticipated to result in notable glare. Additionally, the project would be subject to review by the City's architectural review process, which would ensure the project conforms to the City's adopted Community Design Guidelines. Therefore, the project would have a less-than-significant impact on day and nighttime views in the area resulting from lighting or glare and no mitigation would be required.

2.2 Agriculture and Forest Resources

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Regulatory Setting

State

Farmland Mapping and Monitoring Program

The California Department of Conservation's (DOC) 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. 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. Four classifications of farmland are considered valuable: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance. Any conversion of land within these classifications is typically considered an environmental impact under CEQA. Other categories of land that are not protected by the Department of Conservation include Grazing Land, Urban and Built-up Land, and Other Land.

California Land Conservation Act

The California Land Conservation Act (Williamson Act) enables local governments to enter 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. The project site is not subject of a Williamson Act contract.[7]

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.[8] Programs such as CAL FIRE's Fire and Resource Assessment Program are used to identify whether forest land, timberland, or timberland production areas that could be affected are located on or adjacent to a project site.

Regional

Santa Clara Valley Agricultural Plan

Adopted in January 2018 by the County Board of Supervisors, the Santa Clara Valley Agricultural Plan is a regional effort led by the County and the Santa Clara Valley Open Space Authority (OSA) to conserve Santa Clara Valley's farmland and ranchland as an innovative climate change mitigation and economic development strategy (Santa Clara County, 2018). Funded in part by cap-and-trade revenues through the State's Sustainable Agricultural Lands Conservation Program (SALCP), the Santa Clara Valley Agricultural Plan will help avoid future greenhouse gas emissions (GHG) by reducing conversion of working farmlands and focusing development in existing urban areas.

Local

City of Santa Clara Climate Action Plan[9]

The Santa Clara City Council adopted the Climate Action Plan (CAP) 2022 in June 2022. The CAP aims to address climate change by reducing GHG emissions and building resiliency to anticipated climate impacts while bringing other social and economic co-benefits to the City. To that end, the CAP outlines current and projected GHG emissions, establishes GHG reduction targets, identifies strategies and actions for reducing emissions, anticipates vulnerabilities to climate change, and lays out strategies and actions for building climate resilience.

[7] County of Santa Clara, Department of Planning and Development. *Williamson Act and Open Space Easement*. Available: https://plandev.sccgov.org/policies-programs/williamson-act-and-open-space-easement. Accessed July 3, 2023.

[8] California Department of Forestry and Fire Protection (CAL FIRE). 2022. *Fire and Resource Assessment Program*. Available: http://frap.fire.ca.gov/. Accessed: July 3, 2023.

[9] City of Santa Clara. 2022. *City of Santa Clara Climate Action Plan.* 2022. Available*:* *https://www.santaclaraca.gov/home/showpublisheddocument/78208/637970130098870000.* Accessed July 3, 2023.

Environmental Setting

The project site is designated as Urban and Built-up Land by the FMMP.[10] The FMMP defines the Urban and Built-up Land category as land used for industrial and commercial purposes, golf courses, landfills, airports, sewage treatment, and water control structures.

The project site is currently developed with industrial buildings and is zoned Light Industrial. No land on nor adjacent to the project site is designated as farmland, forest land, or timberland.

Impact Discussion

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

OR

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

No Impact. The project site is developed with industrial buildings and is zoned for light industrial uses. The project site is not designated by the California Natural Resources Agency as farmland of any type and is not the subject of a Williamson Act (a statewide agricultural land protection program) contract.[11] Additionally, no land adjacent to the project site is designated as farmland. Therefore, implementation of the project would not impact farmland and would not conflict with zoning for agricultural use or a Williamson Act contract.

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

No Impact. The project is zoned for light industrial uses and does not contain forest land or other similar resources. The project site is currently developed with an office building. Therefore, the project would not 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)), and no impact would occur.

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

No Impact. As discussed in **Threshold (c),** there is no forest land on the project site or in the area surrounding the project. Therefore, implementation of the project would not impact forest lands or result in the conversion of forest land to non-forest use.

[10] California Department of Conservation, Division of Land Resource Protection. 2022. *Farmland Mapping & Monitoring Program*. Available: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed: July 3, 2023.

[11] County of Santa Clara, Department of Planning and Development. *Williamson Act and Open Space Easement*. Available: https://plandev.sccgov.org/policies-programs/williamson-act-and-open-space-easement. Accessed: July 5,2023.

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

No Impact. As discussed in **Thresholds (a) through (d),** the project site is currently zoned for light industrial and does not include any farmland or forest land or in the areas surrounding the project site. Therefore, the implementation of the project would not impact farmland or forest lands, nor would it result in the conversion of farmlands or forest lands to non-agricultural or non-forest uses.

2.3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

The following discussion is based in part on an air quality assessment prepared for the project in November 2023. A copy of this report is included as **Appendix A** to this Initial Study.

Regulatory Setting

Local Climate and Meteorology

The project site is in the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). As the local air quality management agency, the BAAQMD is required to monitor air pollutant levels to ensure that State and Federal air quality standards are met and, if they are not met, to develop strategies to meet the standards.

Air Pollutants of Primary Concern

Primary criteria pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack. The Federal and State Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for "criteria pollutants" and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide, volatile organic compounds (VOC)/reactive organic gases (ROG),[12] nitrogen oxides (NO_x), particulate matter with diameters of up to ten microns (PM_{10}) and up to 2.5 microns ($PM_{2.5}$), sulfur dioxide (SO_2), and lead. Other pollutants are created indirectly through

[12] CARB defines VOC and ROG similarly as, "any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate," with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term ROG is used in this analysis.

chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between ROG and NO_x. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog). The characteristics, sources and effects of criteria pollutants are discussed in the following subsections. The following subsections describe the characteristics, sources, and health and atmospheric effects of air pollutants of primary concern.

Ozone

Ozone is a highly oxidative unstable gas produced by a photochemical reaction (triggered by sunlight) between NO_x and ROG. ROG is composed of non-methane hydrocarbons (with specific exclusions), and NO_x is composed of different chemical combinations of nitrogen and oxygen, mainly nitric oxide (NO) and NO_2. NO_x is formed during the combustion of fuels, while ROG is formed during the combustion and evaporation of organic solvents. As a highly reactive molecule, ozone readily combines with many multiple different atmosphere components. Consequently, high ozone levels tend to exist only while high ROG and NO_x levels are present to sustain the ozone formation process. Once the precursors have been depleted, ozone levels rapidly decline. Because these reactions occur on a regional rather than local scale, ozone is considered a regional pollutant.

In addition, because ozone requires sunlight to form, it mainly occurs in concentrations considered serious between April and October. Groups most sensitive to ozone include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors. Depending on the level of exposure, ozone can cause coughing and a sore or scratch throat; make it more difficult to breathe deeply and vigorously and cause pain when taking a deep breath; inflame and damage the airways; make the lungs more susceptible to infection; and aggravate lung diseases such as asthma, emphysema, and chronic bronchitis.[13]

Carbon Monoxide

Carbon monoxide (CO) is a localized pollutant found in high concentrations only near its source. The primary source of CO, a colorless, odorless, poisonous gas, is automobile traffic's incomplete combustion of petroleum fuels. Therefore, elevated concentrations are usually only found near areas of high traffic volumes. Other sources of CO include the incomplete combustion of petroleum fuels at power plants and fuel combustion from wood stoves and fireplaces throughout the year. When CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease. These people already have a reduced ability to get oxygenated blood to their hearts in situations where they need more oxygen than usual. As a result, they are especially vulnerable to the effects of CO when exercising or under increased stress. In these situations, short-term exposure to elevated CO may result in reduced oxygen to the heart accompanied by chest pain, also known as angina.[14]

[13]United States Environmental Protection Agency. 2022. *Ground-level Ozone Basics*. Available: https://www.epa.gov/ground-level-ozone-pollution/ground-level-ozone-basics#effects. Accessed: July 7, 2023.

[14] United States Environmental Protection Agency. 2022. *Basic Information about Carbon Monoxide (CO) Outdoor Air Pollution*. https://www.epa.gov/co-pollution/basic-information-aboutcarbon-monoxide-co-outdoor-air-pollution#Effects.Accessed July 7, 2023.

Nitrogen Dioxide

Nitrogen dioxide (NO_2) is a by-product of fuel combustion. The primary sources are motor vehicles and industrial boilers, and furnaces. The principal form of NO_x produced by combustion is NO, but NO reacts rapidly to form NO_2, creating the mixture of NO and NO_2, commonly called NO_x. NO_2 is a reactive, oxidizing gas and an acute irritant capable of damaging cell linings in the respiratory tract. Breathing air with a high concentration of NO_2 can irritate airways in the human respiratory system. Such exposures over short periods can aggravate respiratory diseases leading to respiratory symptoms (such as coughing, wheezing, or difficulty breathing), hospital admissions, and visits to emergency rooms. Longer exposures to elevated concentrations of NO_2 may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. People with asthma, such as children and the elderly are generally at greater risk for the health effects of NO_2.[15] NO_2 absorbs blue light and causes a reddish-brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of O3/smog and acid rain.

Sulfur Dioxide

SO_2 is included in a group of highly reactive gases known as "oxides of sulfur." The largest sources of SO_2 emissions are from fossil fuel combustion at power plants (73 percent) and other industrial facilities (20 percent). Smaller sources of SO_2 emissions include industrial processes such as extracting metal from ore and burning fuels with a high sulfur content by locomotives, large ships, and off-road equipment. Short-term exposures to SO_2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO_2.[16]

Particulate Matter

Suspended atmospheric PM_{10} and $PM_{2.5}$ are comprised of finely divided solids and liquids such as dust, soot, aerosols, fumes, and mists. Both PM_{10} and $PM_{2.5}$ are emitted into the atmosphere as byproducts of fuel combustion and wind erosion of soil and unpaved roads. The atmosphere, through chemical reactions, can form particulate matter. The characteristics, sources, and potential health effects of PM_{10} and $PM_{2.5}$ can be very different. PM_{10} is generally associated with dust mobilized by wind and vehicles. In contrast, $PM_{2.5}$ is generally associated with combustion processes and formation in the atmosphere as a secondary pollutant through chemical reactions. PM_{10} can cause increased respiratory disease, lung damage, cancer, premature death, reduced visibility, surface soiling. For $PM_{2.5}$, short-term exposures (up to 24-hours duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases.[17]

[15]United States Environmental Protection Agency. 2022. *Basic Information about NO2*.Available: https://www.epa.gov/no2-pollution/basic-information-about-no2#Effects. Accessed: July 7, 2023.

[16]United States Environmental Protection Agency. 2023. *Sulfur Dioxide Basics*. https://www.epa.gov/so2-pollution/sulfur-dioxide-basics#effects. Accessed July 7, 2023.

[17] California Air Resource Board. 2023. *Overview: Diesel Exhaust & Health.N.d*. Available: https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health. Accessed July 7, 2023.

Lead

Lead (Pb) is a metal found naturally in the environment, as well as in manufacturing products. The major sources of lead emissions historically have been mobile and industrial. However, due to the United States EPA 's regulatory efforts to remove lead from gasoline, atmospheric Pb concentrations have declined substantially over the past several decades. The most dramatic reductions in Pb emissions occurred before 1990 due to the removal of Pb from gasoline sold for most highway vehicles. Pb emissions were further reduced substantially between 1990 and 2008, with reductions occurring in the metals industries at least partly due to national emissions standards for hazardous air pollutants (U.S. EPA 2013). As a result of phasing out leaded gasoline, metal processing is currently the primary source of Pb emissions. The highest Pb level in the air is generally found near Pb smelters. Other stationary sources include waste incinerators, utilities, and Pb-acid battery manufacturers. Pb can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and cardiovascular system depending on exposure. Pb exposure also affects the oxygen-carrying capacity of the blood. The Pb effects most likely encountered in current populations are neurological in children. Infants and young children are susceptible to Pb exposures, contributing to behavioral problems, learning deficits, and lowered IQ.[18]

Toxic Air Contaminants

In addition to the criteria pollutants previously discussed, Toxic Air Contaminants (TAC) are airborne substances diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. One of the main sources of TACs in California is diesel engine exhaust that contains solid material known as diesel particulate matter (DPM). More than 90 percent of DPM is less than one micron in diameter (about 1/70th the diameter of a human hair) and thus is a subset of $PM_{2.5}$. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs.[19] TACs are different than criteria pollutants because ambient air quality standards have not been established for TACs. TACs occurring at extremely low levels may still cause health effects and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic risk and by chronic (i.e., long duration) and acute (i.e., severe but of short duration) adverse effects on human health. People exposed to TACs at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects. These health effects can include damage to the immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and other health problems.[20]

[18] United States Environmental Protection Agency. 2022. *Basic Information about Lead Air Pollution*. Available: https://www.epa.gov/lead-air-pollution/basic-information-about-lead-air-pollution#health. Accessed: July 12, 2023.

[19] California Air Resource Board. 2022. *Overview: Diesel Exhaust & Health*. Available: https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health. Accessed: July 12, 2023.

[20] United States Environmental Protection Agency. 2023. Health and Environmental Effects of Hazardous Air Pollutants. Available: https://www.epa.gov/haps/health-and-environmental-effects-hazardous-airpollutants. Accessed: July 12, 2023.

Air Quality Regulation

The Federal and State Governments have authority under the Federal and State CAA to regulate emissions of airborne pollutants and have established ambient air quality standards (AAQS) for the protection of public health. An air quality standard is defined as "the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without harming public health.[21] The U.S. EPA is the Federal agency designated to administer air quality regulation, while CARB is the State equivalent in California. Federal and State AAQS have been established for six criteria pollutants: Ozone, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and Pb, which can be harmful to public health and the environment. The CAA identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.[22] In addition, the State of California has established health-based ambient air quality standards for these and other pollutants, some of which are more stringent than the Federal standards.[23] The Federal and State Clean Air Acts are described in more detail below.

Federal

The Federal CAA was enacted in 1970 and amended in 1977 and 1990 (42 United States Code [USC] 7401) for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. In 1971, to achieve the purposes of Section 109 of the CAA (42 USC 7409), the U.S. EPA developed primary and secondary NAAQS. NAAQS have been designated for the following criteria pollutants: ozone, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead. The primary NAAQS "in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health," and the secondary standards are to "protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air" (42 USC 7409[b][2]). The U.S. EPA classifies specific geographic areas as either "attainment" or "nonattainment" areas for each pollutant based on the comparison of measured data with the NAAQS. States are required to adopt an enforceable plan, known as a State Implementation Plan (SIP), to achieve and maintain air quality meeting the NAAQS. State plans also must control emissions that drift across state lines and adversely affect air quality in downwind states. Once a nonattainment area has achieved the air quality standards for a particular pollutant, it may be redesignated to an attainment area for that pollutant. To be redesignated, the area must meet air quality standards and have a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the Federal CAA. Areas that have been redesignated to attainment are called maintenance areas. **Table 2-1** lists the current Federal standards for regulated pollutants.

[21]California Air Resources Board. 2023. National Ambient Air Quality Standards. Available: https://ww2.arb.ca.gov/resources/national-ambient-air-quality-standards. Accessed: July 12, 2023.

[22] United States Environmental Protection Agency. 2023. *NAAQS Table*. Available: https://www.epa.gov/criteria-airpollutants/naaqs-table. Accessed: July 12, 2023.

[23] California Air Resources Board. 2023. California Ambient Air Quality Standards. Available: https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards. Accessed: July 12, 2023.

Table 2-1 Federal and State Ambient Air Quality Standards

Pollutant	NAAQS	CAAQS
Ozone	0.070 ppm (8-hr avg)	0.09 ppm (1-hr avg) 0.070 ppm (8-hr avg)
Carbon Monoxide	35.0 ppm (1-hr avg) 9.0 ppm (8-hr avg)	20.0 ppm (1-hr avg) 9.0 ppm (8-hr avg)
Nitrogen Dioxide	0.100 ppm (1-hr avg) 0.053 ppm (annual avg)	0.18 ppm (1-hr avg) 0.030 ppm (annual avg)
Sulfur Dioxide	0.075 ppm (1-hr avg) 0.5 ppm (3-hr avg) 0.14 ppm (24-hr avg) 0.030 ppm (annual avg)	0.25 ppm (1-hr avg) 0.04 ppm (24-hr avg)
Lead	0.15 µg /m^3 (rolling 3-month avg) 1.5 µg /m^3 (calendar quarter)	1.5 µg /m^3 (30-day avg)
Particulate Matter (PM_{10})	150 µg /m^3 (24-hr avg)	50 µg /m^3 (24-hr avg) 20 µg /m^3 (annual avg)
Particulate Matter ($PM_{2.5}$)	35 µg /m^3 (24-hr avg) 12 µg /m^3 (annual avg)	12 µg /m^3 (annual avg)
Visibility-Reducing Particles	No Federal Standards	Extinction coefficient of 0.23 per kilometer – visibility of ten miles or more (0.07 - 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape. (8-hr avg)
Sulfates	No Federal Standards	25 µg/m^3 (24-hr avg)
Hydrogen Sulfide	No Federal Standards	0.03 ppm (1-hr avg)
Vinyl Chloride	No Federal Standards	0.01 ppm (24-hr avg)

NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards; ppm = parts per million; avg =average; µg/m^3 = micrograms per cubic meter

Source: CARB 2016

To derive the NAAQS, the U.S. EPA reviews data from integrated science assessments and risk/exposure assessments to determine the ambient pollutant concentrations at which human health impacts occur, then reduces these concentrations to establish a margin of safety.[24] As a result, human health impacts caused by the air pollutants previously discussed may affect people when ambient air pollutant concentrations are at or above the concentrations established by the NAAQS. The closer a region is to attaining a particular NAAQS, the lower the human health impact is from that pollutant. Accordingly, ambient air pollutant concentrations below the NAAQS are considered to be protective of human health.[25] The NAAQS and the underlying science that forms the basis of the NAAQS are reviewed every

[24] United States Protection Agency. 2023. *Process of Reviewing the National Ambient Air Quality Standards.* Available: https://www.epa.gov/criteria-air-pollutants/process-reviewing-national-ambient-air-quality-standards. Accessed: July 19, 2023.

[25] California Air Resources Board. 2023b. National Ambient Air Quality Standards. Available: https://ww2.arb.ca.gov/resources/national-ambient-air-quality-standards. Accessed: July 13, 2023.

five years to determine whether updates are necessary to continue protecting public health with an adequate margin of safety.[26,27]

State

The California CAA was enacted in 1988 (California Health & Safety Code §39000 et seq.). Under the California CAA, the State has developed the CAAQS, which are generally more stringent than the NAAQS. **Table 2-1** lists the current State standards for regulated pollutants. In addition to the Federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Like the Federal CAA, the California CAA classifies specific geographic areas as either "attainment" or "nonattainment" areas for each pollutant, based on the comparison of measured data within the CAAQS.

Toxic Air Contaminants

A TAC is an air pollutant that may cause or contribute to an increase in mortality or serious illness or which may pose a present or potential hazard to human health. TACs may result in long-term health effects such as cancer, birth defects, neurological damage, asthma, or genetic damage, or short-term acute effects such as eye watering, respiratory irritation, runny nose, throat pain, and headaches. TACs are considered either carcinogenic or non-carcinogenic based on the nature of the health effects associated with exposure. For carcinogenic TACs, potential health impacts are evaluated in terms of overall relative risk expressed as excess cancer cases per one million exposed individuals. Non-carcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

TACs include both organic and inorganic chemical substances. One of the main sources of TACs in California is diesel engines that emit exhaust containing solid material known as DPM; however, TACs may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health (Assembly Bill [AB] 1807: Health and Safety Code Sections 39650–39674). The Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase. The second step is the risk management (or control) phase of the process.

The California Air Toxics Program establishes the process for the identification and control of TACs and includes provisions to make the public aware of significant toxic exposures and for reducing risk. Additionally, the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly Bill) was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, identify facilities having localized impacts, ascertain health risks, notify nearby residents of significant risks, and reduce those significant risks to acceptable levels. The Children's Environmental Health Protection Act, California Senate Bill (SB) 25 (Chapter 731, Escutia, Statutes of 1999), focuses on

[26] United States Environmental Protection Agency. 2015. *Overview of EPA's Updates to the Air Quality Standards for Ground-Level Ozone*. Available: https://www.epa.gov/sites/production/files/2015-10/documents/overview_of_2015_rule.pdf. Accessed: July 12, 2023.

[27] California Air Resources Board. 2023c. California Ambient Air Quality Standards. Available: https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards. Accessed: July 13, 2023.

children's exposure to air pollutants. The act requires the CARB to review its air quality standards from a children's health perspective, evaluate the statewide air quality monitoring network, and develop any additional air toxic control measures needed to protect children's health.

State Implementation Plan

The SIP is a collection of documents that set forth the State's strategies for achieving the AAQS. In California, the SIP is a compilation of new and previously submitted plans, programs (such as monitoring, modeling, and permitting), district rules, State regulations, and Federal controls. The CARB is the lead agency for all purposes related to the SIP under State law. Local air districts and other agencies, such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the United States EPA for approval and publication in the Federal Register. The items included in the California SIP are listed in the Code of Federal Regulations (CFR) at 40 CFR 52.220.

As the regional air quality management district, the BAAQMD is responsible for preparing and implementing the portion of the SIP applicable to the portion of the SFBAAB within its jurisdiction. The air quality management district for each region adopts rules, regulations, and programs to attain Federal and State air quality standards and appropriates money (including permit fees) to achieve these standards. In addition, the following California Code of Regulations (CCR) sections would be applicable to the project:

- **Engine Idling**. In accordance with Section 2485 of CCR Title 13, the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to five minutes at any location.
- **Emission Standards**. In accordance with Section 93115 of CCR Title 17, operation of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emission standards.

NAAQS And NAAQS Attainment Status

California is divided geographically into 15 air basins for managing the air resources of the State on a regional basis. Areas within each air basin are considered to share the same air masses and, therefore, are expected to have similar ambient air quality. If an air basin is not in either Federal or State attainment for a particular pollutant, the basin is classified as a nonattainment area for that pollutant. Under the Federal and State CAA, once a nonattainment area has achieved the air quality standards for a particular pollutant, it may be redesignated to an attainment area for that pollutant. To be redesignated, the area must meet air quality standards and have a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the Federal CAA. Areas that have been redesignated to attainment are called maintenance areas.

California is divided geographically into 15 air basins for managing the air resources of the State on a regional basis. Areas within each air basin are considered to share the same air masses and, therefore, are expected to have similar ambient air quality. If an air basin is not in either Federal or State attainment for a particular pollutant, the basin is classified as a nonattainment area for that pollutant. Under the Federal and State CAA, once a nonattainment area has achieved the air quality standards for a particular pollutant, it may be redesignated to an attainment area for that pollutant. To be redesignated, the area must meet air quality standards and have a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the Federal CAA. Areas that have been redesignated to attainment are called maintenance areas.

The project site is within Santa Clara County jurisdiction, which currently exceeds the NAAQS for 8-hour ozone (O_3) and 24-hour $PM_{2.5}$.[28] Santa Clara County is currently classified as a nonattainment area under the CAAQS for O_3, PM_{10}, and $PM_{2.5}$ and classified as attainment for the remaining criteria pollutants.

Regional

Air Quality Management Plan

The BAAQMD is responsible for assuring that the Federal and State ambient air quality standards are attained and maintained in the Bay Area. The BAAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, as well as many other activities.

The BAAQMD adopted the 2017 Clean Air Plan (2017 CAP) as an update to the 2010 Clean Air Plan in April 2017. The 2017 Plan provides a regional strategy to protect public health and the climate. Consistent with the GHG reduction targets adopted by the State, the 2017 Plan lays the groundwork for a long-term effort to reduce Bay Area GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050 .[29] To fulfill State ozone planning requirements, the 2017 control strategy includes all feasible measures to reduce emissions of ozone precursors—ROG and NO_X—and reduce transport of ozone and its precursors to neighboring air basins. The 2017 Plan builds upon and enhances the BAAQMD's efforts to reduce emissions of fine particulate matter TACs.[30]

BAAQMD Rules

The BAAQMD implements rules and regulations for emissions that may be generated by various uses and activities. The rules and regulations detail pollution-reduction measures that must be implemented during construction and operation of projects. Rules and regulations relevant to the project include the following:

- Regulation 2 Permits, Rule 2 (New Source Review): This rule applies to all new or modified sources requiring a permit. This rule requires the analysis of new or modified sources to ensure that if emissions do exceed specific applicable thresholds that "Best Available Control Technology" be installed to limit the emissions to the greatest extent possible.
- Regulation 8, Rule 3 (Architectural Coatings): This rule limits the quantity of volatile organic compounds that can be supplied, sold, applied, and manufactured within the BAAQMD region.
- Regulation 9 Inorganic Gaseous Pollutants, Rule 8 (Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines): This rule limits the emissions of NO_x and CO from stationary internal combustion engines with an output rated by the manufacturer at more than 50 brake horsepower. In addition, Section 9-8-330 states that an emergency standby engine

[28] United States Environmental Protection Agency. 2023. *Nonattainment Areas for Criteria Pollutants (Green Boo*k). Available: https://www.epa.gov/green-book. Accessed: July 12, 2023.

[29] Bay Area Air Quality Management District. 2017. *Final 2017 Clean Air Plan.* Available: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en. Accessed July 14, 2023

[30] Bay Area Air Quality Management District. 2017. *Final 2017 Clean Air Plan.* Available: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en. Accessed July 14, 2023

cannot be operated for more than 50 hours in a calendar year for testing and maintenance purposes.

Regional Significance Thresholds

The BAAQMD has adopted guidelines for quantifying and determining the significance of air quality emissions in its 2022 CEQA Air Quality Guidelines.

The BAAQMD's 2022 CEQA Air Quality Guidelines are used in this analysis to evaluate air quality. **Table 2-2** shows the significance thresholds for construction and operational-related criteria air pollutant and precursor emissions being used for the purposes of this analysis. These thresholds represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. For the purposes of this analysis, the project would result in a significant impact if construction or operational emissions would exceed thresholds as shown in **Table 2-2**.

Table 2-2 BAAQMD Air Quality Significance Thresholds

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10

ROG = reactive organic gases, NO_X = nitrogen oxides, PM_{10} = particulate matter 10 microns in diameter or less, $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter; lbs/day = pounds per day

Source: BAAQMD 2023

Carbon Monoxide

BAAQMD provides a preliminary screening methodology to conservatively determine whether a proposed project would exceed carbon monoxide thresholds. If the following criteria are met, a project would result in a less than significant impact related to local carbon monoxide concentrations:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Odor Sources

The BAAQMD provides minimum distances for siting of new odor sources as shown in **Table 2-3**. A significant impact would occur if the project would result in other emissions (such as odors) affecting substantial numbers of people or would site a new odor source within the specified distances of existing receptors.

Table 2-3 BAAQMD Odor Source Thresholds

Odor Source	Minimum Distance for Less than Significant Odor Impacts (in miles)
Wastewater treatment plant	2
Wastewater pumping facilities	1
Sanitary Landfill	2
Transfer Station	1
Composting Facility	1
Petroleum Refinery	2
Asphalt Batch Plant	2
Chemical Manufacturing	2
Fiberglass Manufacturing	1
Painting/Coating Operations	1
Rendering Plant	2
Coffee Roaster	1
Food Processing Facility	1
Confined Animal facility/feed lot/diary	1
Green Waste and Recycling Operations	1
Metal Smelting Plants	2

Source: Rincon Consultants, 2023.

Local

City of Santa Clara 2010-2035 General Plan [31]

The Air Quality Goals and Polices section of the General Plan addresses the City's goals, policies, and implementing actions regarding air quality. The following policies in the General Plan related to air quality are applicable to the project:

5.10.2-P1 Support alternative transportation modes and efficient parking mechanisms to improve air quality.

5.10.2-P2 Encourage development patterns that reduce vehicle miles traveled and air pollution.

5.10.2-P3 Encourage implementation of technological advances that minimize public health hazards and reduce the generation of air pollutants.

5.10.2-P4 Encourage measures to reduce greenhouse gas emissions to reach 30 percent below 1990 levels by 2020.

[31] City of Santa Clara. 2010. *2010-2035 General Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: July 3, 2023.

5.10.2-P5 Promote regional air pollution prevention plans for local industry and businesses.

5.10.2-P6 Require "Best Management Practices" for construction dust abatement.

Environmental Setting

The BAAQMD operates a network of air quality monitoring stations throughout the SFBAAB. The purpose of the monitoring stations is to measure ambient concentrations of pollutants and to determine whether ambient air quality meets the NAAQS and CAAQS. The SFBAAB monitoring station closest to the project site is the San José-Jackson Street Station, which is located approximately 6.4 miles southeast of the project site, was used for ozone, carbon monoxide, nitrogen dioxide, PM_{10}, and $PM_{2.5}$ measurements. SO_2 is not monitored in Santa Clara County and therefore is not reported.

Table 3 in **Appendix A** indicates the number of days that each of the Federal and State standards has been exceeded at this station in the years 2019, 2020, and 2021. The data indicates that the 1-hour ozone CAAQS and 8-hour ozone CAAQS were exceeded for all three years. In addition, the 8-hour ozone NAAQS were exceeded for all three years. The PM_{10} CAAQS was exceeded in 2019 and 2020, and the $PM_{2.5}$ NAAQS was exceeded in 2020 and 2021. As shown in Table 3 of **Appendix A**, no other State or Federal standards were exceeded at these monitoring stations.

Regional Climate and Air Pollution in the SFBAAB

The City of Santa Clara is in the southern portion of the SFBAAB and the proximity to the Pacific Ocean and San Francisco Bay influence the climate in the City and surrounding region. The Santa Cruz Mountains and Diablo Mountain Range on either side of the South Bay restrict air dispersion, and this alignment of the terrain also channels winds from the north to south, carrying pollution from the northern Peninsula toward the south bay. The maximum daily temperature near the project area (measured in the neighboring City of San José) is approximately 73 degrees Fahrenheit (°F), while the minimum average daily temperature for the year is approximately 50°F. The average total precipitation in the project area is approximately 14.9 inches annually.[32] Winds play a large role in controlling climate in the area, and annual average winds range between five and ten miles per hour in this region.[33]

Air pollutant emissions in the SFBAAB are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat. Area sources are distributed widely and include those such as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be operated legally on roadways and highways. Off-road sources include aircraft,

[32] U.S. Climate Data. 2023. Climate San José – California. Available: https://www.usclimatedata.com/climate/san-jose/california/united-states/usca0993. Accessed: July 7, 2023.

[33] Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act: Air Quality Guidelines. San Francisco, CA. May 2017. Available: http://www.baaqmd.gov/~/media/files/planning-andresearch/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed: July 7, 2023.

ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment such as when high winds suspend fine dust particles.[34]

Sensitive Receptors

CARB and the Office of Environmental Health Hazard Assessment (OEHHA) have identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, infants (including in utero in the third trimester of pregnancy), and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.[35,36] The sensitive receptors nearest to the project site are residential receptors located approximately 925 feet south of the project site. The project would not include new sensitive receptors.

Impact Discussion

Air pollutant and GHG emissions generated by project construction and operation were estimated using the California Emissions Estimator Model (CalEEMod), version 2022.1. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. CalEEMod allows for the use of standardized data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs. The calculation methodology and input data used in CalEEMod can be found in the CalEEMod User's Guide Appendices C, D, and G.[37] The analysis reflects construction and operation of the project as described in Section 1, Project Information.

Construction Methodology

Project construction would primarily generate temporary criteria pollutant and GHG emissions from construction equipment operation on-site, construction worker vehicle trips to and from the site, and import of materials off-site. Construction of the project was analyzed based on the land use type and square footage described provided by the applicant, which includes a commercial building programmed to include 21,079 square feet of data center, 170,779square feet of research and development uses, 53,060 square feet of laboratory uses, 223 parking spaces in a subterranean parking garage, and 426 parking spaces in a surface parking lot. Construction of the project was assumed to begin in October 2023 and end in August 2025, for approximately 23 months. Based on the applicant-provided land uses, the CalEEMod provides assumptions for equipment lists and vehicle trips.

[34] Bay Area Air Quality Management District (BAAQMD). 2017. *California Environmental Quality Act: Air Quality Guidelines*. San Francisco, CA. May 2017. Available: http://www.baaqmd.gov/~/media/files/planning-andresearch/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed: July 7, 2023.

[35] California Air Resources Board. 2005. *Air Quality and Land Use Handbook: A Community Health Perspective.* https://ww3.arb.ca.gov/ch/handbook.pdf. Accessed: July 7, 2023.

[36] Office of Environmental Health Hazard Assessment. 2015. *Air Toxics Hot Spots Program*. https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.Accessed July 7, 2023.

[37] California Air Pollution Control Officers Association. 2022. California Emissions Estimator Model User Guide Version 2022. Available: https://www.caleemod.com/documents/user-guide/CalEEMod_User_Guide_v2022.1.pdf. Accessed: July 17, 2023.

During the demolition phase, the project would export approximately 67,789 cubic yards of soil based on applicant provided data. In addition, the existing 95,580 square-foot one-story building would be demolished. The hauling material would be transported approximately 5.2 miles from the project site to Green Waste Zanker Resource Recovery Facility at 705 Los Esteros Road. It is assumed that construction equipment used would be diesel-powered and the project would comply with applicable regulatory standards, such as BAAQMD's Basic Best Management Practices fugitive dust control measures and Regulation 8 Rule 3, Architectural Coating.[38]

Operational Emissions

Operational emissions modeled include mobile source emissions, energy emissions, and area source emissions. Operational area source modeling relied on the following assumptions:

- Energy Consumption: Based on applicant-provided information, the estimated annual electricity consumption is anticipated to be approximately 78,740 MWh per year. The project would not use natural gas.
- Water Demand: Water source emissions are based on CalEEMod defaults.
- Employee Vehicle Trips: The existing land use generates 1,012 daily vehicle trips and the project would generate 1,866 daily vehicle trips. Therefore, approximately 852 net new daily trips would be generated from the project.
- Area Source Emissions: Area source emissions are based on CalEEMod defaults.
- Solid Waste Generation: Solid waste generated by the operations of the building are quantified based on CalEEMod default generation rates.

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

Less than Significant Impact. The California CAA requires that air districts create a Clean Air Plan (CAP) that describes how the jurisdiction will meet air quality standards. The most recently adopted air quality plan is the BAAQMD 2017 CAP. The 2017 CAP builds upon and enhances the BAAQMD's efforts to reduce emissions of fine particulate matter and TACs. The 2017 Plan does not include control measures that apply directly to individual development projects. Instead, the control strategy includes control measures related to stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-GHG pollutants.

The 2017 CAP focuses on two paramount goals:

- Protect air quality and health at the regional and local scale by attaining all national and State air quality standards and eliminating disparities among Bay Area communities in cancer health risk from TACs.
- Protect the climate by reducing Bay Area GHG emissions to 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050.

Under BAAQMD's methodology, a determination of consistency with the 2017 Plan should demonstrate that a project:

- Supports the primary goals of the air quality plan.

[38] Bay Area Air Quality Management District. 2010. *Bay Area 2010 Clean Air Plan – Volume II*. Available: https://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/Plans/2010%20Clean%20Air%20Plan/CAP%20Volume%20II_Sections%20A-F.ashx. Accessed: August 1, 2023.

- Includes applicable control measures from the air quality plan.
- Does not disrupt or hinder implementation of any air quality plan control measures.

A project that would not support the 2017 Plan's goals would not be consistent with the 2017 Plan. On an individual project basis, consistency with BAAQMD quantitative thresholds is interpreted as demonstrating support for the clean air plan's goals. As shown in the response below in **Threshold (b)**, (**Table 2-5** and **Table 2-6**), the project would not result in exceedances of BAAQMD thresholds for criteria air pollutants and thus would not conflict with the 2017 Plan's goal to attain air quality standards. Furthermore, as shown in **Table 2-4**, the project would include applicable control measures from the 2017 Plan and would not disrupt or hinder implementation of such control measures. Therefore, project impacts related to consistency with the 2017 Plan would be less than significant and no mitigation is required.

Table 2-4 Project Consistency with Applicable Control Measures of 2017 Plan

Control Measure	Evaluation
TR9: **Bicycle and Pedestrian Access and Facilities**. Encourage planning for bicycle and pedestrian facilities in local plans, e.g., general and specific plans, fund bike lanes, routes, paths and bicycle parking facilities.	**Consistent**. The project would include 4 short-term and 62 long-term bicycle parking spaces.
EN2: Decrease Electricity Demand. Work with local governments to adopt additional energy-efficiency policies and programs. Support local government energy efficiency program via best practices, model ordinances, and technical support. Work with partners to develop messaging to decrease electricity demand during peak times.	**Consistent**. The project would be required to comply with all energy efficiency standards of the latest Title 24 (including the California Energy Code and CALGreen). The Title 24 standards are updated every three years and become increasingly more stringent over time. In addition, the proposed data center would utilize air cooled chillers, air handling units, and dedicated outdoor air system with economizer mode to reduce energy used to cool air and lower energy consumption. Furthermore, according to SB 100, renewable energy resources must supply 100 percent of retail sales of electricity in California to end-use customers by 2045. As SVP transitions its energy sourcing to meet this requirement, emissions generated by project-related energy use would decrease accordingly.
BL1: Green Buildings. Collaborate with partners such as KyotoUSA to identify energy-related improvements and opportunities for on-site renewable energy systems in school districts; investigate funding strategies to implement upgrades. Identify barriers to effective local implementation of the CALGreen (Title 24) statewide building energy code; develop solutions to improve implementation/enforcement. Work with Association of Bay Area Governments' (ABAG) BayREN program to make additional funding available for energy-related projects in the buildings sector. Engage with additional partners to target reducing emissions from specific types of buildings.	**Consistent**. The project would be required to comply with the latest iteration of the 2022 Title 24 Building Efficiency Standards. For example, require a minimum 65 percent diversion of construction/demolition waste, use of low pollutant emitting exterior and interior finish materials, and dedicated circuitry for electric vehicle charging stations. The CALGreen standards are updated every three years and become increasingly more stringent over time. The building design will follow Leadership in Energy and Environmental Design (LEED) guidelines.

Control Measure	Evaluation
WR2: **Support Water Conservation**. Develop a list of best practices that reduce water consumption and increase on-site water recycling in new and existing buildings; incorporate into local planning guidance.	**Consistent**. The project would be required to comply with all water conservation standards of CALGreen that are in effect at that time. The project would include plumbing fixtures with low-flow and WaterSense Labeled, which meets EPA's specifications for water efficiency and performance.

Source: BAAQMD, 2017.

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

Construction Emissions

Less than Significant Impact. Project construction would involve operation of diesel-powered construction equipment that would generate air pollutant emissions. **Table 2-5** summarizes the estimated maximum daily emissions of ROG, NO_x, CO, PM_{10} exhaust, $PM_{2.5}$ exhaust, and sulfur oxide (SO_x) during project construction. As shown in **Table 2-5**, project construction emissions for all criteria pollutants would be below the BAAQMD average daily thresholds of significance and therefore would be less than significant and no mitigation is required.

Table 2-5 Project Construction Emissions

	Average Daily Emissions (lbs/day)					
	ROG	NO_x	CO	SO_x	PM_{10} (exhaust)	$PM_{2.5}$ (exhaust)
Average Daily Emissions	7	10	14	<1	<1	<1
BAAQMD Thresholds (average daily emissions)	54	54	N/A	N/A	82	54
Threshold Exceeded?	**No**	**No**	**N/A**	**N/A**	**No**	**No**

N/A = not applicable (no BAAQMD threshold for CO or SOX)

Source: Rincon Consultants, 2023.

The BAAQMD does not have quantitative thresholds for fugitive dust emissions during construction. Instead, the BAAQMD recommends Best Management Practices (BMPs) be implemented to reduce fugitive dust emissions. The City of Santa Clara requires projects to implement BMPs consistent with the BAAQMD Basic Construction Mitigation Measures. These measures would be part of standard City conditions of approval for project construction. With the implementation of this Standard Permit Condition, construction air quality impacts would be less than significant.

> **Standard Permit Condition AQ-1:** The following BAAQMD best management practices shall be implemented in addition to compliance with the City's conditions of approval for construction dust management:
>
> During any construction period ground disturbance, the construction contractor shall implement measures to control dust and exhaust. Implementation of the measures recommended by

BAAQMD and listed below would reduce the air quality impacts associated with grading and new construction to a less than significant level. The contractor shall implement the following best management practices that are required of all projects:

- Include construction equipment exhaust controls and measures to control dust and exhaust during construction.
- 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.
- 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 California Code of Regulations). 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.
- A publicly visible sign shall be posted at the project site with the telephone number and person to contact at the City regarding dust complaints. This person shall respond and take corrective action within 48 hours of receiving a complaint. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Operational Emissions

Long-term emissions associated with project operation are shown in **Table 2-6**. Emissions would not exceed BAAQMD daily or annual thresholds for any criteria pollutant. Since project emissions would not exceed BAAQMD thresholds for construction or operation, the project would not violate an air quality standard or result in a cumulatively considerable net increase in criteria pollutants and impacts would be less than significant.

Table 2-6 Project Operational Emissions

Sources	Average Daily Emissions (lbs/day)					
	ROG	NO_x	CO	PM_{10} (exhaust)	$PM_{2.5}$ (exhaust)	SO_x
Mobile	3	3	26	6	2	<1
Area	7	<1	8	<1	<1	<1
Total Project Emissions	10	3	34	6	2	<1

Sources	Average Daily Emissions (lbs/day)					
	ROG	NO_x	CO	PM_{10} (exhaust)	$PM_{2.5}$ (exhaust)	SO_x
BAAQMD Thresholds	**54**	**54**	**N/A**	**82**	**54**	**N/A**
Threshold Exceeded?	**No**	**No**	**N/A**	**No**	**No**	**N/A**
Annual Emissions (tons/yr)						
Project Emissions	2	1	6	1	<1	<1
BAAQMD Thresholds	10	10	N/A	15	10	N/A
Threshold Exceeded?	**No**	**No**	**N/A**	**No**	**No**	**N/A**

Source: Rincon Consultants, 2023.

N/A = not applicable (no BAAQMD threshold for CO or SO_X), lbs = pounds, yr = year

c. Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant with Mitigation Incorporated. The project is located approximately 925 feet north of the nearest sensitive receptors. This section analyzes the exposure of these sensitive receptors to health risks associated with carbon monoxide hotspots and TACs.

Carbon Monoxide Hotspots

A carbon monoxide hotspot is a localized concentration of carbon monoxide that is above ambient air quality standard. Localized carbon monoxide hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local carbon monoxide concentration exceeds the Federal one-hour standard of 35.0 parts per million (ppm) or the Federal and State eight-hour standard of 9.0 ppm.[39]

BAAQMD recommends comparing project's attributes with the following screening criteria as a first step to evaluating whether the project would result in the generation of carbon monoxide concentrations that would substantially contribute to an exceedance of the Thresholds of Significance. The project would result in a less than significant impact to localized carbon monoxide concentrations if:

1. The project is consistent with an applicable congestion management program for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at the affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage).

[39]California Air Resources Board. 2016. *Ambient Air Quality Standards*. Available: http://www.arb.ca.gov/research/aaqs/aaqs2.pdf. Accessed: July 7, 2023.

The project would generate 852 net new daily vehicle trips. According to the General Plan's Appendix 8.7 Transportation and Mobility Assumptions, the existing (2008) and future (2035) traffic volumes for Tasman Drive between City Limits and Great America Parkway are 12,790 and 25,910 average daily traffic, respectively.[40] The project site is approximately 800 feet north of Tasman Drive. Therefore, the project would not increase vehicle traffic at any intersections above the screening thresholds listed above and the impact of localized carbon monoxide emissions would not be significant.

Toxic Air Contaminants

Construction Impacts

Construction-related activities would result in temporary project-generated DPM exhaust emissions from off-road, heavy-duty diesel equipment for site preparation, grading, building construction, and other construction activities. Generation of DPM, which was identified as a TAC by CARB in 1998, from construction projects typically occurs in a single area for a short period. The project's construction would occur in phases over approximately 23 months with sensitive receptors located approximately 925 feet to the south. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has to the substance. Dose is positively correlated with time, and a more extended exposure period would result in a higher exposure level for the maximally exposed individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a more extended period.

The project would be consistent with the applicable Air Quality Management Plan (AQMP) requirements and control strategies intended to reduce emissions from construction equipment and activities. The project would comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than five minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these would minimize emissions of TACs during construction.

However, BAAQMD identifies that projects may have significant TAC cumulative impacts when constructed within 1,000 feet of sensitive receptors. Therefore, it is conservatively assumed that project construction could result in potentially significant TAC emissions. **Mitigation Measure AQ-1** would implement construction measures, such as use of U.S EPA Tier 4 engines, which would reduce impacts to less than significant.

Impact: AQ 1: The project could result in potentially significant TAC emissions.

AQ-MM-1: Construction Emissions Reduction

Prior to issuance of grading permits, the City shall confirm that the grading plan, building plans, and specifications stipulate that the following measures shall be implemented:

- All mobile off-road equipment (wheeled or tracked) greater than 50 horsepower used during construction activities shall meet the U.S. EPA Tier 4 final standards. Tier 4

[40] City of Santa Clara. 2014. *City of Santa Clara 2010-2035 General Plan Appendix 8.7 Transportation and Mobility Assumptions*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/12891/635713044859030000. Accessed: July 7, 2023.

certification can be for the original equipment or equipment that is retrofitted to meet the Tier 4 Final standards.

- Alternative fuel (natural gas, propane, electric, etc.) construction equipment shall be incorporated where available. These requirements shall be incorporated into the contract agreement with the construction contractor. A copy of the equipment's certification or model year specifications shall be available upon request for all equipment on-site.
- Unpaved demolition and construction areas shall be wet at least three times per day during excavation and construction.
- Electricity shall be supplied to the site from the existing power grid to support the electric construction equipment. If connection to the grid is determined to be infeasible for portions of the project, a non-diesel fueled generator shall be used.
- The project shall comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than five minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these would minimize emissions of TACs during construction.

With incorporation of **Mitigation Measure AQ-1**, DPM emissions would be reduced by approximately 81 to 96 percent as compared to standard CalEEMod assumptions for engine tier. With these reductions, toxic air contaminant concentrations at sensitive receptors would not be substantial, and construction-related health impacts would be less than significant.

Operational Impacts

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities). CARB guidelines recommend siting distances both for the development of sensitive land uses in proximity to TAC sources and for the addition of new TAC sources in proximity to existing sensitive land uses. Data center, research and development, and laboratory land uses are not considered land uses that generate substantial TAC emissions based on reviewing the air toxic sources listed in CARB's guidelines. Therefore, the expected hazardous TACs generated on site (e.g., cleaning solvents, paints, landscape pesticides, etc.) for the proposed land uses would be below thresholds warranting further study under the California Accidental Release Program. Project operation would not expose off-site sensitive receptors to significant amounts of carcinogenic or TACs. Therefore, operational impacts would be less than significant.

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

Less than Significant Impact. The project would generate oil and diesel fuel odors during construction from equipment use. The odors would be limited to the construction period and would be temporary. With respect to operation, the BAAQMD's 2022 CEQA Guidelines (2023) identifies land uses associated with odor complaints to include, but not limited to, wastewater treatment plants, landfills, confined animal facilities, composting stations, food manufacturing plants, refineries, and chemical plants. Data centers, research and development uses, and laboratory uses are not identified on this list (shown in **Table 2-3**). Therefore, the project would not generate objectionable odors affecting a substantial number of people, and impacts would be less than significant with no mitigation required.

2.4 Biological Resources

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

Regulatory Setting

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 project would result in the wake 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. Nesting birds are considered special-status species and are protected by the USFWS. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

Sensitive Habitat Regulations

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable Federal, state, and local regulations, and are generally subject to regulation by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and/or the USFWS under provisions of the Federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

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

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 the County. It was developed and adopted through a partnership between the County, the Cities of San José, Morgan Hill, and Gilroy, Santa Clara Valley Water District (Valley Water), Santa Clara 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 the southern portion of the County. The Santa Clara Valley Habitat Agency is responsible for implementing the plan. The City of Santa Clara is not subject to the Habitat Plan.

Local

Santa Clara 2010-2035 General Plan[41]

The Conservation Goals and Polices section of the General Plan addresses the City's goals, policies, and implementing actions regarding biological resources. The following policies in the General Plan related to biological resources are applicable to the project:

5.10.1-P1 Require environmental review prior to approval of any development with the potential to degrade the habitat of any threatened or endangered species.

5.10.1-P2 Work with Santa Clara Valley Water District and require that new development follow the "Guidelines and Standards for Lands Near Streams" to protect streams and riparian habitats.

5.10.1-P3 Require preservation of all City-designated heritage trees listed in the Heritage Tree Appendix 8.10 of the General Plan.

5.10.1-P4 Protect all healthy cedars, redwoods, oaks, olives, bay laurel and pepper trees of any size, and all other trees over 36 inches in circumference measured from 48 inches above-grade on private and public property as well as in the public right-of-way.

5.10.1-P5 Encourage enhancement of land adjacent to creeks in order to foster the reinstatement of natural riparian corridors where possible.

Environmental Setting

The project site is surrounded by industrial buildings, office development, and surface parking lots within the larger urban context of the City. Most of the project site is paved except for a landscaped area along Patrick Henry Drive featuring a small lawn, shrubbery, and multiple evergreen pears and river she-oaks. The project site is separated from adjacent parcels to the west by Calabazas Creek, Patrick Henry Drive to the east, and a strip of trees/shrubbery and parking spaces to the north and south of the project site.

The Calabazas Creek sub-watershed covers an area of approximately 20 square miles. This 13.3-mile creek originates from the northeast-facing slopes of the Santa Cruz Mountains and discharges into the Lower South San Francisco Bay via Guadalupe Slough. Major tributaries to Calabazas Creek include Prospect, Rodeo, and Regnart Creeks. Additional sources of water to Calabazas Creek include the El Camino storm drain and the Junipero Serra Channel. The Creek traverses through a small portion of unincorporated County land, and flows through the Cities of Saratoga, Cupertino, Sunnyvale, San José, and Santa Clara.[42]

Calabazas Creek has riparian zones and channels that have been extensively modified for flood protection. Thirty-two percent of its length, approximately 4.2 miles, is classified as "hard bottom"

[41] City of Santa Clara. 2010. *2010-2035 General Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: July 3, 2023.

[42] Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP). *Santa Clara Basin Stormwater Resource Plan*. 2019. Available: https://scvurppp.org/wp-content/uploads/2019/08/SCB_SWRP_FINAL_8-20-19.pdf. Accessed: July 11, 2023.

meaning the creek channel has been lined with manmade materials. From Guadalupe Slough to Highway 101, Calabazas Creek is an enlarged earthen channel with levees. The reach between Highway 101 and Lawrence Expressway is a trapezoidal, concrete-lined channel.

Construction of the project would require removal of 125 trees on site, 67 of which are protected under the City's Heritage Tree Inventory in the General Plan. For further information regarding tree removal, see the discussion under **Threshold (e)** below. There are no natural areas on the site; all vegetation consists of ornamental landscaping installed and maintained by the current owner of the property. The site does not contain watercourses or any bodies of water. The closest open space to the project site is in the City of Sunnyvale, Baylands Park, a green space with children's play equipment and picnic tables located approximately 0.5-mile northwest. The park is separated from the project site by intervening urban development and SR-237.

Impact Discussion

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

Less than Significant with Mitigation. Due to the highly developed nature of the project site and surrounding area and lack of suitable habitat for special-status species, no special-status plant or animal species are expected to occur within the project site.

Adjacent to the project site is Calabazas Creek, one of the three major waterways in the City. Calabazas Creek has been modified for flood control, bank stabilization, and sediment reduction purposes and as a result, is lined with concrete for most of the length of the project site and immediate vicinity. As a result of the concrete channeling within the project area, the creek also shows little to no signs of riparian plant or animal species.

It is not anticipated that implementation of the project would indirectly or directly impact the creek. The creek is outside of the project site and would not be modified or otherwise affected by project construction or operation. Construction of the project could temporarily increase the risk of pollution into nearby waterways if stormwater runoff conveys sediment or other substances into the creek. For more information on nearby waterways and measures to control water quality during construction, please refer to **Section 2.10, Hydrology and Water Quality.**

Despite the lack of riparian habitat, it is possible that on-site trees could provide nesting habitat for migratory birds. The MBTA protects active nests, adults, eggs, and young of most species of birds. Project related tree removal may have a potential impact on nesting birds. Additionally, if nesting birds are present within or adjacent to the project site during construction, construction activities could result in the abandonment of active nests or direct mortality to birds. However, **Mitigation Measure BIO-1** would be implemented prior to and during construction activities for the purpose of minimizing risks to migratory birds such as disturbance and other direct and indirect impacts from construction.

Impact BIO-1: Construction, including removal of trees, could impact nesting birds.

BIO-MM-1: Nesting Bird Survey

- Schedule tree removal activities between September 1 and January 31 (inclusive) to avoid the nesting season (including for raptors). If tree removal occurs outside of nesting season, no pre-construction surveys will be required.
- If tree removal takes place between February 1 and August 31, pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests will be disturbed.
- Surveys will be completed no more than seven days prior to the initiation of site clearing or construction activities. During this survey, the ornithologist will inspect all trees and other potential nesting habitats (e.g., shrubs) in and immediately adjacent to the construction area for nests.
- If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist will determine the extent of a disturbance-free buffer zone to be established around the nest (typically 250 feet for raptors and 50-100 feet for other species). This will ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during project implementation.
- A report indicating the result of the survey and any designated buffer zones shall be submitted to the satisfaction of the Planning Department prior to the start of construction.

With implementation of **Mitigation Measure BIO-1**, nesting birds would be protected from disturbance and other direct and indirect impacts from construction. Therefore, project impacts would be less than significant with mitigation.

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

Less than Significant Impact. The project site is developed with a single-story office building, asphalt, and surface parking areas. The site is surrounded by industrial and commercial development with limited cover and foraging habitat for wildlife. The closest natural area to the project is Calabazas Creek, west adjacent to the project site. The creek has been modified for flood control purposes and contains very little natural habitat. Existing development is within 50 feet of the modified bank which has a concrete bottom.

According to the City of Santa Clara 2010-2035 General Plan EIR (City's General Plan EIR) that was certified in 2010, Calabazas Creek has no identified biological uses and has been documented to contain notable amounts of trash from illegal dumping and urban runoff/storm sewers. The creek contains little to no riparian habitat and does not appear to be populated with aquatic or riparian species.

The project site and Calabazas Creek are separated by minimal landscaping, a pedestrian/bike path, and a concrete wall. Development at the project site would not reasonably be anticipated to impact any

sensitive communities directly or indirectly at the Creek. For more information regarding San Tomas Aquino Creek, see **threshold (a)** above. There are no sensitive natural communities within the project site. Therefore, the project would have a less-than-significant impact on any riparian habitat or other sensitive natural community as identified at the local, State, or Federal level and no mitigation is required.

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

No Impact. The project site does not contain and is not adjacent to any wetlands. For this reason, the impact would be no impact.

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

Less than Significant with Mitigation. The project site is currently developed and is surrounded by industrial and office development, which preclude major wildlife movement. The project site is near heavily traveled roadways including SR-237, Great America Parkway, and Tasman Drive. Existing opportunities for wildlife movement on site and within the project vicinity are profoundly constrained by heavily traveled roadways and the lack of continuous or connected natural areas.

Migratory birds may nest in trees located within the boundaries of the project site. However, removed trees would be replaced on-site at a minimum 2:1, using 24-inch box sizes. As discussed in **Section 1.2, Project Description**, a total of 143 trees exists on the project site. A total of 125 trees would be removed during construction, and 250 replacement trees are required at a ratio of 2:1 as specified in City Code Chapter 12.35 and the City's General Plan Policy 5.3.1-P10. The project would plant 96 on-site trees, 73 @36 inch box trees and 23@ 48 inch box trees). . The remaining trees shall be replaced at an equal alternative as approved by the Director of Community Development per Chapter 12.35.090(c)(8) of the City Code.

Therefore, nesting birds would not be permanently displaced. With implementation of **Mitigation Measure BIO-1,** described above**,** nesting birds would be protected from disturbance and other direct and indirect impacts from construction. Thus, with mitigation the project would result in a less-than-significant impact on the migratory movement of wildlife species.

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

Less than Significant Impact. The provision of landscaping and trees in the community is addressed in both the City's General Plan Policies 5.3.1-P4 and 5.3.1-P10 and the City Code Chapter 12.35. General Plan Policy 5.10.1-P4 states the City will protect all healthy cedars, redwoods, oaks, olives, bay laurel and pepper trees of any size, and all other healthy trees over 36 inches in circumference measured from 48 inches above-grade on private and public property as well as in the public right-of-way. By this definition, there are 80 protected trees on the project site. General Plan Policy 5.3.1-P10 calls for new development to provide street trees and a minimum 2:1 on- or off-site replacement of trees removed as part of a development proposal. As required by the General Plan, trees on site would be replaced at a

minimum 1:1, with additional trees provided off-site to achieve a total replacement ratio of 2:1, while using a 24 inch or larger box size after construction.

There are 143 trees present on the property and 11 trees located on neighboring properties are located near property lines. Of the 143 trees on the project site, 38 are London planes, 23 are River she-oak, 23 are evergreen pear, 18 are holly oak, 16 are coast redwoods, 12 are Aleppo pine, and 13 comprise other species. During construction, 125 of the existing trees would be removed. A permit is required for removal of any City trees, City-designated heritage trees, trees from nine listed species—California buckeye (*aesculus californica*), big leaf maple (*acer macrophyllum*), deodar cedar (*cedrus deodara*), blue Atlas cedar (*cedrus atlantica "Glauca"*), camphor tree (*cinnamomum camphora*), western sycamore (*platanus racemosa*), native oak tree species (*quercus sp.*), coast redwood (*sequoia sempervirens*), and California bay (*umbellularia californica*)—with a diameter of 12 inches or more at 54 inches above grade, and any tree with a diameter of 38 inches or more at 54 inches above grade. These trees are considered "protected" trees. Twenty-eight of the trees proposed for removal would require a permit prior to removal. Because the project would comply with all relevant tree removal and replacement requirements, implementation of the project would not conflict with policies or ordinances for biological resources including tree protection. This impact would be less than significant and no mitigation is required.

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

No Impact. No habitat conservation plan or natural community conservation plans have been adopted that include the project site. The Santa Clara Valley Habitat Plan (Habitat Plan) is both a habitat conservation plan and natural community conservation plan (HCP/NCCP), which encompasses 519,506 acres located in Santa Clara County and was adopted in 2013 by all local participating agencies. The project site and immediate vicinity are not located within the boundaries of the Santa Clara Valley HCP/NCCP study area and the City is not a member jurisdiction of the Habitat Plan.[43] Therefore, the project is not subject to the obligations imposed upon member agencies and implementation of the project would not conflict with the plan, and no impact would occur.

[43] Santa Clara Valley Habitat Agency. 2012. *Santa Clara Valley Habitat Plan, Chapter 3: Physical and Biological Resources*. Available: http://scv-habitatagency.org/DocumentCenter/Home/View/125. Accessed: July 11, 2023.

2.5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Regulatory Setting

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 CFR Part 800) constitute the primary Federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed or eligible for listing in the NRHP. Impacts to properties listed in the NRHP must be evaluated under CEQA.

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

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

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic Preservation and encourages protection of resources of architectural, historical, archeological, and

cultural significance. The CRHR identifies historic resources for State and local planning purposes and affords protections under CEQA. Under Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria.[44, 45]

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.

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.

California Native American Historical, Cultural, and Sacred Sites Act

Section 5097.9 – 5097.991 of the Public Resource Code (he California Native American Historical, Cultural, and Sacred Sites Act) applies to both State and private lands, providing protection to Native American historical and cultural resources, and sacred sites, and identifies the powers and duties of the NAHC. The act requires that upon discovery of human remains, construction or excavation activity must cease and the county coroner be notified.

[44] Office of Historic Recreation Department of Parks and Recreation (OHP). 2001. *California Office of Historic Preservation Technical Assistance Series #1: California Environmental Quality Act (CEQA) and Historical Resources*. Available: https://ohp.parks.ca.gov/pages/1054/files/ts01ca.pdf. Accessed: July 5, 2023.

[45] Office of Historic Recreation Department of Parks and Recreation (OHP). 2011. *California Office of Historic Preservation Technical Assistance Series #6: California Register and National Register, A Comparison*. Available: http://www.parks.ca.gov/pages/1069/files/03ca%20regq&a_090606.pdf. Accessed: July 5, 2023.

Local

Santa Clara 2010-2035 General Plan[46]

The Conservation Goals and Polices section of the General Plan addresses the City's goals, policies, and implementing actions regarding cultural resources. The following policies in the General Plan related to cultural resources are applicable to the project:

5.6.3-P1 Require that new development avoid or reduce potential impacts to archaeological, paleontological and cultural resources.

5.6.3-P4 Require that a qualified archaeologist/paleontologist monitor all grading and/or excavation if there is potential to affect archeological or paleontological resources, including sites within 500 feet of natural water courses and in the Old Quad Neighborhood

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**.**

5.6.3-P6 In the event that human remains are discovered, work with appropriate Native American representative and follow the procedures set forth in State law.

Environmental Setting

A records search was completed at the Northwest Information Center of the California Historical Resources Information System (CHRIS) in August 2022. All records of identified archaeological resources within a quarter of a mile, and all other cultural resources and archaeological resources reports for projects within 50 meters of the project area were reviewed. Studies on file at Holman & Associates' library were also used.

No recorded cultural resources have been identified on the project site, nor have any been recorded within a quarter mile. There have been two cultural resource studies that cover in total approximately 20 percent of the project site (Edwards 1974: S-4182, Holson et al 2002: S-25173). No archaeological resources were found during these surveys. No resources are listed on Federal, State, or local inventories within or abutting the project site (CA-DPR 1976; CA-OHP 2012, 2020; NPS 2020).

In this part of the central Santa Clara Valley, prehistoric archaeological resources have been recorded on terraces adjacent to major creeks, at the margins of former marshes, and often at the confluences of two creeks. Several buried archaeological sites have been recorded near major waterways. The Patrick Henry Drive project area is in alluvial valley lands in Santa Clara County approximately 0.4 miles south of the southern reaches of San Francisco Bay and its associated marshlands, just east of Calabazas Creek, and west of Campbell Creek, now called Saratoga Creek. Aerial maps indicate a large building surrounded by landscaping and asphalted parking lot. Given the similarity of these environmental

[46] City of Santa Clara. 2010. 2010-2035 General Plan. Available at: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: July 3, 2023.

factors, there is a moderately high potential for unrecorded Native American resources to be within the proposed Patrick Henry Drive project area.

Review of historical literature and maps indicated the possibility of historic-period activity within the Patrick Henry Drive project area. Early General Land Office Plat Maps indicate the project area may contain fences (1866). In addition, early Santa Clara County maps indicate the project area was located within the landholdings of J.S. French. As this map failed to indicate any buildings within the project area, it is unclear if the project area was developed at this time (Thompson and West 1876: 24). With this information in mind, there is a moderate potential for unrecorded historic-period archaeological resources to be within the proposed Patrick Henry Drive project area.

The 1961 photo revised 1980 Milpitas United States Geological Survey (USGS) 7.5-minute topographic quadrangle does not depict any buildings or structures within the Patrick Henry Drive project area; therefore, there is a low potential for any buildings or structures 45 years or older to be within the Patrick Henry Drive project area.

Impact Discussion

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

No Impact. The project site has been previously developed and there are no State- or nationally eligible, listed, or local historic resources on or adjacent to the project site. Implementation of the project would have no impact on any historic resources.

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

Less than Significant with Mitigation. The project site has a moderate potential for containing prehistoric archaeological resources near the surface. Given the project site's moderate potential for containing archaeological resources near the surface, trenching and excavation of the project site could damage unrecorded subsurface resources, resulting in a significant impact. Therefore, the project will incorporate **Mitigation Measure CUL-1**, described below, to reduce the potential of significant impacts to archaeological resources to a less than significant level.

Impact CUL-1: Construction activities associated with the project, specifically ground disturbing activities, could adversely impact the significance of an archaeological resource.

CUL MM-1: Archaeological Monitoring

A Secretary of the Interior-qualified archaeologist and a Native American cultural resources monitor shall be on site to monitor grading and excavation of native soil. The contractor shall undergo a tribal cultural resources sensitivity training conducted by the Native American Monitor prior to the start of ground disturbing activities.

The project applicant shall submit the name and qualifications of the selected archaeologist and Native American Monitor to the Director of Community Development prior to the issuance of a grading permit. Preference in selecting Native American monitors shall be given to Native Americans with:

- Traditional ties to the area being monitored.
- Knowledge of local historic and prehistoric Native American village sites.
- Knowledge and understanding of Health and Safety Code, Section 7050.5 and Public Resources Code, Section 5097.9 et seq.
- Ability to effectively communicate the requirements of Health and Safety Code, Section 7050.5 and Public Resources Code, Section 5097.9 et seq.
- Ability to work with law enforcement officials and the NAHC to ensure the return of all associated grave goods taken from a Native American grave during excavation.
- Ability to travel to project sites within traditional tribal territory.
- Knowledge and understanding of Title 14, California Code of Regulations, Section 15064.5.
- Ability to advocate for the preservation in place of Native American cultural features through knowledge and understanding CEQA mitigation provisions.
- Ability to read a topographical map and be able to locate site and reburial locations for future inclusions in the NAHC's Sacred Lands Inventory.
- Knowledge and understanding of archaeological practices, including the phases of archaeological investigation.

c. Disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant with Mitigation. Although unlikely, trenching and excavation of the project site could disturb human remains and could result in a significant impact. Therefore, the project will incorporate **Mitigation Measure CUL-2**, described below, to reduce the potential of disturbance of human remains during construction to a less than significant level.

Impact CUL-2: During ground disturbing activities, the project could encounter human remains.

CUL MM-2: Protocol for Human Remains Discovery

If human remains are discovered during presence/absence testing or excavation and/or grading of the project site, all activity within a 50-foot radius of the find will be stopped. The County Coroner will be notified and shall determine 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 NAHC immediately. Once NAHC identifies the most likely descendants, the descendants will make recommendations regarding proper burial, which will be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines. All actions taken under this mitigation measure shall comply with Health and Human Safety Code § 7050.5(b).

2.6 Energy

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

Regulatory Setting

Federal

Energy Independence and Security Act of 2007

The Energy Independence and Security Act, enacted by Congress in 2007, is designed to improve vehicle fuel economy and help reduce the United States' dependence on foreign oil. It expands the production of renewable fuels, reducing dependence on oil, and confronting climate change. Specifically, it does the following:

- Increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard, requiring fuel producers to use at least 36 billion gallons of biofuel in 2022, which represents a nearly five-fold increase over current levels.
- Reduces U.S. demand for oil by setting a national fuel economy standard of 35 miles per gallon (mpg) by 2020 – an increase in fuel economy standards of 40 percent.

The Energy Independence and Security Act of 2007 also set energy efficiency standards for lighting (specifically light bulbs) and appliances. Development would also be required to install photosensors and energy-efficient lighting fixtures consistent with the requirements of 42 USC Section 17001 et seq.

Construction Equipment Fuel Efficiency Standards

The U.S. EPA sets emission standards for construction equipment. The first Federal standards (Tier 1) were adopted in 1994 for all off-road engines over 50 horsepower (hp) and were phased in by 2000. A new standard was adopted in 1998 that introduced Tier 1 for all equipment below 50 hp and established the Tier 2 and Tier 3 standards. The Tier 2 and Tier 3 standards were phased in by 2008 for all equipment. The current iteration of emissions standards for construction equipment are the Tier 4 efficiency requirements are contained in 40 Code of Federal Regulations Parts 1039, 1065, and 1068 (originally adopted in 69 Federal Register 38958 [June 29, 2004], and most recently updated in 2014 [79 Federal Register 46356]). Emissions requirements for new off-road Tier 4 vehicles were to be completely phased in by the end of 2015.

State

Executive Order B-55-18 To Achieve Carbon Neutrality

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

California Energy Plan

The California Energy Commission (CEC) is responsible for preparing the California Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The 2008 California Energy Plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies several strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and addressing their infrastructure needs, as well as encouragement of urban designs that reduce vehicle miles travelled and accommodate pedestrian and bicycle access.

Reducing California's Petroleum Dependence (Assembly Bill 2076)

Pursuant to AB 2076 (Chapter 936, Statutes of 2000), the CEC and CARB prepared and adopted a joint-agency report, Reducing California's Petroleum Dependence, in 2003. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita vehicle miles travelled. One of the performance-based goals of AB 2076 is to reduce petroleum demand to 15 percent below 2003 demand. Furthermore, in response to the CEC's 2003 and 2005 Integrated Energy Policy Reports, the Governor directed the CEC to take the lead in developing a long-term plan to increase alternative fuel use.

Integrated Energy Policy Report

Senate Bill (SB) 1389 (Chapter 568, Statutes of 2002) required the CEC to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The CEC uses these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the State's economy, and protect public health and safety. The most recent assessment, the 2018 Integrated Energy Policy Report, contains two volumes. Volume one highlights the implementation of California's innovative policies and the role they have played in establishing a clean energy economy. Volume two, adopted February 20, 2019, provides more detail on several key energy policies, including decarbonizing buildings, increasing energy efficiency savings, and integrating more renewable energy into the electricity system.

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.

California Renewable Portfolio Standard and Senate Bill 100

Established in 2002 under SB 1078, and accelerated by SB 107 (2006), SB X 1-2 (2011), and SB 100 (2018), California's Renewable Portfolio Standard (RPS) obligates investor-owned utilities, energy service providers, and community choice aggregators to procure 33 percent total retail sales of electricity from renewable energy sources by 2020, 60 percent by 2030, and 100 percent by 2045. SB 100 also states "that it is the policy of the State that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045." The California Public Utilities Commission and the CEC are jointly responsible for implementing the program.

Energy Action Plan

In the October 2005, the CEC and California Public Utilities Commission updated their energy policy vision by adding some important dimensions to the policy areas included in the original Energy Action Plan, such as the emerging importance of climate change, transportation-related energy issues. and research and development activities. The CEC adopted an update to the Energy Action Plan II in February 2008 that supplements the earlier energy action plans and examines the state's ongoing actions in the context of global climate change.

State Alternative Fuels Plan (Assembly Bill 1007)

AB 1007 (Chapter 371, Statutes of 2005), which went into effect in 2007, required the CEC to prepare a plan to increase the use of alternative fuels in California. The CEC prepared the State Alternative Fuels Plan in partnership with CARB and in consultation with other Federal, State, and local agencies. The Alternative Fuels Plan presents strategies and actions California must take to increase the use of alternative nonpetroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Bioenergy Action Plan (Executive Order S-06-06)

EO S-06-06 establishes targets for the use and production of biofuels and biopower and directs State agencies to work together to advance biomass programs in California while providing environmental

protection and mitigation. The EO establishes the following targets to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels in California by 2010, 40 percent by 2020, and 75 percent by 2050. EO S-06-06 also calls for the State to meet a target for the use of biomass electricity. The 2011 Bioenergy Action Plan identifies those barriers and recommends actions to address them so that the State can meet its clean energy, waste reduction, and climate protection goals. The 2012 Bioenergy Action Plan updated the 2011 Plan and provided a more detailed action plan to achieve the following goals:

- Increase environmentally and economically sustainable energy production from organic waste
- Encourage development of diverse bioenergy technologies that increase local electricity generation, combined heat and power facilities, renewable natural gas, and renewable liquid fuels for transportation and fuel cell applications
- Create jobs and stimulate economic development, especially in rural regions of the State
- Reduce fire danger, improve air and water quality, and reduce waste

Title 24, 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.[47] Compliance with Title 24 is mandatory at the time new building permits are issued by the City, as amended by the City of Santa Clara.[48]

Title 24 contains numerous subparts, including Part 1 (Administrative Code), Part 2 (Building Code), Part 3 (Electrical Code), Part 4 (Mechanical Code), Part 5 (Plumbing Code), Part 6 (Energy Code), Part 8 (Historical Building Code), Part 9 (Fire Code), Part 10 (Existing Building Code), Part 11 (Green Building Standards Code), Part 12 (Referenced Standards Code).

Part 6 (Building Energy Efficiency Standards)

Part 6 of Title 24 contains the Building Energy Efficiency Standards for new residential and non-residential buildings. Part 6 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. The Standards focus on four key areas: 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3) residential and nonresidential ventilation requirements; 4) and nonresidential lighting requirements.

Part 11 (CALGreen)

On July 17, 2008, the California Building Standards Commission (CBSC) adopted the nation's first green building standards. The California Green Building Standards Code (Title 24, Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code, and is updated every 3

[47] California Building Standards Commission (CBSC). 2022. *California Building Standards Code*. Available: https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo. Accessed: July 10, 2023.

[48] California Energy Commission (CEC). 2022, *2022 Building Energy Efficiency Standards*. Available:https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency . Accessed: October 23, 2023.

years. CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The mandatory provisions of the CALGreen became effective January 1, 2011 and were last updated in 2022. The 2022 Standards, which became effective on January 1, 2023, establish green building criteria for residential and nonresidential projects.

Local

City of Santa Clara Climate Action Plan

The City of Santa Clara CAP (2022) contains goals and policies that are designed to encourage reduced energy use. The following goals and policies that would apply to the project:

Building & Energy

Goal: Transition to clean, renewable energy sources and reduce energy consumption.

Action B-1-7: Carbon-neutral data centers. Require all new data centers to operate on 100 percent carbon neutral energy, with offsets as needed. This requirement does not apply to data centers with planning application approval within six months of the CAP adoption date.

Code of the City of Santa Clara

The City's energy code is codified in Chapter 15.36, Adoption of the Energy Code, of the Santa Clara City Code (SCCC). Chapter 15.36 adopts the 2022 California Energy Code as amended by the City of Santa Clara, published and copyrighted by the International Code Council, Inc., and the California Building Standards Commission in Part 6 of Title 24 of the California Code of Regulations.

Santa Clara 2010-2035 General Plan[49]

The Energy Goals and Polices section of the General Plan addresses the City's goals, policies, and implementing actions regarding energy. The following policies in the General Plan related to energy and energy use are applicable to the project:

5.10.3-P1 Promote the use of renewable energy resources, conservation and recycling programs.

5.10.3-P3 Maximize the efficient use of energy throughout the community by achieving adopted electricity efficiency targets and promoting natural gas efficiency, consistent with the CAP.

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.

[49] City of Santa Clara. 2010. *2010-2035 General Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: July 7, 2023.

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.

5.10.3-P11 Continue innovative energy programs to develop cost effective alternative power sources and encourage conservation.

Environmental Setting

Electricity

In 2021, California used 277,764 gigawatt-hours (GWh) of electricity, of which 35 percent were from renewable resources.[50] The project site would be provided electricity by Silicon Valley. **Table 2-7** shows the electricity consumption by sector and total for Silicon Valley Power. In 2021, Silicon Valley Power provided approximately 1.6 percent of the total electricity used in California.

Table 2-7 Electricity Consumption in the Silicon Valley Power Service Area in 2021

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Streetlight	Total Usage
0.1	3,090.7	46.2	910.9	80.2	251.1	3.0	4,382

Notes: All usage expressed in GWh

Source: California Energy Commission. 2023.

Petroleum

In 2021, the transportation sector used approximately 83 percent of the petroleum consumed in the State.[51] Californians presently consume over 19 billion gallons of motor vehicle fuels per year.[52] Though California's population and economy are expected to grow, gasoline demand is projected to decline from roughly 15.6 billion gallons in 2017 to between 12.1 billion and 12.6 billion gallons in 2030, a 19 percent to 22 percent reduction. This decline comes in response to both increasing vehicle electrification and higher fuel economy for new gasoline vehicles.[53]

[50] California Energy Commission. 2023. *Total System Electric Generation*. Available: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2021-total-system-electric-generation. Accessed: July 11, 2023.

[51] United States Energy Information Administration. 2020. *Total Energy Consumption Estimates per Capita by End-Use Sector, Ranked by State*. https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_sum/html/rank_use_capita.html&sid=US&sid=CA. Accessed: July 11, 2023

[52] California Energy Commission. 2017. *Revised Transportation Energy Demand Forecast 2018-2030*. Available: https://efiling.energy.ca.gov/getdocument.aspx?tn=221893. Accessed: July 11, 2023.

[53] California Energy Commission. 2017. *Revised Transportation Energy Demand Forecast 2018-2030*. Available: https://efiling.energy.ca.gov/getdocument.aspx?tn=221893. Accessed: July 11, 2023

Impact Discussion

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

Construction Energy Demand

Less than Significant Impact. During project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction workers travel to and from the project site, and vehicles used to deliver materials. In addition, the project would require hauling material offsite during demolition; vendor trips during building construction; and worker trips for all phases of construction, such as demolition, site preparation, grading, paving, building construction, and architectural coating.

The total gasoline and diesel fuel consumption during project construction was estimated using the assumptions and factors from CalEEMod used to estimate construction air emissions (**Appendix A**). **Table 2-8** presents the estimated construction phase energy consumption, indicating construction equipment and hauling and vendor trips would consume 86,103 gallons of diesel fuel, and worker trips would consume about 20,531 gallons of other petroleum fuel over the project construction period.

Table 2-8 Estimated Fuel Consumption during Construction

Fuel Type	Gallons of Fuel	MMBtu
Diesel Fuel (Construction Equipment)	61,727	7,868
Diesel Fuel (Hauling & Vendor Trips)	24,376	3,107
Other Petroleum Fuel (Worker Trips)	20,531	2,617
Total	**106,634**	**13,592**

Source: Rincon Consultants, 2023

The construction energy estimates represent a conservative estimate, which may overstate the energy consumption, because the construction equipment used in each construction phase was assumed to operate every day of construction.

Construction equipment would be maintained to applicable standards, and construction activity and associated fuel consumption and energy use would be temporary and typical for construction sites. It is reasonable to assume contractors would avoid wasteful, inefficient, and unnecessary fuel consumption during construction to reduce construction costs. Therefore, the project would not involve inefficient, wasteful, and unnecessary energy use during construction. The construction phase impact related to energy consumption would be less than significant and no mitigation is required.

Operational Energy Demand

The operation of the project would increase area energy demand from greater electricity consumption. Electricity would be used for heating and cooling systems, lighting, appliances, and water use. As stated above, the project would result in a net increase of daily vehicle trips compared to existing conditions. This is due to the project developing a building than existing conditions. Gasoline consumption is typically attributed to the trips generated from people employed by the project.

Operation of the project would consume approximately 78.74 GWh of electricity per year (**Appendix A**). The electricity provider, Silicon Valley Power (SVP), prepared a System Impact Study, which is included

as part of **Appendix A**. As detailed in that study, SVP can provide enough energy (4.5 MVA) to serve the primary use of the project (i.e., the office and engineering use) on the opening day of the project. The data center portion of the project would not be able to begin operation until 2029, when several transmission-related projects that were previously planned by SVP as part of separate projects would be completed. The analysis throughout the IS/MND assumes the data center portion of the project will begin operating concurrently with the rest of the project, which provides a "worst-case" scenario to ensure all air quality, noise, and greenhouse gas emissions impacts are captured.

The project would also comply with all standards set in CBC Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. California's Green Building Standards Code (CALGreen; California Code of Regulations, Title 24, Part 11) requires implementation of energy efficient light fixtures and building materials into the design of new construction projects. Furthermore, the 2022 Building Energy Efficiency Standards (CBC Title 24, Part 6) requires newly constructed buildings to meet energy performance standards set by the Energy Commission. As the name implies, these standards are specifically crafted for new buildings to result in energy efficient performance so that the buildings do not result in wasteful, inefficient, or unnecessary consumption of energy. The standards are updated every three years and each iteration is more energy efficient than the previous standards.

In conclusion, the construction of the project would be temporary and typical of similar projects and would not result in wasteful use energy. The operation of the project would increase the use of electricity on-site. However, the increase would be in conformance with the latest version of California's Green Building Standards Code and Building Energy Efficiency Standards. In addition, Silicon Valley Power and PG&E have sufficient supplies to serve the project. Therefore, the operation would not result in wasteful or unnecessary energy consumption.

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

Local Plans

Less than Significant Impact. As previously discussed in **Regulatory Setting**, the City's General Plan, CAP, and Reach Code include several goals and policies related to renewable energy and energy efficiency. The project's consistency with these goals and policies is evaluated in **Table 2-9**. As shown therein, the project would be consistent with renewable energy and energy efficiency plans.

Table 2-9 Project Consistency with Plans for Renewable Energy and Energy Efficiency

Energy Efficiency Goal or Policy	Project Consistency
Santa Clara General Plan	
Goal 5.10.3-G1. Energy supply and distribution maximizes the use of renewable resources. Policy 5.10.3-P1. Promote the use of renewable energy resources, conservation and recycling programs.	**Consistent**. The project would source its electricity from Silicon Valley Power, which has a renewable energy procurement portfolio of 35.9 percent renewable resources. Silicon Valley Power is subject to the provisions of SB 100, which requires utility providers to increase their renewable energy procurement portfolios to 60 percent by 2030 and 100 percent by 2045. In addition, the project's data center use would comply with City of Santa Clara CAP Action B-1-7 for 100 percent carbon-neutral energy Therefore, the project would be consistent with Goal 5.10.3-G1.
Goal 5.10.3-G2. Implementation of energy conservation measures to reduce consumption. Policy 5.10.3-P4. Encourage new development to incorporate sustainable building design, site planning and construction, including encouraging solar opportunities. Policy 5.10.3-P5. Reduce energy consumption through sustainable construction practices, materials, and recycling. Policy 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.	**Consistent**. The building would comply with the latest iteration of Title 24 standards. The building design would also follow LEED guidelines. The project would also be required to comply with the requirements of 2022 CALGreen, which mandates a minimum diversion rate of 65 percent for construction and demolition waste. In addition, the project would provide electric vehicle charging stations, install WaterSense bathroom utilities, and high efficiency HVAC and water heater systems. Therefore, the project would be consistent with Goal 5.10.3-G3, Policy 5.10.3-P4, Policy 5.10.3-P5, and Policy 5.10.3-P6.
Goal: Transition to clean, renewable energy sources and reduce energy consumption. Action B-1-7: Carbon-neutral data centers. Require all new data centers to operate on 100 percent carbon neutral energy, with offsets as needed. This requirement does not apply to data centers with planning application approval within six months of the CAP adoption date.	**Consistent**. The project's data center would operate on 100 percent carbon neutral energy.
Santa Clara Reach Code (Ordinance No. 2056)	
Section 15.36.040 All Electric Buildings. All newly constructed buildings shall be All-Electric Buildings	**Consistent.** The project would only use electricity for lighting, heating, etc. No natural gas would be used.
Section 15.36.090 (d) Solar Panel Requirements for all new nonresidential and high-rise residential buildings. Under this section, all new nonresidential and high-rise buildings greater than or equal to 10,000 square feet must install a minimum 5-kW photovoltaic system.	**Consistent.** The project would comply with this policy by installing a minimum 5-kW photovoltaic system on the rooftop.
Section 15.38.050 (b) Electric Vehicle (EV) Capable Spaces and Section 15.38.050 (c) EV Charging Stations. Under these sections, nonresidential buildings must dedicate 35 percent of total proposed parking spaces	**Consistent.** The project would include a total of 658 parking stalls. To comply with these sections of the Reach Code, the project would need to provide 230 Level 2 EV charging stations at the start of project

Energy Efficiency Goal or Policy	Project Consistency
as Level 2 EV charging stations (i.e., stations with a 208/240 volt, 40-ampere capacity) and an additional 35 percent as EV-capable spaces (i.e., spaces that can easily be converted to EV charging stations as demand for such spaces increases). Under this section, fast charging stations (i.e., Level 3 EV charging stations with capacity to provide at least 80 kW output) may be substituted for slower Level 2 EV charging stations at a ratio of 1:11.	operation and 230 EV-capable spaces. To meet this requirement, the project would include a total of 97 Level 2 EV charging stations and 33 Level 3 charging stations (equivalent to 363 Level 2 chargers). Thus, the project would provide the equivalent of 460 Level 2 EV charging stations at the start of project operation.

Sources: City of Santa Clara 2014, City of Santa Clara 2022

2.7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in the most recent version of the California Building Code, creating substantial direct or indirect risks to life or property?	☐	☒	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Regulatory Setting

Federal

The National Environmental Policy Act of 1969 (NEPA)

The National Environmental Policy Act of 1969, [NEPA] as amended (Public Law [Pub. L.] 91-190, 42 United States Code [USC] 4321-4347, January 1, 1970, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, and Pub. L. 97-258 § 4(b), Sept. 13, 1982) recognizes the continuing responsibility of the Federal Government to "preserve important historic, cultural, and natural aspects of our national heritage." (Sec. 101 [42 USC § 4321]) (#382). With the passage of the Paleontological Resources Preservation Act (PRPA) (2009), paleontological resources are considered to be a significant resource and it is therefore now standard practice to include paleontological resources in NEPA studies in all instances where there is a possible impact.

State

Alquist-Priolo Earthquake Fault Zoning Act[54]

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 the 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. The California Geological Survey 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.

[54] Alquist-Priolo Earthquake Fault Zoning Act. Stats. 1994. *Chapter 7.5. Earthquake Fault Zoning [2621 - 2630]*. Available: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?division=2.&chapter=7.5.&lawCode=PRC. Accessed: July 3, 2023.

California Division of Occupational Safety and Health Regulations

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

Public Resources Code Section 5097.5

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

Local

Santa Clara 2010-2035 General Plan[55]

The Safety Goals and Polices section of the General Plan addresses the City's goals, policies, and implementing actions regarding geology, soils, and seismicity. The following policies in the General Plan related to geology, soils, and seismicity are applicable to the project:

5.6.3-P1 Require that new development avoid or reduce potential impacts to archaeological, paleontological and cultural resources.

5.6.3-P4 Require that a qualified archaeologist/paleontologist monitor all grading and/or excavation if there is potential to affect archeological or paleontological resources, including sites within 500 feet of natural water courses and in the Old Quad Neighborhood

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**.**

5.10.5-P5 Regulate development, including remodeling or structural rehabilitation, to ensure adequate mitigation of safety hazards, including flooding, seismic, erosion, liquefaction and subsidence dangers.

5.10.5-P6 Require that new development is designed to meet current safety standards and implement appropriate building codes to reduce risks associated with geologic conditions.

[55] City of Santa Clara. 2010. *2010-2035 General Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: July 3,2023.

5.10.5-P7 Implement all recommendations and design solutions identified in project soils reports to reduce potential adverse effects associated with unstable soils or seismic hazards.

5.10.5-P10 Support efforts by the Santa Clara Valley Water District to reduce subsidence.

5.10.5-P16 Require new development to implement erosion and sedimentation control measures to maintain an operational drainage system, preserve drainage capacity and protect water quality.

5.10.5-P17 Require that grading and other construction activities comply with the Association of Bay Area Governments' Manual of Standards for Erosion and Sediment Control Measures and with the California Stormwater Quality Association (CASQA), Stormwater Best Management Practice Handbook for Construction.

Environmental Setting

The project site is in the Santa Clara Valley, a relatively flat alluvial basin, bounded by the Santa Cruz Mountains to the west and southwest, the Diablo Mountain Range to the east, and the San Francisco Bay to the north. A project-specific geotechnical investigation was completed for the project site in January 2022, and the report is included as **Appendix E** to this Initial Study. The soil setting consists of alluvium derived from the parent material of metamorphic and sedimentary rocks.[56] The soil contains an underlain of Holocene alluvial fan deposits (Qhff). Sedimentary rock has the potential to contain paleontological resources such as fossils. The General Plan requires a paleontologist be present during all grading or excavation if paleontological resources are present.

No known active or potentially active faults cross the project site, and the project site is not within an Earthquake Fault Zone as delineated by the Alquist-Priolo Earthquake Fault Zoning Act. However, the project site is located within a State-designated Liquefaction Hazard Zone as well as a Santa Clara County Liquefaction Hazard Zone.[57] Soil liquefaction is a condition where saturated granular soils near the current grade undergo a significant loss of strength during seismic events. Loose, water-saturated soils are transformed from a solid to a liquid State during ground shaking. Liquefaction can result in significant deformations and ground rupture. Soils most susceptible to liquefaction are loose, uniformly graded, saturated, fine-grained sands that lie close to the current grade.

While the project is not within an Earthquake Fault Zone, the San Francisco Bay Area region has several known seismically active faults, making the area subject to strong ground shaking in the event of an earthquake. The closest faults to the project site are the Hayward-Rodgers Creek fault (located 6.65 miles away), Monte Vista-Shannon fault (8.14 miles away), Calaveras fault (10.06 miles away), and the North San Andreas fault (11.31 miles away).

[56] USDA Natural Resources Coservation Service. 2022. *Web Soil Survey*. Available: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed: July 28, 2023.

[57] California Department of Conservation. 2016. *Earthquake Zones of Required Investigation*. Available: https://maps.conservation.ca.gov/cgs/EQZApp/. Accessed: July 3, 2023.

Impact Discussion

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

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault?

Less than Significant Impact. The site is not within a currently established State of California Earthquake Fault Zone or Santa Clara County Geologic Hazard Zone for surface fault rupture hazards. No active or potentially-active faults are known to pass directly beneath the site. Therefore, the potential for surface rupture during the design life of project is low. Due to the distances of faults from the project site, and the absence of known faults within or near the project site, implementation of the project would not expose people or buildings to known risks of fault rupture. Thus, the impact would be less than significant and no mitigation is required.

ii. Strong seismic ground shaking?

Less than Significant Impact. Earthquakes along several nearby active faults in the region could cause moderate to strong ground shaking at the project site. The intensity of the earthquake ground motions and the damage done by shaking would depend on the characteristics of the generating fault, distance to the fault and rupture zone, earthquake magnitude, earthquake duration, and site-specific geologic conditions. Given that the entire San Francisco Bay Area region is subject to strong seismic ground shaking during a large earthquake event, risks involving seismic ground shaking at the project site are typical for the region. While the potential for seismic ground shaking cannot be eliminated, the building would be constructed to comply with the 2022 CBC and other applicable standards and practices for earthquake-resistant construction. Compliance with these standards and practices reduces the risks associated with strong seismic ground shaking at the project site. Therefore, impacts related to seismic ground shaking would be less than significant and no mitigation is required.

iii. Seismic-related ground failure, including liquefaction?

Less than Significant Impact.

The project site is located within a State-designated Liquefaction Hazard Zone as well as a Santa Clara County Liquefaction Hazard Zone.[58] The likely consequence of potential liquefaction at the site would be settlement. As previously mentioned, the project would be constructed in compliance with the 2022 CBC, including all applicable seismic standards for structures. Compliance with the 2022 CBC reduces potential risks associated with settlement from seismically-induced liquefaction. Additionally, the following Condition of Approval would further limit the risk of settlement from soil liquefaction.

Condition of Approval

The project could experience potential settlement or structural issues because of soil liquefaction. To reduce risks associated with soil liquefaction, the project will be built using

[58] City of Santa Clara. 2008. *Santa Clara General Plan - Seismic, Geologic and Soil Hazards*. Available: https://www.santaclaraca.gov/our-city/departments-a-f/community-development/planning-division/general-plan. Accessed: November 2022.

standard engineering and seismic safety design techniques. Building design and construction at the site shall be completed in conformance with the recommendations of the project-specific geotechnical investigation (**Appendix E**). Such recommendations include, but are not limited to, the use of shallow foundations such as spread footings that are designed to maintain structural integrity in the event of settlement from liquefaction. The project shall be designed to withstand soil hazards identified on the site and the project shall be designed to reduce the risk to life or property on site and off site to the extent feasible and in compliance with the California Building Code. The City shall approve the final building design to ensure adequate precautions are taken to limit risks from soil liquefaction.

With the condition of approval, potential risks associated with settlement from seismically-induced liquefaction would be reduced to a less than significant level.

iv. Landslides?

No Impact. The project site and surrounding area is relatively flat and does not have any steep slopes or hillsides that would be susceptible to landslides. Therefore, the project would not be exposed to landslide-related hazards. No impact would occur.

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

Less than Significant Impact. Project construction would involve ground disturbing activities that would temporarily expose soils and increase the potential for soil erosion from wind or stormwater runoff. The project would be subject to the requirements of Provision C.3 of the City's National Pollutant Discharge Elimination System (NPDES) permit and would be required to comply with the City's Best Management Practices for erosion and sedimentation control during the construction period, as outlined in the NPDES permit. Additionally, the project would be subject to a post-construction NPDES Permit and Provision C.3 requirements, ensuring that the project would not include areas of exposed topsoil. This is described in detail in **Section 2.9, Hydrology and Water Quality**. As a result, impacts related to erosion and loss of topsoil would be less than significant and no mitigation is required.

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

Less than Significant Impact. Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal displacement of flat-lying alluvial material toward an open face, such as the steep bank of a stream channel. The nearest open face channel is Calabazas Creek located approximately 175 feet west of the project site with upslope towards the creek bank. There are no open faces along the western boundary of the project site and the potentially liquefiable layers are discontinuous. Furthermore, there is no historical evidence of lateral spreading in the vicinity of the project site Therefore, the potential for lateral spreading is low.

The project would be designed and constructed in accordance with standard engineering safety techniques and in conformance with the requirements of applicable current Building and Fire Codes, including the 2022 CBC, as adopted by the City. As described above, the project site is not at risk of lateral spreading or landslides. While the project could experience settlement or structural issues because of soil liquefication, the condition of approval described above would reduce these risks to a

less than significant level. Therefore, impacts related to soil stability would be less than significant and no mitigation is required.

d. Be located on expansive soil, as defined in the most recent version of the California Building Code, creating substantial direct or indirect risks to life or property?

Less than Significant with Mitigation. Moderate to highly expansive soils generally blanket the project site. Expansive soils can undergo significant volume changes when moisture content in the soil fluctuates. This continuous change in volume can cause building foundations to move unevenly and crack. To avoid risks associated with expansive soils, foundation design would be reviewed and approved by City engineers for compliance with the California Building Code and the 2022 CBC general foundation design standards. **Mitigation Measure GEO-1** would be implemented to reduce potential impacts from expansive soils to a less-than-significant level.

IMPACT GEO-1: The project site could expose people to hazards related to expansive soils.

MM GEO-1: Treatment of expansive soils

Expansive soils shall be addressed through treatment or removal, to reduce the potential for structural damage. Slabs-on-grade should have sufficient reinforcement and be supported on a layer of non-expansive fill. Treatment of expansive soil may include lime or other additives to reduce expansion potential. Footings should extend below the zone of seasonal moisture content variation. Expansive soils may also be replaced with a non-expansive fill material to a depth where the seasonal moisture content variation becomes relatively insignificant. The appropriate depth shall be determined by a qualified structural engineer. In addition, moisture changes in the surficial soils should be limited by directing drainage away from buildings, as well as limiting the water used for landscaping.

With implementation of **Mitigation Measure GEO-1**, potential risks associated with expansive soils would be reduced to be less than significant.

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

No Impact. The City sewer utility system would treat wastewater generated by the project. The project site is currently developed and connected to existing wastewater mains. The project does not include septic tanks, and no septic tanks are proposed. Therefore, no impact would occur.

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

Less than Significant with Mitigation. The project site is currently developed with an existing single-story building and parking lot. Ground disturbance from project construction activities would be primarily limited to previously disturbed areas. Project construction would require excavation up to 14 feet deep. As such, project construction may encounter paleontological resources. In the unlikely event that paleontological resources are encountered during construction, they may be inadvertently damaged or destroyed. This is a potentially significant impact. **Mitigation Measure GEO-2** would require the implementation of discovery procedures if paleontological resources are encountered and require a qualified paleontologist to recommend measures specific to the discovered resource. Implementation of **Mitigation Measure GEO-2** would reduce potential impacts to paleontological resources.

IMPACT GEO-2: The project could disturb a paleontological specimen.

MM GEO-2: Discovery of paleontological specimen

Discovery of a paleontological specimen during any phase of the project shall result in a work stoppage in the vicinity of the find until it can be evaluated by a professional paleontologist. Should loss or damage be detected, additional protective measures or further action (e.g., resource removal), as determined by a professional paleontologist, shall be implemented to mitigate the impact.

With implementation of **Mitigation Measure GEO-2**, potential impacts to paleontological resources would be reduced to be less than significant.

2.8 Greenhouse Gas Emissions

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

Regulatory Setting

Federal

Federal Clean Air Act

The U.S. Supreme Court determined in *Massachusetts et al. v. Environmental Protection Agency et al.* ([2007] 549 U.S. 05-1120) that the U.S. EPA has the authority to regulate motor vehicle GHG emissions under the Federal Clean Air Act. The U.S. EPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the U.S. EPA issued a Final Rule that established the GHG permitting thresholds that determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities.

In *Utility Air Regulatory Group v. Environmental Protection Agency* (134 Supreme Court 2427 [2014]), the U.S. Supreme Court held the U.S. EPA may not treat GHGs as an air pollutant for purposes of determining whether a source can be considered a major source required to obtain a Prevention of Significant Deterioration or Title V permit. The Court also held that Prevention of Significant Deterioration permits otherwise required based on emissions of other pollutants may continue to require limitations on GHG emissions based on the application of Best Available Control Technology.

State

California Air Resources Board

CARB is responsible for the coordination and oversight of State and local air pollution and GHG control programs in California. There are numerous regulations aimed at reducing the State's GHG emissions. These initiatives are summarized below. For more information on the Senate and Assembly Bills, executive orders, building codes, and reports previously discussed, and to view reports and research referenced below, please refer to the following websites: https://www.energy.ca.gov/data-

reports/reports/californias-fourth-climate-change-assessment, www.arb.ca.gov/cc/cc.htm, and https://www.dgs.ca.gov/BSC/Codes.

California Global Warming Solutions Act Of 2006 (Assembly Bill 32 And Senate Bill 32)

The "California Global Warming Solutions Act of 2006," (AB 32), outlines California's major legislative initiative for reducing GHG emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHG emissions to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 target of 431 million metric tons (MMT of CO_2e), which was achieved in 2016. CARB approved the Scoping Plan on December 11, 2008, which included GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among others.[59] Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since the Scoping Plan's approval.

The CARB approved the 2013 Scoping Plan update in May 2014. The update defined the CARB's climate change priorities for the next five years, set the groundwork to reach post-2020 statewide goals, and highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the State's longer term GHG reduction strategies with other State policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use.[60]

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, the CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, and implementation of recently adopted policies and legislation, such as SB 1383 and SB 100. The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with statewide per capita goals of six metric tons (MT) of CO_2e by 2030 and two MT of CO_2e by 2050.[61] As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, sub-regional, or regional level), but not for specific individual projects because they include all emissions sectors in the State.

[59] California Air Resources Board. 2008. *Climate Change Scoping Plan*. Available: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2008-scoping-plan-documents. Accessed: July 12, 2023.

[60] California Air Resources Board. 2014. *AB 32 Scoping Plan Website*. Available: http://www.arb.ca.gov/cc/scopingplan/scopingplan.htm. Accessed: July 12, 2023.

[61] California Air Resources Board. 2017. *California's 2017 Climate Change Scoping Plan*. Available: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed: July 12, 2023.

The California Climate Crisis Act (Assembly Bill 1279)

AB 1279 was passed on September 16, 2022 and declares the State would achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045. In addition, the bill directs the state to ensure that by 2045, statewide anthropogenic greenhouse gas emissions are reduced to at least 85 percent below the 1990 levels. The bill would require updates to the scoping plan (once every five years) to implement various policies and strategies that enable carbon dioxide removal solutions and carbon capture, utilization, and storage technologies.

2022 Update to The Climate Change Scoping Plan

In response to the passage of AB 1279 and the identification of the 2045 GHG reduction target, CARB published the Final 2022 Climate Change Scoping Plan in November 2022.[62] The 2022 Update builds upon the framework established by the 2008 Climate Change Scoping Plan and previous updates while identifying new, technologically feasible, cost-effective, and equity-focused path to achieve California's climate target. The 2022 Update includes policies to achieve a significant reduction in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands (NWL) to reduce emissions and sequester carbon, and the capture and storage of carbon.

The 2022 Update assesses the progress California is making toward reducing its GHG emissions by at least 40 percent below 1990 levels by 2030, as called for in SB 32 and laid out in the 2017 Scoping Plan, addresses recent legislation and direction from Governor Newsom, extends and expands upon these earlier plans, and implements a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045, as well as taking an additional step of adding carbon neutrality as a science-based guide for California's climate work. As stated in the 2022 Update, "The plan outlines how carbon neutrality can be achieved by taking bold steps to reduce GHGs to meet the anthropogenic emissions target and by expanding actions to capture and store carbon through the State's NWL and using a variety of mechanical approaches".[63] Specifically, the 2022 Update:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.
- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.
- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.
- Integrates equity and protecting California's most impacted communities as driving principles throughout the document.
- Incorporates the contribution of NWL to the State's GHG emissions, as well as their role in achieving carbon neutrality.

[62] California Air Resources Board. 2022. *2022 Scoping plan Documents.* Available: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed: July 12, 2023.

[63] California Air Resources Board. 2022. *2022 Scoping Plan Documents.* Available: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed: July 12, 2023.

- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture.
- Evaluates the substantial health and economic benefits of taking action.
- Identifies key implementation actions to ensure success.

In addition to reducing emissions from transportation, energy, and industrial sectors, the 2022 Update includes emissions and carbon sequestration in NWL and explores how NWL contribute to long-term climate goals. Under the Scoping Plan Scenario, California's 2030 emissions are anticipated to be 48 percent below 1990 levels, representing an acceleration of the current SB 32 target. Cap-and-Trade regulation continues to play a large factor in the reduction of near-term emissions for meeting the accelerated 2030 reduction target. Every sector of the economy will need to begin to transition in this decade to meet our GHG reduction goals and achieve carbon neutrality no later than 2045. The 2022 Update approaches decarbonization from two perspectives, managing a phasedown of existing energy sources and technologies, as well as increasing, developing, and deploying alternative clean energy sources and technology.

Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008 (SB 375), signed in August 2008, enhances the State's ability to reach AB 32 goals by directing the CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and affordable housing allocations. Metropolitan Planning Organizations (MPO) are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the MPO's Regional Transportation Plan (RTP). Qualified projects consistent with an approved SCS or Alternative Planning Strategy (categorized as "transit priority projects") can receive incentives to streamline CEQA processing.

On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The ABAG was assigned targets of a 3 percent reduction in per capita GHG emissions from passenger vehicles by 2020 and a 6 percent reduction in per capita GHG emissions from passenger vehicles by 2035.

Senate Bill 1383

Adopted in September 2016, SB 1383 (Lara, Chapter 395, Statues of 2016) requires the CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. SB 1383 requires the strategy to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

SB 1383 also requires the California Department of Resources Recycling and Recovery (CalRecycle), in consultation with the CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills.

Senate Bill 100

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's RPS Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Executive Order B-55-18

On September 10, 2018, the former Governor Brown issued EO B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

California Building Standards Code

The CCR Title 24 is referred to as the California Building Standards Code. It consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, and handicap accessibility for persons with physical and sensory disabilities. The current iteration is the 2022 Title 24 standards. The California Building Standards Code's energy-efficiency and green building standards are outlined below.

Part 6 – Building Energy Efficiency Standards/Energy Code. CCR Title 24, Part 6 is the Building Energy Efficiency Standards or California Energy Code. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings to reduce California's energy demand. New construction and major renovations must demonstrate their compliance with the current Energy Code through submittal and approval of a Title 24 Compliance Report to the local building permit review authority and the CEC. The 2022 Title 24 standards are the applicable building energy efficiency standards for the proposed Project because they became effective on January 1, 2023.

Part 11 – California Green Building Standards. The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11, first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 California Building Standards Code). The 2022 CALGreen includes mandatory minimum environmental performance standards for all ground-up new construction of residential and non-residential structures. It also includes voluntary tiers with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory CALGreen standards and may adopt additional amendments for stricter requirements.

The mandatory standards applicable to the project require:

- 20 percent reduction in indoor water use relative to specified baseline levels;[64]
- Waste Reduction:

[64] Similar to the compliance reporting procedure for demonstrating Energy Code compliance in new buildings and major renovations, compliance with the CALGreen water-reduction requirements must be demonstrated through completion of water use reporting forms. Buildings must demonstrate a 20 percent reduction in indoor water use by either showing a 20 percent reduction in the overall baseline water use as identified in CALGreen or a reduced per-plumbing-fixture water use rate.

    - Non-residential: Reuse and/or recycling of 100 percent of trees, stumps, rocks, and associated vegetation soils resulting from primary land clearing;
- Inspections of energy systems to ensure optimal working efficiency;
- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particleboards;
- EV Charging for New Construction:[65]
    - Non-residential land uses shall comply with the following EV charging requirements based on the number of passenger vehicle parking spaces:
        - 0-9: no EV capable spaces or charging stations required;
        - 10-25: 4 EV capable spaces but no charging stations required;
        - 26-50: 8 EV capable spaces of which 2 must be equipped with charging stations;
        - 1-75: 13 EV capable spaces of which 3 must be equipped with charging stations;
        - 76-100: 17 EV capable spaces of which 4 must be equipped with charging stations;
        - 101-150: 25 EV capable spaces of which 6 must be equipped with charging stations;
        - 151-200: 35 EV capable spaces of which 9 must be equipped with charging stations; and
        - More than 200: 20 percent of the total available parking spaces of which 25 percent must be equipped with charging stations;
    - Non-residential land uses shall comply with the following EV charging requirements for medium- and heavy-duty vehicles: warehouses, grocery stores, and retail stores with planned off-street loading spaces shall install EV supply and distribution equipment, spare raceway(s) or busway(s) and adequate capacity for transformer(s), service panel(s), or subpanel(s) at the time of construction based on the number of off-street loading spaces as indicated in Table 5.106.5.4.1 of the California Green Building Standards;
- Bicycle Parking:
    - Non-residential short-term bicycle parking for projects anticipated to generate visitor traffic: permanently anchored bicycle racks within 200 feet of visitor entrance for five percent of new visitor motorized vehicle parking spaces with a minimum of one 2-bike capacity rack; and/or
    - Non-residential buildings with tenant spaces of 10 or more employees/tenant-occupants: secure bicycle parking for five percent of the employee/tenant-occupant vehicle parking spaces with a minimum of one bicycle parking facility.
- Shade Trees (Non-Residential):
    - Surface parking: minimum No. 10 container size or equal shall be installed to provide shade over 50 percent of the parking within 15 years (unless parking area covered by appropriate shade structures and/or solar);
    - Landscape areas: minimum No. 10 container size or equal shall be installed to provide shade of 20 percent of the landscape area within 15 years; and/or

[65] EV Capable = a vehicle space with electrical panel space and load capacity to support a branch circuit and necessary raceways to support EV charging; EV-ready = a vehicle space which is provided with a branch circuit and any necessary raceways to accommodate EV charging stations, including a receptacle for future installation of a charger (see 2022 California Green Building Standard Code, Title 24 Part 11 for full explanation of mandatory measures, including exceptions).

- Hardscape areas: minimum No. 10 container size or equal shall be installed to provide shade of 20 percent of the landscape area within 15 years (unless covered by applicable shade structures and/or solar or the marked area is for organized sports activities).

The voluntary Tier I and Tier II standards require:

- Tier I:
    - Stricter energy efficiency requirements;
    - Stricter water conservation requirements for specific fixtures;
    - minimum 65 percent reduction in construction waste with third-party verification, Minimum 10 percent recycled content for building materials;
    - Minimum 20 percent permeable paving;
    - Minimum 20 percent cement reduction;
- Tier II:
    - Stricter energy efficiency requirements,
    - Stricter water conservation requirements for specific fixtures;
    - Minimum 75 percent reduction in construction waste with third-party verification
    - Minimum 15 percent recycled content for building materials;
    - Minimum 30 percent permeable paving; and/or
    - Minimum 25 percent cement reduction.

California Integrated Waste Management Act (Assembly Bill 341)

The California Integrated Waste Management Act of 1989, as modified by AB 341 in 2011, requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows: (1) diversion of 25 percent of all solid waste by January 1, 1995, through source reduction, recycling, and composting activities and (2) diversion of 50 percent of all solid waste on and after January 1, 2000.

Executive Order N-79-20

On September 23, 2020, Governor Newsom issued EO N-79-20, which established the following new statewide goals:

- All new passenger cars and trucks sold in-state to be zero-emission by 2035;
- All medium- and heavy-duty vehicles in the State to be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks; and
- All off-road vehicles and equipment to be zero-emission by 2035 where feasible.

EO N-79-20 directs CARB, the Governor's Office of Business and Economic Development, the CEC, the California Department of Transportation, and other State agencies to take steps toward drafting regulations and strategies and leveraging agency resources toward achieving these goals.

Clean Energy, Jobs, And Affordability Act Of 2022 (Senate Bill 1020)

Adopted on September 16, 2022, SB 1020 creates clean electricity targets for eligible renewable energy resources and zero-carbon resources to supply 90 percent of retail sale electricity by 2035, 95 percent by 2040, 100 percent by 2045, and 100 percent of electricity procured to serve all State agencies by 2035. This bill states that to achieve this, carbon emissions should not be increased elsewhere in the western grid.

Local

BAAQMD CEQA GHG Guidelines

BAAQMD has adopted thresholds of significance to assist in the review of operational GHGs under CEQA. BAAQMD has not adopted a threshold for construction-period GHG emissions, as GHG emission impacts reflect the long-term and cumulative effect of GHG on a global scale, while construction-period emissions are intermittent and temporary. These thresholds are designed to establish the level at which GHG emissions would cause significant environmental impacts. The significance thresholds identified by BAAQMD for GHG emissions established on April 20, 2022, include the following project design elements for Land Use projects:

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

A project would also have a less-than-significant impact if it is consistent with a local GHG reduction strategy. In accordance with CEQA Guidelines Section 15064(h)(3) and BAAQMD guidance, the City's CAP, which qualifies as a GHG reduction strategy, would be the relevant local GHG reduction strategy for this project.

Plan Bay Area 2050

Plan Bay Area 2050 is a State-mandated, integrated long-range transportation, land-use, and housing plan that would support a growing economy, provide more housing and transportation choices and reduce transportation-related pollution in the nine-county San Francisco Bay Area.[66] "Plan Bay Area 2050 connects the elements of housing, the economy, transportation and the environment through 35 strategies that will make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges. In the short-term, the plan's Implementation Plan identifies more than 80 specific actions for Metropolitan Transportation Commission (MTC), ABAG, and partner organizations to take over the next five years to make headway on each of the 35 strategies.[67]

[66] Association of Bay Area Governments. 2021. *Plan Bay Area 2050.* Available: https://www.planbayarea.org/finalplan2050. Accessed: July 12, 2023.

[67] Bay Area Metro. 2022. *Final Plan Bay Area 2050.* Available: https://www.planbayarea.org/finalplan2050. Accessed: July 12, 2023.

City of Santa Clara Climate Action Plan

The City of Santa Clara adopted an updated CAP on June 7, 2022.[68] The City of Santa Clara CAP specifies the strategies and measures to be taken for a number of focus areas (data centers, coal-free and large renewables, energy efficiency, water conservation, transportation and land use, waste reduction, etc.) citywide to achieve the overall emission reduction target and includes an adaptive management process that can incorporate new technology and respond when goals are not being met.

CEQA clearance for discretionary development proposals are required to address the consistency of individual projects with reduction measures in the City of Santa Clara CAP and goals and policies in the Santa Clara General Plan designed to reduce GHG emissions.

The following strategies relate to the project:[69]

- Strategy B1: Shift to electric fuels in new and existing buildings to achieve net-zero carbon buildings.
    - B-1-7: Carbon-neutral data centers
- Strategy B2: Improve energy efficiency
- Strategy T1: Transition vehicles to electric alternatives; and
- Strategy N3: Improve water supply and conservation.

Santa Clara 2010-2035 General Plan[70]

The Air Quality Goals and Policies and other sections of the General Plan address the City's goals, policies, and implementing actions regarding GHG emissions. The following policies in the General Plan related to GHG emissions from automobile travel are applicable to the project:

5.10.2-P3 Encourage implementation of technological advances that minimize public health hazards and reduce the generation of air pollutants.

5.10.2-P4 Encourage measures to reduce greenhouse gas emissions to reach 30 percent below 1990 levels by 2020.

Santa Clara Reach Codes Ordinance No. 2056

The City's Reach Code is an ordinance that exceeds and enhances the current version of the State's Energy and Green Building Standards codes. The City's Reach Code includes requirements aimed at reducing GHG emissions, including Section 15.38.050, Non-residential Mandatory Measures—Electric Vehicle (EV) Charging. This section requires that 35 percent of parking spaces for non-residential buildings (excluding hotels and motels) and non-residential portions of mixed-use buildings have EV chargers. Another 35 percent of the spaces must be EV capable.

[68] City of Santa Clara. 2022. City of Santa Clara Climate Action Plan. Available: https://www.santaclaraca.gov/home/showpublisheddocument/78208/637970130098870000. Accessed: July 12, 2023.

[69] City of Santa Clara. 2022. City of Santa Clara Climate Action Plan. Available: https://www.santaclaraca.gov/home/showpublisheddocument/78208/637970130098870000. Accessed: July 12, 2023.

[70] City of Santa Clara. 2010. *2010-2035 General Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: July 7, 2023.

Environmental Setting

Greenhouse Gas Overview

Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO_2e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than CO_2 on a molecule per molecule basis.[71,72]

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. The term "climate change" is often used interchangeably with the term "global warming," but climate change is preferred because it conveys that other changes are happening in addition to rising temperatures. The baseline against which these changes are measured originates from historical records that identify temperature changes that occurred in the past, such as during previous ice ages.

The global climate is changing continuously, as evidenced in the geologic record which indicates repeated episodes of substantial warming and cooling. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming over the past 150 years. The IPCC expressed that the rise and continued growth of atmospheric CO_2 concentrations is unequivocally due to human activities in the IPCC's Sixth Assessment Report (2021).

Human influence has warmed the atmosphere, ocean, and land, which has led the climate to warm at an unprecedented rate in the last 2,000 years. It is estimated that between the period of 1850 through 2019, that a total of 2,390 gigatonnes of anthropogenic CO_2 was emitted. It is likely that anthropogenic

[71] The Intergovernmental Panel on Climate Change's (2021) Sixth Assessment Report determined that methane has a GWP of 30. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change's (2007) Fourth Assessment Report. Therefore, this analysis utilizes a GWP of 25.

[72] Intergovernmental Panel on Climate Change. 2021. Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S. L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M. I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T. K. Maycock, T. Waterfield, O. Yelekçi, R. Yu and B. Zhou (eds.)] Cambridge University Press. Available: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf. Accessed: July 17, 2023.

activities have increased the global surface temperature by approximately 1.07 degrees Celsius (°C) between the years 2010 through 2019.[73]

Greenhouse Gas Emissions Inventory

Global Emissions Inventory

In 2015, worldwide anthropogenic GHG emissions totaled 47,000 MMT of CO_2e, which is a 43 percent increase from 1990 GHG levels. Specifically, 34,522 MMT of CO_2e of CO_2, 8,241 MMT of CO_2e of CH_4, 2,997 MMT of CO_2e of N_2O, and 1,001 MMT of CO_2e of fluorinated gases were emitted in 2015. The largest source of GHG emissions were energy production and use (includes fuels used by vehicles and buildings), which accounted for 75 percent of the global GHG emissions. Agriculture uses and industrial processes contributed 12 percent and six percent, respectively. Waste sources contributed three percent. These sources account for approximately 96 percent.[74]

United States Emissions Inventory

U.S. GHG emissions were 6,347.7 MMT of CO_2e in 2021 or 5,593.5 MMT CO_2e after accounting for sequestration. Emissions increased by 6.8 percent from 2020 to 2021. The increase from 2020 to 2021 reflects the was driven by an increase in CO_2 emissions from fossil fuel combustion which increased 7 percent relative to previous years and is primarily due to the economic rebounding after the COVID-19 Pandemic. In 2020, the energy sector (including transportation) accounted for 81 percent of nationwide GHG emissions while agriculture, industrial and waste accounted for approximately 10 percent, six percent and three percent respectively.[75]

California Emissions Inventory

Based on CARB California Greenhouse Gas Inventory for 2000-2020, California produced 369.2 MMT of CO_2e in 2020, which is 35.3 MMT of CO_2e lower than 2019 levels. The 2019 to 2020 decrease in emissions is likely due in large part to the impacts of the COVID-19 pandemic. The major source of GHG emissions in California is the transportation sector, which comprises 37 percent of the State's total GHG emissions. The industrial sector is the second largest source, comprising 20 percent of the State's GHG emissions while electric power accounts for approximately 16 percent.[76] The magnitude of California's total GHG emissions is due in part to its large size and large population compared to other States. However, a factor that reduces California's per capita fuel use and GHG emissions as compared to other States is its relatively mild climate. In 2016, the State of California achieved its 2020 GHG emission

[73] The Intergovernmental Panel on Climate Change. 2021. *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press. Available: https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_LongerReport.pdf. Accessed: July 11, 2023.

[74] United States Environmental Protection Agency. 2022. *Climate Change Indicators: Global Greenhouse Gas Emissions*. Available: https://www.epa.gov/climate-indicators/climate-change-indicators-global-greenhouse-gas-emissions. Accessed: July 11, 2023.

[75] United States Environmental Protection Agency. 2023. *Inventory of Greenhouse Gas Emissions and Sinks: 1990-2021*. Available: https://www.epa.gov/system/files/documents/2023-02/US-GHG-Inventory-2023-Main-Text.pdf. Accessed: July 11, 2023.

[76] California Air Resources Board. 2022. *California Greenhouse Gas Emissions for 2000 to 2020 Trends of Emissions and Other Indicators*. Available: https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/2000-2020_ghg_inventory_trends.pdf. Accessed: July 11, 2023.

reduction target of reducing emissions to 1990 levels as emissions fell below 431 MMT of CO_2e. The annual 2030 statewide target emissions level is 260 MT of CO_2e.[77]

Local Emissions Inventory[78]

Based on the City of Santa Clara CAP, the City generated approximately 1.8 MMT of CO_2e in 2016. Nonresidential electricity consumption was the major source accounting for approximately 0.8 MMT of CO_2e. Transportation accounted for approximately 0.4 MMT of CO_2e. The remaining emissions came from natural gas usage, residential electricity consumption, landfilled waste and wastewater treatment. These 2017 GHG emissions are an approximately 4 percent reduction from 2008 GHG emissions (approximately 1.9 MMT of CO_2e) with the greatest reductions from non-residential natural gas usage. By 2030, the City is forecasted to generate 1.5 MMT of CO_2e if no further reduction measures are taken. Therefore, the City has an established a pathway towards achieving the following goals:

- SB 32 requirement of 40 percent reduction in emissions by 2030;
- City interim goal of an 80 percent reduction in emissions by 2035; and
- EO B-55-18 target of net carbon neutrality by no later than 2045.

The CAP has adopted strategies and actions that will meet the GHG reduction requirements of 40 percent below 2030 level with a pathway outlined to meet the long-term 2045 reduction goals of net neutrality, while working to achieve the aggressive interim goal of 80 reduction by 2035.

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources though potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. The year 2022 was the sixth warmest year since global records began in 1880 at 0.86°C (1.55°F) above the 20th century average of 13.9°C (57.0°F). This value is 0.13°C (0.23°F) less than the record set in 2016 and it is only 0.02°C (0.04°F) higher than the last year's (2021) value, which now ranks as the seventh highest.[79] Furthermore, several independently analyzed data records of global and regional Land-Surface Air Temperature obtained from station observations jointly indicate that Land Surface Air Temperature and sea surface temperatures have increased. Due to past and current activities, anthropogenic GHG emissions are increasing global mean surface temperature at a rate of 0.2°C per decade. In addition to these findings, there are identifiable

[77] California Air Resources Board. 2017. *California's 2017 Climate Change Scoping Plan*. Available: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed: July 11, 2023.

[78] City of Santa Clara. 2022. *City of Santa Clara Climate Action Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/78208/637970130098870000. Accessed July 12, 2023.

[79] National Oceanic and Atmospheric Administration. 2023. *Global Climate Report for Annual 2022*. Available: https://www.ncdc.noaa.gov/sotc/global/201813. Accessed: July 11, 2023.

signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades.[80,81]

Potential impacts of climate change in California may include reduced water supply from snowpack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years. California's Fourth Climate Change Assessment includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the State and regionally specific climate change case studies.[82] However, while there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy. A summary follows of some of the potential effects that climate change could generate in California.

Impact Discussion

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

and

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

Less than Significant Impact. Pursuant to the BAAQMD methodology, a project that complies with a qualified GHG reduction strategy would be considered to have less than significant GHG impact. As mentioned above, the City's CAP meets the criteria for a qualified GHG reduction strategy. The CAP includes numerous measures to reduce GHG emissions associated with project operation, and therefore provides a clear path to demonstrate if new development is consistent with the CAP. The project's consistency with the applicable CAP measures is shown in **Table 2-10**.

Table 2-10 Consistency with Santa Clara Emissions Reduction Strategies

Goals, Targets, and Policies	Consistency
City of Santa Clara General Plan Consistency	
Policy 5.10.2-P2: Encourage development patterns that reduce vehicle miles traveled and air pollution.	**Consistent.** The project would include a cafeteria on the ground floor of the building, which would potentially reduce employee needs for outside meals and vehicle miles traveled. In addition, the project site is within half a mile walking distance to bus & shuttle transit, and the Old Ironsides light rail station, which promotes alternative modes of transportation.

[80] International Panel on Climate Change. 2014. *Climate Change 2014 Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Available: https://www.ipcc.ch/site/assets/uploads/2018/02/ar4_syr_full_report.pdf. Accessed July 11, 2023

[81] International Panel on Climate Change. 2018. *Summary for Policymakers*. In: Global warming of 1.5°C. Available: https://www.ipcc.ch/sr15/. Accessed: July 11, 2023.

[82] California Natural Resources Agency. 2019. *California's Fourth Climate Change Assessment Statewide Summary Report*. Available: http://www.climateassessment.ca.gov/state/. Accessed. July 11, 2023

Goals, Targets, and Policies	Consistency
City of Santa Clara's Climate Action Plan	
***Strategy* B1:** Shift to electric fuels in new and existing buildings to achieve net-zero carbon buildings**.**	
Action B-1-7: Carbon-neutral data centers: Require all new data centers to operate on 100% carbon neutral energy, with offsets as needed. This requirement does not apply to data centers with planning application approval within six months of the CAP adoption date (June 7, 2022).	**Consistent.** The project's data center area would be designed to operate on 100 percent carbon neutral energy, acquiring emissions off-sets as necessary to meet this target; therefore, the project would be consistent with this measure.
Strategy B2: Improve Energy Efficiency	**Consistent.** The project would be consistent with the latest iteration of the Title 24 Standards that would include energy efficient lighting and appliances.
Strategy T1: Transition vehicles to electric alternatives	
Action T-1-2: EV charging for all new construction	**Consistent.** The project would include a total of 658 parking stalls. Under the City's reach code, nonresidential projects must provide 35 percent of total parking as Level 2 EV charging stations (i.e., stations with a 208/240 volt, 40-ampere capacity) and an additional 35 percent as EV-ready spaces. Level 3 charging stations (i.e., stations with capacity to provide at least 80 kW output), which charge cars faster than Level 2 stations, may be substituted for Level 2 EV charging stations at a 1:11 ratio. To comply with these requirements, the project would need to provide 230 Level 2 EV charging stations at the start of project operation and 230 EV-capable spaces. To meet this requirement, the project would include a total of 97 Level 2 EV charging stations and 33 Level 3 charging stations (equivalent to 363 Level 2 chargers). Thus, the project would provide the equivalent of 460 Level 2 EV charging stations at the start of project operation.
Strategy N3: Improve water supply and conservation	**Consistent.** The project would include plumbing fixtures that would be low-flow and WaterSense Labeled, which are products and services certified to use at least 20 percent less water and save energy.

Source: City of Santa Clara 2014a and 2022

As shown in **Table 2-10**, the project would be consistent with the City of Santa Clara CAP. Therefore, the project would be consistent with a qualified GHG reduction strategy. These impacts would be less than significant and no mitigation is required.

GHG Emissions for Informational Purposes

The construction and operational GHG emissions for the project are described below for informational purposes only.

Construction Emissions

Construction of the project would generate temporary GHG emissions primarily because of operation of construction equipment on-site, as well as from vehicles transporting construction workers to and from

the project site and heavy trucks to transport building materials and soil export. As shown in **Table 2-11**, construction of the project would generate an estimated total of 1,186 MT of CO_2e. Amortized over a 30-year period, construction of the project would generate an estimated total of 40 MT of CO_2e per year.

Table 2-11 Estimated GHG Emissions during Construction

Year	Annual Emissions (MT of CO_2e)
2023	217
2024	598
2025	371
Total	**1,186**
Amortized over 30 years	**40**

MT = metric tons; CO_2e = carbon dioxide equivalents

Operational Emissions

The project's data center would operate on 100 percent carbon neutral energy. Building operations aside from the data center would generate GHG emissions associated with area sources (e.g., landscape maintenance), energy and water usage, wastewater and solid waste generation, and off-road equipment. As shown in **Table 2-12**, total combined annual GHG emissions generated by the project would be approximately 15,469 MT of CO_2e per year.

Table 2-12 Estimated Annual Operational GHG Emissions

Source	Annual Emissions (MT of CO_2e)
Mobile	1,141
Area	5
Energy (Office and Engineering Use) *	13,983
Water	287
Waste	12
Refrigerant	1
Total	15,429
Amortized construction Emissions	40
Total Project Emissions	**15,469**

*As stated above, the data center component of the project would run on carbon neutral energy, and therefore would not have indirect GHG emissions associated with energy use. The values in this table represent indirect GHG emissions for the office and engineering uses of the building only.

MT = metric tons; CO_2e = carbon dioxide equivalents

2.9 Hazards and Hazardous Materials

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

Regulatory Setting

Federal

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;
- 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 conducted only at sites listed on U.S. 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.[83]

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. The RCRA gives U.S. EPA the authority to control hazardous waste from "cradle to grave" This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid waste.

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for the U.S. EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.[84]

State

Government Code Section 65962.5

Section 65962.5 of the Government Code requires California Environmental Protection Agency (CalEPA) to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by State and local agencies and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB).[85]

[83] United States Environmental Protection Agency (U.S. EPA). 2023. *Superfund: CERCLA Overview*. Available: https://www.epa.gov/superfund/superfund-cercla-overview. Accessed: July 19, 2023.

[84] United States Environmental Protection Agency (U.S. EPA). 2022. *Summary of the Resource Conservation and Recovery Act*. Available: https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act. Accessed: July 19, 2023.

[85] California Environmental Protection Agency (CalEPA). 2023. *Cortese List Data Resources*. Available: https://calepa.ca.gov/sitecleanup/corteselist/. Accessed: July 19, 2023.

California Accidental Release Prevention Program

The California Accidental Release Prevention (CalARP) Program aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond the boundaries of a property. Facilities that are required to participate in the CalARP Program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released. The Santa Clara Fire Department Community Risk Reduction Division reviews CalARP risk management plans as the Certified Unified Program Agency (CUPA). City codes covered by the CUPA include the Fire Code Hazardous Materials Requirements, Hazardous Materials Storage Permit Requirements, and Industrial Wastewater Permit and Inspections for the South County Regional Wastewater Authority (Sanitary Sewer Plant).

Local

Santa Clara 2010-2035 General Plan[86]

The Safety and Goals and Policies of the General Plan addresses the City's goals, policies, and implementing actions regarding hazards and hazardous materials. The following policies in the General Plan related to hazards and hazardous materials are applicable to the project:

5.10.5-P1 Use the City's Local Hazard Mitigation Plan as the guide for emergency preparedness in Santa Clara.

5.10.5-P11 Require that new development meet stormwater and water management requirements in conformance with State and regional regulations.

5.10.5-P12 Continue to participate in the National Flood Insurance Program and encourage all property owners within flood hazard areas to carry flood insurance.

5.10.5-P13 Require that development complies with the Flood Damage Protection Code.

5.10.5-P15 Require new development to minimize paved and impervious surfaces and promote on-site Best Management Practices for infiltration and retention, including grassy swales, pervious pavement, covered retention areas, bioswales, and cisterns, to reduce urban water run-off.

5.10.5-P16 Require new development to implement erosion and sedimentation control measures to maintain an operational drainage system, preserve drainage capacity and protect water quality.

5.10.5-P17 Require that grading and other construction activities comply with the Association of Bay Area Governments' Manual of Standards for Erosion and Sediment Control Measures and with the CASQA, Stormwater Best Management Practice Handbook for Construction.

5.10.5-P21 Require that storm drain infrastructure is adequate to serve all new development and is in place prior to occupancy.

[86] City of Santa Clara. 2010. *2010-2035 General Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: July 11, 2023.

5.10.5-P23 Require appropriate clean-up and remediation of contaminated sites.

5.10.5-P24 Protect City residents from the risks inherent in the transport, distribution, use and storage of hazardous materials.

5.10.5-P25 Use Best Management Practices to control the transport of hazardous substances and to identify appropriate haul routes to minimize community exposure to potential hazards.

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-P28 Continue to require all new development and subdivisions to meet or exceed the City's adopted Fire Code provisions.

Environmental Setting

A Phase I Environmental Site Assessment (ESA) was completed for the project site in July 2021.

Current and Historic Use of the Project Site

According to a review of historical records, the project site was undeveloped land from at least 1889 through 1960. Circa 1963 through 1968, the project site appeared to be agricultural land (row crops) and by 1974, the project site was vacant land. Circa 1979, construction of the current commercial/industrial began and construction was completed in 1980. Previous and current occupants of the project site have included the following: Dysan/Xidex Corporation/Anacomp (floppy and hard disk manufacturer; 1979-1991), Fujitsu Systems of America/Fujitsu Corporation (technology firm; 1994-2009), and Coherent Inc. (laser equipment manufacturer; 2014-2020). The surrounding area has historically been undeveloped or agricultural land until commercial and industrial development began in the 1960s. By 1993, the surrounding areas appears as primarily developed.

Given the historical use of the project site as agricultural row crops as observed on review of historical aerial photographs, soils were likely treated with pesticides, herbicides, and fertilizers. Evidence of large-scale use or disposal of pesticides, herbicides, or fertilizers, such as mixing tanks, chemical storage areas, sprayers, etc., was not observed on the project site. Evidence for the overuse of these materials, such as stressed vegetation, was not observed. Furthermore, the project site was subsequently graded and developed with the current commercial improvements and these activities would have involved the significant soil disturbance and mixing of soils.

On-Site Contamination

Former storage tanks, located to the west of the project site, included two 7,300-gallon underground storage tanks (USTs) containing methyl ethyl ketone (MEK), two 7,300-gallon USTs containing cyclohexanone, and two 10,000-gallon USTs containing diesel fuel. The USTs were originally installed in 1979 and utilized by Dysan Corporation/Xidex Corporation/Anacomp Industries. Subsurface investigations for the project site were first initiated in 1982, which detected concentrations of industrial solvents, including MEK, cyclohexanone, isopropanol, and acetone in both soil and groundwater in the vicinity of the USTs. From 1982-1994, various subsurface investigations and remedial activities were conducted including groundwater monitoring, groundwater extraction and treatment, and UST removal. Based on the latest rounds of groundwater sampling results, the RWQCB granted

regulatory closure with no further action required for this release case on March 23, 1994. All on-site groundwater monitoring wells were reportedly decommissioned in 1994 and 2014.

Given the removal of the USTs, completion of the groundwater remediation activities, and subsequent regulatory closure with NFA granted by the RWQCB, the closed release case is considered to represent a historical recognized environmental condition to the project site.

Off-Site Contamination

The Phase I ESA did not identify any significant sources of off-site contamination. A review of the Cortese list in March 2021 revealed that there are 15 Cortese sites within approximately 0.5 miles of the project site. All the listings within approximately 0.5 miles of the project site are closed, indicating no further action is required, and no violations or spills were reported.

Other Hazards

Airports

The project site is approximately 3.03 miles east from the Moffett Field Airport and approximately 3.35 miles northwest of San José International Airport, outside of the airport's noise impact area and Airport Influence Area as defined by the Airport Land Use Commission (ALUC). The project would not require referral to the ALUC and would not require an avigation easement to the City of San José.

Wildfire

The project is not located in or near a State Responsibility Area or lands classified as very high fire hazard severity zones (FHSZs).[87]

Asbestos and Lead-Based Paint

Since the existing building was constructed after 1978, building materials containing asbestos and lead-based paint are not expected to be present.

Impact Discussion

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

Less than Significant Impact. The project would involve the use of common types of potentially hazardous materials such as cleaners and pesticides for landscaping. All potentially hazardous materials used on the project site would be contained, stored, and used in accordance with manufacturer's instructions and handled in compliance with applicable standards and regulations. In accordance with Federal and State law, the project would be required to disclose hazardous materials handled at reportable amounts. Additionally, the project applicant would be required to prepare an emergency response and evacuation plan, conduct hazardous materials training, and notify employees who work in the vicinity of hazardous materials, in accordance with Federal Occupational Health and Safety

[87] CAL FIRE. *Fire Hazard Severity Zones Maps*. Available: https://osfm.fire.ca.gov/fire-hazard-severity-zones-maps-2022/. Accessed: July 3, 2023.

Administration (OSHA) and California Division of Occupational Safety and Health (Cal OSHA) requirements.

As the Certified Unified Program Agency for Santa Clara, the Santa Clara Fire Department Hazardous Materials Division (Hazardous Materials Division) is authorized to implement the California Aboveground Petroleum Storage Act (Act). The Hazardous Materials Division inspects facilities that store petroleum products in aboveground tanks for compliance with the Act and applicable sections of the Federal Spill Prevention, Control, and Countermeasure (SPCC) rule. Installation of above ground tanks on the project site would be subject to this inspection and project operation would comply with all relevant regulations.

The Hazardous Materials Division also administers the California Accidental Release Prevention Program within the City. The program requires assessment of hazard potential from the storage of hazardous materials on-site and the implementation of a Risk Management Plan to minimize the risk of accidental release. The fuel storage tanks would pose a risk to soils if an accidental release of fuel occurred. A Risk Management Plan would be required for the project to ensure the storage tanks are maintained and operated in a way that minimizes the risk of release. In the event of an accidental release, the Hazardous Materials Division would oversee required cleanup and remediation as required by local, State and Federal regulation.

With implementation of the required permit conditions and regulatory controls outlined above, impacts related to the routine use, transport, or disposal of hazardous materials would be less than significant and no mitigation is required.

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

Less than Significant with Mitigation. Construction activities would require building foundation work, including grading and excavation. The project site was previously used for agricultural row crops and industrial purposes, and its soils may therefore contain hazardous chemicals from exposure to pesticides and fertilizers. Construction workers would disturb potentially contaminated soils, releasing them locally as dust in the air where they could be absorbed through respiration, and/or absorption through physical contact with contaminated soils. This would represent a potentially significant impact to human health and safety.

Because on-site soils may contain agricultural chemicals such as organochlorine pesticides, soil management measures shall be required during construction/earthwork activities. Construction worker exposure would be managed by exercising appropriate dust control measures during construction activities. Because most of the project site would be capped by the office building and parking lot, agricultural chemicals present in the soil are not likely to present a significant health concern with respect to future users of the building. Given the possibility of direct exposure to contaminated soils through ground-disturbing activities during construction, **Mitigation Measure HAZ-1** would be required to ensure hazardous materials do not present a threat to human health or the environment.

IMPACT HAZ-1: During construction/earthwork activities, construction workers could be exposed to contaminated soils.

Mitigation Measure HAZ-1: A Site Management Plan (SMP) and Health and Safety Plan (HSP) shall be prepared.

A SMP and HSP shall be prepared for the proposed development activities. The purpose of these documents will be to establish appropriate management practices for handling impacted materials that may be encountered during construction activities. The SMP and HSP shall be forwarded to an appropriate regulatory agency, such as the Department of Toxic Substances Control or the Santa Clara County Department of Environmental Health, for review and approval. Excavated soil will be exported from the project site, and sampling of the soil will be required prior to disposal to identify and deliver to appropriate disposal facilities for disposal.

With implementation of **MM HAZ-1**, this impact would be less than significant.

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

No Impact. The closest school to the project site is Kathryn Hughes Elementary School, which is approximately 1.9 miles east of the project site. Because the project site is not located within a 0.25-mile radius of a school, it would not emit any hazardous emissions on educational establishments. No impact would occur.

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

No Impact. The project site is not included any of the lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5.[88] Therefore, no impact would occur.

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

No Impact. The project site is located approximately 3.03 miles east from the Moffett Field Airport and 3.35 miles northwest of San José International Airport. The project site is not located within an airport land use plan and, therefore, would not result in a safety hazard for people residing or working in the project area. [89] No impact would occur.

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. The City adopted the Santa Clara City Emergency Operations Plan in 2016 to assign responsibilities to designated city leaders, employees, departments, agencies, boards, and

[88] California Environmental Protection Agency (CalEPA). 2023. Cortese List Data Resources. Available: https://calepa.ca.gov/sitecleanup/corteselist/. Accessed: July 19, 2023.

[89] Santa Clara County. 2016. *Comprehensive Land Use Plan, Norman Y. Mineta San José International Airport*. Available: https://stgenpln.blob.core.windows.net/document/ALUC_SJC_CLUP.pdf . Accessed: July 12, 2023.

community and volunteer organizations in the event of a disaster. Santa Clara Fire Department (SCFD) currently serves the project site. Please refer to **Section 2.15, Public Services**, for more detailed information regarding fire and emergency services. The project does not include any changes to the existing public roadways that provide emergency access to the site or surrounding area. Operation of the project would require a maximum of 700 employees to be on-site, however, this increase is not expected to result in a significant increase in demand for emergency access. Therefore, the project would not impair the implementation of, or physically interfere with the City's Emergency Operations Plan, adopted in 2016. Impacts would be less than significant, and no mitigation is required.

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

No Impact. The project site is in a developed urban area containing no wildland areas. Calabazas Creek is west of the project site, but it contains concrete retaining walls and sparse vegetation surrounding the creek. Neighboring cities such as Sunnyvale, San José, and Cupertino adjacent to the City limits are also fully developed. The project site is not located adjacent to natural areas that would be subject to wildland fires. Therefore, the project would not result in any significant exposure of people or structures to wildland fires. No mitigation is required.

2.10 Hydrology and Water Quality

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

Regulatory Setting

Federal

Federal Clean Water Act

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 U.S. EPA and the SWRCB have been developed to fulfill the requirements of this legislation. U.S. EPA regulations include the NPDES permit program, which controls sources that discharge pollutants into the waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the RWQCBs. The project site is within the jurisdiction of San Francisco Bay Regional Water Quality Control Board (SFBRWQCB).

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.

State

Statewide Construction General Permit

The SWRCB has implemented an NPDES General Construction Permit for the State of California (Construction General Permit). For projects disturbing one acre or more of soil, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction. The Construction General Permit includes requirements for training, inspections, record keeping, and, for projects of certain risk levels, monitoring. The general purpose of the requirements 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.

Sustainable Groundwater Act of 2014

This act provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for State intervention, if necessary, to protect the resource. The act requires the formation of local groundwater sustainability agencies that must assess conditions in their local water basins and adopt locally-based management plans. The act provides a 20-year timeframe for achievement of long-term groundwater sustainability. The Department of Water Resources (DWR) is currently taking the initial steps in developing implementation guidance.

Regional

Valley Water Groundwater Management Plan

The Valley Water Groundwater Management Plan (GWMP) describes Valley Water's comprehensive groundwater management framework, including existing and potential actions to achieve basin sustainability goals and ensure continued sustainable groundwater management.[90] The plan covers the Santa Clara and Llagas subbasins, located entirely in Santa Clara County and satisfies the objectives of the Sustainable Groundwater Management Act. The groundwater management plan includes groundwater supply management programs that replenish the groundwater basin, sustain the basin's water supplies, help to mitigate groundwater overdraft, and sustain storage reserves for use during dry periods. The plan also includes groundwater monitoring programs that provide data to assist Valley Water in evaluating and managing the groundwater basin.

[90] Santa Clara Valley Water District (Valley Water). 2021. *Groundwater Management Plan for the Santa Clara and Llagas Subbasins*. Available: https://s3.us-west-2.amazonaws.com/assets.valleywater.org/2021_GWMP_web_version.pdf. Accessed: July 3, 2023.

Valley Water Urban Water Management Plan

Every five years, urban water suppliers in California are required by State law to prepare an Urban Water Management Plan (UWMP). Valley Water's 2020 UWMP is its most recent update.[91] Valley Water's 2020 UWMP documents current and projected water supplies and demands over the next 25 years during normal and drought years, as well as water reliability analysis and conservation efforts. The plan provides an overall picture of current and future water conditions and management in Santa Clara County.

As part of the 2020 UWMP, Valley Water expanded its Water Shortage Contingency Plan (WSCP) to a standalone document. The WCSP establishes actions and procedures for managing water shortages due to droughts and other emergencies consistent with new State regulations. It also summarizes other planning efforts related to natural disasters, drought revenue impacts, and Valley Water's legal authority and communication protocol to respond to water shortages.

Santa Clara Valley Urban Runoff Pollution Prevention Program[92]

The County's Stormwater Handbook defines low impact development (LID) as a land planning and engineering design approach with a goal of reducing stormwater runoff and mimicking a site's predevelopment hydrology by minimizing disturbed areas and impervious cover. The treatment consists of the removal of pollutants from stormwater runoff using the following types of stormwater treatment measures: infiltration, storing, detaining, evapotranspiration[93], rainwater harvesting and use, and biotreatment.

The development or redevelopment of a property represents an opportunity to incorporate post-construction controls that can reduce water quality impacts of the development over the life of the project. Since 2003, the Urban Runoff Program's municipal agencies have required new development and redevelopment projects to incorporate post-construction stormwater site design, source control, and treatment measures in their projects. The Municipal Regional Stormwater NPDES Permit (MRP), adopted by the San Francisco Bay Regional Water Quality Control Board in November 2015 includes requirements for incorporating LID-based post-construction stormwater control measures into new development and redevelopment projects. These requirements include projects that create and/or replace 5,000 square feet or more of impervious surface must comply with Provision C.3 of the MRP.

[91] Santa Clara Valley Water District (Valley Water). 2020. 2020 *Urban Water Management Plan*. Available: https://fta.valleywater.org/dl/pggls1SeCr. Accessed: July 3, 2023.

[92] Santa Clara Valley Urban Runoff Pollution Prevention Program. 2016 *C.3 Stormwater Handbook*. Available: https://watershed.sccgov.org/sites/g/files/exjcpb1226/files/SCVURPPP_C.pdf. Accessed: July 31, 2023.

[93] Evapotranspiration the process by which water is transferred from the land to the atmosphere by evaporation from the soil and other surfaces and by transpiration from plants.

Local

Santa Clara 2010-2035 General Plan[94]

The Water Goals and Policies and other sections of the General Plan address the City's goals, policies, and implementing actions regarding water supply. The following policies in the General Plan related water:

5.10.4-P3 Promote water conservation, recycled water use and sufficient water importation to ensure an adequate water supply.

5.10.4-P4 Require an adequate water supply and water quality for all new development.

5.10.4-P5 Prohibit new development that would reduce water quality below acceptable State and local standards.

5.10.4-P6 Maximize the use of recycled water for construction, maintenance, irrigation and other appropriate applications.

5.10.4-P7 Require installation of native and low-water-consumption plant species when landscaping new development and public spaces to reduce water usage.

5.10.4-P8 Require all new development within a reasonable distance of existing or proposed recycled water distribution systems to connect to the system for landscape irrigation.

5.10.4-P12 Encourage diversion of run-off from downspouts, and replacement of hardscapes to landscaped areas and permeable surfaces.

Environmental Setting

Water Supply

The City operates 26 wells that tap underground aquifers and make up about 62 percent of their potable water supply. A water recharge program is administered by Valley Water from local reservoirs, and imported water enhances the dependability of the underground aquifer. The remainder of the City's water supply consists of water imported from two wholesale water agencies. For certain non-potable uses, recycled water from the San José/Santa Clara Regional Wastewater Facility is used. This is highly treated water delivered through separate pipelines. This source makes up about 16 percent of water sales in the City. Recycled water offsets the use of potable sources in drought-prone California and is a reliable source for irrigation for conservation of potable sources. Valley Water approved and adopted an updated GWMP in 2021. Similarly, the City updates its UWMP every five years; its most recent version is the "2020 UWMP".[95] The project site is currently served by municipal water service.

[94] City of Santa Clara. 2010. *2010-2035 General Plan*. Available at: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: July 3, 2023.

[95] The "2020 UWMP" was actually adopted on June 22, 2021.

Stormwater

The RWQCB has issued an MRP (Permit Number CAS612008). The regional permit applies to 77 Bay Area municipalities, including the City. Under provisions of the MRP, redevelopment projects that create/replace more than 5,000 square feet of impervious surface (collectively over the entire project site) are required to design and construct stormwater treatment controls to treat post-construction stormwater runoff. Post-construction runoff must be treated by using LID treatment controls, such as biotreatment facilities.

In addition to water quality controls, the MRP requires all projects that create or replace 1 acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation or other impacts to beneficial uses of local rivers, streams, and creeks. Projects may be deemed exempt from the permit requirements if they do not meet the size threshold, drain into tidally influenced areas or directly into the Bay, drain into hardened channels, or are infill projects in sub-watersheds or catchment areas that are greater than or equal to 65 percent impervious (per the Santa Clara Hydromodification Management Applicability Map).

Catchments that receive storm runoff from the project site drain to a hardened channel, and the project is infill in an area that is 84 percent impervious. Therefore, the project site is not subject to the hydromodification requirements of the MRP.

Groundwater

During geotechnical investigations (see **Appendix E**), groundwater was encountered at depths ranging from approximately four to nine feet below the existing grade. Historic high groundwater levels in the immediate site vicinity are approximately four feet below existing grade. Fluctuations in groundwater levels are common due to seasonal fluctuation, underground drainage patterns, regional fluctuations, and other factors.

Tsunamis and Seiches

Seismically-induced ocean waves are caused by displacement of the sea floor by a submarine earthquake and are called tsunamis. Seiches are waves produced in a confined body of water such as a lake or reservoir by earthquake ground shaking or landslides. Seiches are possible at reservoir, lake, or pond sites. There are no large bodies of water near the project site, and the project site is not in a tsunami zone or at risk of seiche.

Impact Discussion

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less than Significant Impact. Under existing conditions, the project site consists of mostly impervious surfaces and some landscaped perimeter areas. Implementation of the project would remove the existing structure and replace it with approximately 211,000 square feet of impervious surfaces including an office and engineering building with a first-floor data center, electrical transformer, and surface parking lot. Therefore, the project would be subject to the requirements of Provision C.3 if the

MRP and would be required to comply with the City's BMPs for erosion and sedimentation control during construction, as outlined in the MRP.

As more than 1 acre of impervious surface would be distributed during construction, the project would be subject to a State NPDES General Construction Permit which would require submittal of a Notice of Intent to the State Water Resources Control Board. Additionally, the project would be subject to a post-construction NPDES Permit and Provision C.3 requirements, requiring incorporation of source control design elements to keep pollutants away from stormwater. Maintenance agreements, such as parking lot sweeping and catch basin cleaning, as well as storm drain signs and stenciling would be required by NPDES permit conditions.

Consistent with the City's LID requirements, the project would also include bioretention areas in landscaping design to ensure that particulates are removed from stormwater prior to discharge into a storm drain or creek. Compliance with the standard control measures outlined in the NPDES permit would ensure that impacts to water quality or waste discharge are less than significant during project operation. There is potential for degradation of surface or ground water quality, but with the permit above, impacts would not be significant and would be monitored accordingly.

Compliance with the control measures outlined in the State NPDES General Construction Permit would further ensure that impacts to water quality or waste discharge are less than significant and therefore, no mitigation is required.

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

Less than Significant Impact. Groundwater would not be extracted from the site via wells; rather the City would provide potable water services to the project, which would include some groundwater. Furthermore, due to the General Plan requirements, the project will use recycled water for landscape irrigation by connecting to the City's recycled water pipeline system which surrounds the project site and the surrounding area.[96] The City's water supply planning includes projected increases in water demand due to densification and intensification of non-residential uses.[97] The City's municipal water system currently has the capacity to provide up to 28.8 million gallons of water per day.[98]

According to the City of Santa Clara 2020 Urban Water Management Plan (UWMP), the City will have sufficient water supply to supply projected growth with water through 2045 in normal, dry, and multiple dry years through a combination of recycled water, groundwater, and water purchased from the San Francisco Public Utilities Commission and Valley Water. Furthermore, the City is planning to upgrade and extend the recycled water system to provide an opportunity for new developments and the City's parks to use recycled water and minimize the demand on potable water sources, including groundwater. Given that the project is consistent with the existing General Plan land use designation and zoning, the

[96] City of Santa Clara. June 2021. *Recycled Water System Map City of Santa Clara, California*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/74324/637598888014470000. Accessed: July 31, 2023.

[97] City of Santa Clara. June 2021. *Urban Water Management Plan.* Available: https://www.santaclaraca.gov/home/showpublisheddocument/74073/637606452907100000. Accessed: July 28, 2023.

[99] City of Santa Clara. 2010. *2010-2035 General Plan*. Available at: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: July 3, 2023.

project is accounted for in the projected growth analyzed in the City's 2020 UWMP. Therefore, the City will have sufficient water to serve the project without impeding sustainable groundwater management.

The project would not interfere with groundwater recharge as the impervious area added by the project would be roughly equivalent to existing conditions and will not incorporate the use of wells. Furthermore, the project will incorporate stormwater control improvements such as bioretention and flow-through planters into improved landscaping areas. Therefore, impacts to groundwater recharge or depletion from water use would be less than significant and no mitigation is required.

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

i. Result in substantial erosion or siltation on- or off-site;

Less than Significant Impact. The project site is located within the San Francisco Bay Watershed. Natural drainage features within this watershed include Calabazas Creek, Saratoga Creek, and San Tomas Aquino Creek. Calabazas Creek is located adjacent to the west of the project site, but the implementation of the project would not result in alteration of the creek or any work in or near the creek. The creek has been modified with retaining walls to prevent future erosion.

As previously described, the project would replace the existing development and maintain a similar pattern of landscaping, resulting in an amount of impervious surface that is like existing conditions. Adherence to the NPDES permitting described above would ensure the project does not result in substantial erosion. This impact would be less than significant and no mitigation is required.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

OR

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;

OR

iv. impede or redirect flood flows?

Less than Significant Impact. The project would alter the drainage of the site to effectively convey stormwater within the new site plan. A drainage plan has been prepared and will be implemented as part of the project. Through the City's design review process and standard conditions of approval, the applicant would be required to develop an acceptable on-site stormwater management plan. With adherence to this plan, stormwater volumes from the site would not be increased over existing conditions.

As project construction would involve ground disturbing activities of one acre or more, the project would be subject to the requirements of Provision C.3 of the City's NPDES permit. This permit would require all post construction runoff to be treated using LID treatment controls, such as biotreatment facilities. The site drainage would convey stormwater to onsite retention areas (LID) and/or to the City's stormwater system.

Once operational, the amount of surface runoff generated by the project would not increase compared to existing conditions, in compliance with Provision C.3 requirements and City regulations. For this reason, the project would not contribute to stormwater runoff which would exceed the capacity of the existing or planned stormwater drainage system or to offsite flooding.

As shown in **Figure 2-1** below, the project is located within FEMA Flood Zone X, areas determined to be outside of the 500-year floodplain. The project site is also identified as having reduced flood risk due to the presence of a levee. Therefore, the following measures are listed as Standard Conditions of Approval (as opposed to mitigation measures) as they are required by the project to address existing conditions in accordance with the City's General Plan policies, the Valley Water Groundwater Management Plan, FEMAs NFIP, and the Statewide Construction General Permit.

Condition of Approval

Prior to construction, the applicant shall prepare and submit a Stormwater Pollution Prevention Plan (SWPPP) to the City, delineating efforts to control the discharge of stormwater pollutants. The SWPPP shall include control measures during the construction period for:

- Soil Stabilization practices
- Sediment control practices
- Sediment tracking control practices
- Wind erosion control practices, and
- Non storm water management and waste management and disposal control practices

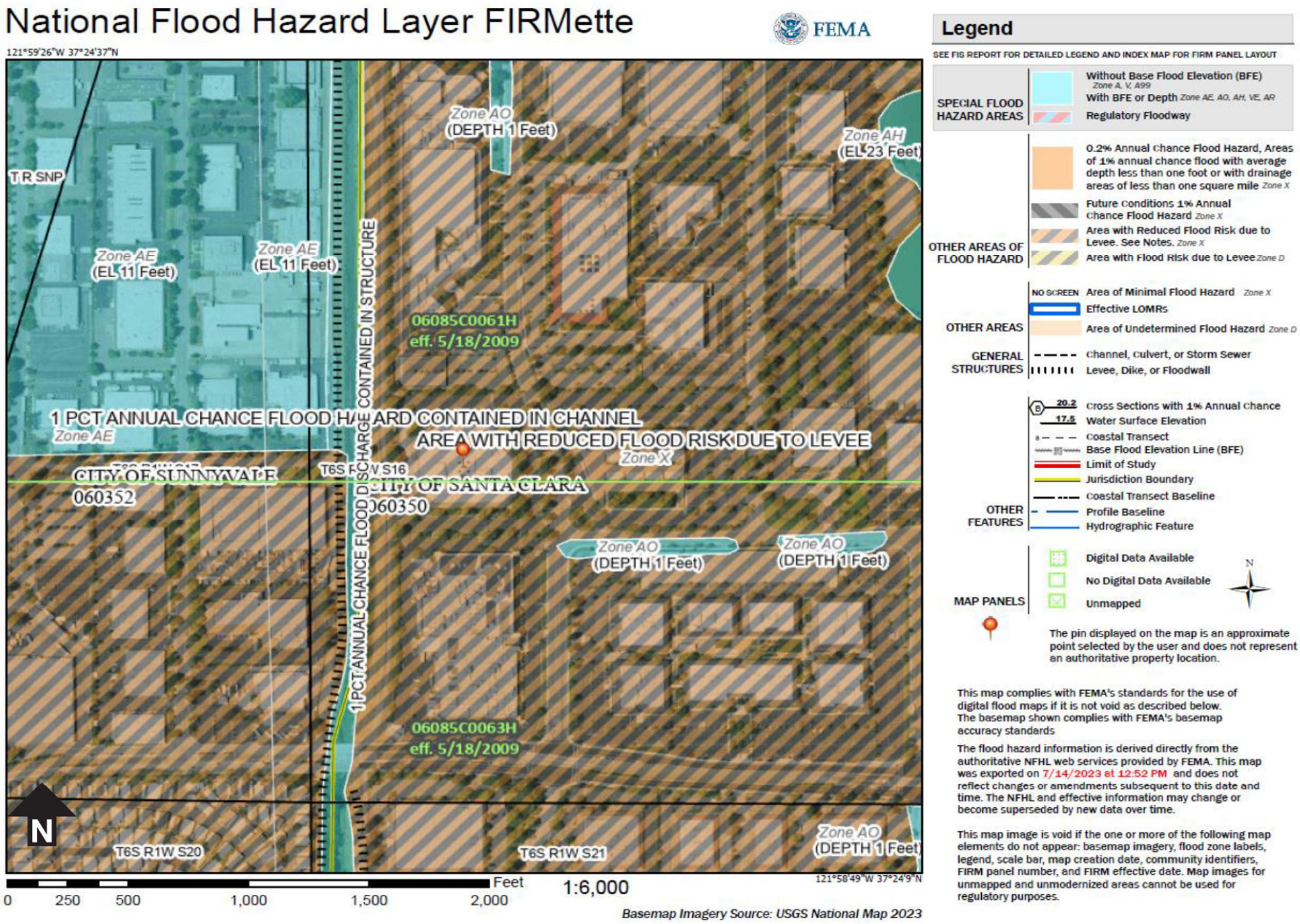
With incorporation of the Condition of Approval above, the project would not contribute substantial amounts of sediment to storm drain systems, and impacts resulting from erosion or siltation during construction would be less than significant. Therefore, no mitigation is required.

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

No Impact. As previously described and shown in **Figure 2-1**, the project is located within FEMA Flood Zone X as an area with a reduced flood risk due to the presence of a levee along the western side of the Calabazas Creek and is determined to be outside of the 500-year floodplain. The project site is not located in a tsunami or seiche zone. The project site is located approximately 1 mile from the San Francisco Bay and approximately 24 miles from the Pacific Ocean; due to this distance, potential impacts related to tsunamis are minimal. Additionally, the project site is not susceptible to impacts resulting from seiche because of its distance from any large bodies of water. Therefore, there would be no impact.

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

Less than Significant Impact. Construction of the project would comply with Santa Clara County Stormwater Quality BMPs and the Santa Clara County Stormwater Control guidelines, as discussed under **Threshold (a),** above. With adherence to these BMPs and guidelines, the impact would be less than significant, and no mitigation is required.



FEMA Flood Hazard Map Figure **2-1**

Source: FEMA 2023

2.11 Land Use and Planning

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

Regulatory Setting

Local

Santa Clara 2010-2035 General Plan[99]

The General Land Use Goals and Policies section and the Natural of the General Plan address the City's goals, policies, and implementing actions regarding land use. The follow General Plan policies related to land use are applicable to the project:

5.3.1-P1 Preserve the unique character and identity of neighborhoods through community-initiated neighborhood planning and design elements incorporated in new development.

5.3.1-P3 Support high quality design consistent with adopted design guidelines and the City's architectural review process.

5.3.1-P4 Encourage new development that meets the minimum intensities and densities specified in the land use classifications or as defined through applicable Focus Area, Neighborhood Compatibility or Historic Preservation policies of the General Plan.

5.3.1-P5 Implement a range of development densities and intensities within General Plan land use classification requirements to provide diversity, use land efficiently and meet population and employment growth.

5.3.1-P9 Require that new development provide adequate public services and facilities, infrastructure, and amenities to serve the new employment or residential growth.

5.3.1-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.

[99] City of Santa Clara. 2010. *2010-2035 General Plan*. Available at: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: July 3, 2023.

5.3.1-P11 Encourage new developments proposed within a reasonable distance of an existing or proposed recycled water distribution system to utilize recycled water for landscape irrigation, industrial processes, cooling and other appropriate uses to reduce water use consistent with the CAP.

5.3.1-P12 Encourage convenient pedestrian connections within new and existing developments.

5.3.1-P18 Meter net new industrial and commercial development excluding "Approved/Not Constructed and Pending Projects" identified on Figure 2.1-1 of the City's General Plan so as not to exceed 2.75 million square feet in Phase I, 5.5 million square feet in Phase II and 5.5 million square feet in Phase III in order to maintain the City's jobs/housing balance and ensure adequate infrastructure and public services.

5.3.1-P24 Coordinate sign programs for commercial uses to promote continuity, improve streetscape design and reduce visual clutter.

5.3.1-P27 Encourage screening of above-ground utility equipment to minimize visual impacts.

5.3.1-P29 Encourage design of new development to be compatible with, and sensitive to, nearby existing and planned development, consistent with other applicable General Plan policies.

Environmental Setting

The project site borders the Sunnyvale City limit in the northern part of Santa Clara just south of SR 237, north of US-101, and east of the Lawrence Expressway. Land use designations surrounding the project site consist of light industrial, and low intensity office/research and development uses. The project site is zoned Light Industrial. There are no residential uses in the immediate vicinity of the project site. The surrounding development consists of one- to three-story buildings with large surface parking lots. Nearby uses include commercial, research and development buildings, biotech companies and other digital technology-oriented uses.

A medical supply store exists immediately west of the project site across the Calabazas Creek along Elk Drive in the City of Sunnyvale. Coherent Inc., a laser equipment manufacturer, exists immediately south of the project site along Patrick Henry Drive. Abbot Diagnostics is immediately to the north along Patrick Henry Drive and the Great America Plaza office building exists immediately west of the project site on Patrick Henry Drive. Patrick Henry Drive intersects with Mountain View-Alviso Road to the north and Tasman Drive to the south.

Impact Discussion

a. Would the project physically divide an established community?

No Impact. A physical division of an established community typically refers to the construction of a physical feature (such as a wall, roadway, or railroad tracks) or the removal of a means of access (such as a local roadway or bridge) that would impair mobility within an existing community for between communities. The project would not physically divide an established community. The project site is in a developed area comprised of light industrial, low intensity office/ research and development, and commercial uses. The project is consistent with the pattern of surrounding land uses, would not change

existing access to roadways or other modes of transportation, and would not create a physical barrier. Therefore, no impact would occur.

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

No Impact. The General Plan land use designation for the project site is Low Intensity Office/R&D. No changes to the General Plan land use designation are proposed. This classification is intended to accommodate a range of light industrial uses, including general service, warehousing, storage, distribution, and manufacturing. Office buildings and data centers are a permitted use under the Low Intensity Office/R&D land use designation. The project site is zoned Light Industrial and is surrounded by industrial development. Under the City's zoning ordinance, the Light Industrial zoning district is intended to provide an optimum general industrial environment, and it is intended to accommodate industries operating substantially within an enclosed building. The project would be consistent with the Light Industrial zoning district.

The anticipated employment density of up to 700 employees on-site on a given day would be consistent with the intent of the Light Industrial General Plan Land Use designation. The General Plan provides maximum floor area ratios (FAR) for industrial uses in the City ranging from 0.45 for heavy industrial uses to 2.0 for high-intensity-office/research and development uses.[100] The maximum FAR for Low-Intensity Office/R&D is 1.0. These floor area ratios reflect intended employment intensities assumed in the General Plan rather than assumptions or requirements for open space around industrial buildings. The FAR of the project on Patrick Henry Drive would be 0.91 and therefore consistent with the General Plan, it would not conflict with the uses or assumed employment intensity for the Light Industrial land use designation**.** Therefore, no impact would occur, and no mitigation is required.

[100] City of Santa Clara. 2010. *2010-2035 General Plan.* Available: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: July 6, 2023.

2.12 Mineral Resources

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

Regulatory Setting

State

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 Resource Zones (MRZs) 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.

Environmental Setting

Local

The City's General Plan states that there are no significant mineral resources located within the City.

Impact Discussion

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

and

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?

b. No Impact. As noted above, there are no significant mineral resources located within the City. Therefore, the project would not have an impact on mineral resources that would be of value to the region or residents of the State. No impact would occur.

2.13 Noise

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

Regulatory Setting

Federal

Federal Transit Administration (FTA) Transit and Noise Vibration Impact Assessment Manual

The FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction in their *Transit and Noise Vibration Impact Assessment Manual*.[101] For residential uses, the daytime noise threshold is 80 decibels (dBA) equivalent continuous sound level (L_{eq}).

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods employed. The operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings founded on the soil near the construction site respond to these vibrations with varying results, ranging from no perceptible effects at the lowest levels, low rumbling sounds and perceptible vibrations at moderate levels, and slight damage at the highest levels.

While ground vibrations from construction activities do not often reach the levels that can damage structures, fragile buildings must receive special consideration. The construction vibration criteria include consideration of the building condition.

[101] Federal Transit Administration. 2018. *Transit Noise and Vibration Impact Assessment.* Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed: July 12, 2023.

The key elements of the Construction Vibration Assessment procedures and recommended workflow are presented in the manual in detail with the following steps:

Step 1: Determine level of construction vibration assessment

Step 2: Use a qualitative construction vibration assessment

Step 3: Use a quantitative construction vibration assessment

Step 4: Assess construction vibration impact

Step 5: Determine construction vibration mitigation measures

Occupational Health and Safety Administration

The Federal Government regulates occupational noise exposure common in the workplace through the OSHA under the EPA. Noise limitations would apply to the operation of construction equipment and could also apply to operational equipment proposed as part of the project. Noise exposure of this type is dependent on work conditions and is addressed through a facility's Health and Safety Plan, as required under OSHA.

State

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires each county and city to adopt a General Plan that includes noise standards consistent with guidelines adopted by the Governor's Office of Planning and Research. The purpose of the noise standards is to limit the exposure of the community to excessive noise levels. The California Environmental Quality Act requires all known environmental effects of a project be analyzed, including environmental noise impacts.

Local

Santa Clara 2010-2035 General Plan

The General Plan contains goals and policies that are designed to control noise within the City. In addition, the General Plan identifies noise and land use compatibility standards for various land uses.

Table 2-13 includes acceptable noise levels for various land uses, taken from Section 5.10.6 of the General Plan. Industrial land uses are considered compatible in noise environments of 70 dBA Community Noise Equivalent Level (CNEL) or less. The guidelines state that where the exterior noise levels are greater than 70 dBA CNEL and less than 80 dBA CNEL, the design of the project should include measures to reduce interior noise to acceptable levels.

Commercial land uses are considered compatible in noise environments of 65 dBA CNEL or less. The guidelines state that where the exterior noise levels are greater than 65 dBA CNEL and less than 75 dBA CNEL, the design of the project should include measures to reduce interior noise to acceptable levels.

Table 2-13 Noise and Land Use Compatibility Standards

Land Use	Compatible (dBA, CNEL)	Require Design Standard (dBA, CNEL)[1]	Incompatible (dBA, CNEL)[2]
Residential	<55	55-70	>70
Educational	<55	55-70	>70
Recreational	<65	65-75	>75
Commercial	<65	65-75	>75
Industrial	<75	70-80	>80
Open Space	<85	N/A	N/A

[1] Requires design standard and insulation to reduce noise levels

[2] Avoid land use except when entirely indoors and an interior level of 45 DNL can be maintained

N/A = no applicable noise standard

Source: City of Santa Clara General Plan, 2014, Table 8.14-1

The Noise Goals and Policies section of the General Plan addresses the City's goals, policies, and implementing actions regarding noise and vibration. The following General Plan policies related to noise are applicable to the project:

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.

Code of the City of Santa Clara

The City's noise ordinance is codified in Chapter 9.10, Regulation of Noise and Vibration, of the SCCC. The noise ordinance requires protection from unnecessary, excessive, and unreasonable noise or vibration from fixed sources in the community. Applicable provisions of the City's noise ordinance are discussed in the following subsections.

SCCC Section 9.10.040 limits exterior noise levels from fixed uses at residences to 55 dBA during daytime hours of 7:00 a.m. to 10:00 p.m. and 50 dBA during nighttime hours of 10:00 p.m. to 7:00 a.m.; exterior noise levels at commercial uses to 65 dBA during daytime hours and 60 dBA during nighttime hours; exterior noise levels at light industrial uses to 70 dBA at any time and noise levels to 75 dBA at heavy industrial uses at any time. Section 9.10.060(c) states if the measured ambient noise level differs from those levels set forth in SCCC Section 9.10.040, the allowable noise standard should be "adjusted in five dBA increments in each category as appropriate to encompass or reflect said ambient noise level".

Section 9.10.230 of the SCCC states that construction activities are not permitted within 300 feet of residentially zoned property except within the hours of 7:00 a.m. and 6:00 p.m. on weekdays and 9:00 a.m. and 6:00 p.m. on Saturdays. The closest residential uses are located approximately 925 feet south of the project site at the Adobe Wells Mobile Home Park and therefore this would not apply.

Santa Clara County Airport Land Use Commission Land Use Plan

The Comprehensive Land Use Plan for the Norman Y. Mineta San José International Airport adopted by the Santa Clara County ALUC contains standards for projects within the vicinity of the Norman Y. Mineta San José International Airport. According to Figure 5 of the Comprehensive Land Use Plan for Norman Y. Mineta San José International Airport, the project is not located within the noise contours of any airport and is therefore not subject to additional noise compatibility standards or requirements specified by the ALUC.[102]

Environmental Setting

The most prominent source of noise in the project site vicinity is traffic noise from Patrick Henry Drive and Tasman Drive and distant traffic noise from State Route 237. According to Figure 5 of the Comprehensive Land Use Plan for Norman Y. Mineta San José International Airport, the project is not located within noise contours of any airport.[103]

Impact Discussion

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

Construction

Less than Significant Impact. SCCC Section 9.10.040 limits exterior noise levels at residences to 55 dBA during daytime hours of 7:00 a.m. to 10:00 p.m. and 50 dBA during nighttime hours of 10:00 p.m. to 7:00 a.m. The nearest residential receptors are located approximately 925 feet south of the center of the project site. At this distance, construction noise would attenuate to 54 dBA L_{eq} or less. This does not take into account acoustical shielding from buildings, terrain, or other features which would reduce

[102] Santa Clara County Airport Land Use Commission. 2011. *Comprehensive Land Use Plan, Santa Clara County, Norman Y. Mineta San José International Airport*. Available: https://stgenpln.blob.core.windows.net/document/ALUC_SJC_CLUP.pdf. Accessed: July 13, 2023.

[103] Santa Clara County Airport Land Use Commission. 2011. *Comprehensive Land Use Plan, Santa Clara County, Norman Y. Mineta San José International Airport*. Available: https://stgenpln.blob.core.windows.net/document/ALUC_SJC_CLUP.pdf. Accessed: July 13, 2023.

construction noise levels further. Therefore, construction noise levels would not exceed the SCCC threshold of 55 dBA L_{eq} at any residential receptors. In addition, construction would comply with all relevant requirements in the City Code. Therefore, this impact would be less than significant.

Operation

Noise sources associated with operation of the project would consist of primarily mechanical equipment (e.g., condenser fans and compressors). The project would include six condenser fans rated at 87.7 dBA sound power level and six compressors rated at 82.0 dBA sound power level. This brings the cumulative sound power level of the 12 units to 96.5 dBA, which is a sound pressure level (SPL) of approximately 88.5 dBA at 3 feet from the source. Assuming that the units were to run for an entire 24-hour period the closest property line to the south would be exposed to a noise level of 49 dBA, which would not exceed the City standard of 70 dBA for light industrial uses. Given that at all other property lines the noise level would be less than 49 dBA and given that the City's most stringent noise standard is 50 dBA (residential uses during nighttime hours), this impact would be less than significant.

Off-site Traffic Noise

Based on net project daily trips, off-site traffic noise impacts due to the project were estimated by conservatively adding all net project daily trips to existing daily traffic volumes on Patrick Henry Drive and Tasman Drive provided by Hexagon Transportation Consultants.[104] The project is estimated to generate 852 net new daily vehicle trips.[105] Tasman Drive has an existing average daily traffic (ADT) volume of approximately 18,500 west of Patrick Henry Drive and Patrick Henry Drive has an ADT volume of approximately 3,400 north of Tasman Drive. Using the formula of 10 x LOG (future traffic volume/existing traffic volume), project net trips would increase traffic noise by approximately 1.0 dBA over existing conditions on Patrick Henry Drive and by approximately 0.2 dBA over existing conditions on Tasman Drive. This would represent a minimal, incremental increase over existing conditions. Therefore, off-site traffic noise impacts would be less than significant.

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

Less than Significant Impact. Operation of the project would not include any substantial vibration sources. Thus, construction activities have the greatest potential to generate ground-borne vibration affecting nearby receivers, especially during paving of the at-grade parking of the project site. Construction activities known to generate excessive groundborne vibration, such as pile driving, would not be conducted by the project. The greatest anticipated source of vibration during general project construction activities would be from vibratory roller, which may be used 70 feet from the nearest off-site light industrial building to the south of the project site. A vibratory roller would create approximately 0.210 in/sec PPV at 25 feet.[106] The vibration level created by a dozer at 50 feet would be

[104] Hexagon Transportation Consultants, Inc. 2022. *Transportation Memo for the Proposed Arista HW Engineering Building at 5200 Patrick Henry Drive in Santa Clara, California.*

[105] Hexagon Transportation Consultants, Inc. 2022. *Transportation Memo for the Proposed Arista HW Engineering Building at 5200 Patrick Henry Drive in Santa Clara, California*

[106] Federal Transit Authority. 2018. *Transit Noise and Vibration Impact Assessment.* Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed: July 12, 2023

0.098 in/sec PPV.[107] Construction vibration at 70 feet would be less. **Table 2-14** shows typical vibration levels for various pieces of construction equipment used in the assessment of construction vibration.[108]

Table 2-14 Vibration Source Levels for Construction Equipment

Equipment	Approximate Vibration Level (in/sec PPV)		
	25 feet	50 feet	100 feet
Small Bulldozer	0.003	0.001	0.0007
Jackhammer	0.035	0.016	0.008
Loaded Truck	0.076	0.036	0.017
Large Bulldozer	0.089	0.042	0.019
Vibratory Roller	0.210	0.098	0.046

Source: FTA 2018

Vibration limits used in this analysis to determine a potential impact to local land uses from construction activities are based on information contained in FTA 2018. Maximum recommended vibration limits by the FTA are identified in **Table 2-15.**

Table 2-15 Criteria for Vibration Damage Potential

Building Category	PPV (in/sec)
I. Reinforced concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Nonengineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

in/sec = inches per second; PPV = peak particle velocity

Source: FTA 2018

Based on FTA recommendations, limiting vibration levels to below 0.3 in/sec PPV at nearby light industrial/commercial structures would prevent architectural damage. These limits are applicable regardless of the frequency of the source. Vibration from construction activity would be lower than the

[107] Federal Transit Authority. 2018. *Transit Noise and Vibration Impact Assessment.* Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed: July 12, 2023

[108] Federal Transit Authority. 2018. *Transit Noise and Vibration Impact Assessment.* Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed: July 12, 2023.

threshold of 0.3 in/sec PPV for light industrial/commercial buildings. Therefore, this impact would be less than significant and no mitigation is required.

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

No Impact. The Norman Y. Mineta San José International Airport is located approximately 3.2 miles to the southeast of the project site and Moffett Federal Airfield is located approximately three miles to the west of the project site. According to the Norman Y. Mineta San José International Airport Land Use Compatibility Plan, the project is not located within noise contours of any airport.[109] Therefore, the project would not expose people working in the project area to excessive aircraft overflight noise levels and no impact would occur.

[109] Santa Clara County Airport Land Use Commission. 2011. Amended 2016. *Comprehensive Land Use Plan, Santa Clara County, Norman Y. Mineta San José International Airport*. Available: https://stgenpln.blob.core.windows.net/document/ALUC_SJC_CLUP.pdf. Accessed: July 12, 2023

2.14 Population and Housing

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

Regulatory Setting

Regional

Plan Bay Area 2050[110]

Plan Bay Area 2050 is a long-range transportation, land-use, and housing plan intended to support a growing economy, provide more housing and transportation choices, and reduce transportation-related pollution and GHG emissions in the Bay Area. Plan Bay Area 2050 promotes compact, mixed-use residential and commercial neighborhoods near transit, particularly within identified Priority Development Areas (PDAs).

ABAG allocates regional housing needs to each city and county within the nine-county San Francisco Bay Area, based on statewide goals. ABAG also develops forecasts for population, households, and economic activity in the Bay Area. ABAG, MTC, and local jurisdiction planning staff created the Regional Forecast of Jobs, Population, and Housing, which is an integrated land use and transportation plan through the year 2040 upon which Plan Bay Area 2040 is based.

Local

Santa Clara 2010-2035 General Plan[111]

The following General Plan policies related to population and housing are applicable to the project:

5.3.1-P5 Implement a range of development densities and intensities within General Plan land use classification requirements to provide diversity, use land efficiently and meet population and employment growth.

[110] Metropolitan Transportation Commission. 2023. *Plan Bay Area 2050.* Available: https://mtc.ca.gov/planning/long-range-planning/plan-bay-area-2050. Accessed: July 7, 2023.

[111] City of Santa Clara. 2010. *2010-2035 General Plan*. Available at: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: July 5, 2023.

5.3.2-P11 Maintain the existing character and integrity of established neighborhoods through infill development that is in keeping with the scale, mass and setbacks of existing or planned adjacent development.

Environmental Setting

According to the U.S. Census Bureau data, the City had a population of approximately 126,930 as of July 2022.[112] ABAG predicts that Santa Clara households will grow at a rate of 24 percent over the next 17 years increasing to about 57,010 households by 2040. The City currently has more jobs than residents and ABAG estimates that there will be 170,575 total jobs in the City by 2040.[113]

Existing land uses are often used as the basis growth projections within cities and regions. Growth projections include predictions of future population, employees, and housing units over time. Construction of large employment centers can induce population growth by enticing new employees to move from other locales. Population growth can also be induced through the creation of large housing developments. In either case, rapid growth can disturb the jobs-housing balance of a city to create an imbalance and produce environmental impacts by increasing demand for services and infrastructure.

The City's growth is planned for through the General Plan, and through the Plan Bay Area 2050, a long-range regional plan that identifies land-use strategies to enable more economically sustainable growth and development.

Impact Discussion

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

No Impact. The project is a commercial/light industrial use that does not include the construction of residential units. The project is expected to employ up to 700 people on-site. This level of employment is consistent with the underlying General Plan land use designation (Low Intensity Office/R&D) and was accounted for in the General Plan. Therefore, growth induced by the project would not be considered "unplanned" and would not be substantial. Additionally, the project does not include roadway or other utility extensions that could indirectly induce unplanned growth. Therefore, no impact would occur.

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

No Impact. There are no existing residential uses on the project site; therefore, the project would not displace individuals or residents and would not necessitate the construction of replacement housing elsewhere. No impact would occur.

[112] United States Census Bureau, 2022. *Quick Facts, Santa Clara County*. Available: https://www.census.gov/quickfacts/santaclaracitycalifornia. Accessed: July 7, 2023.

[113] Association of Bay Area Governments. 2018. *Plan Bay Area Projections 2040*. Available: https://mtc.ca.gov/sites/default/files/Projections_2040-ABAG-MTC-web.pdf. Accessed: July 18, 2023

2.15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☒	☐
iv) Parks?	☐	☐	☒	☐
v) Other public facilities?	☐	☐	☐	☒

Regulatory Setting

Local

City of Santa Clara General Plan 2010-2035

The following General Plan policies related to public services are applicable to the project:

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.

5.9.3-P2 Provide police and fire services that respond to community goals for a safe and secure environment for people and property.

5.9.3-P3 Maintain a City-wide average three-minute response time for 90 percent of police emergency service calls.

5.9.3-P4 Maintain a City-wide average three-minute response time for fire emergency service calls.

5.9.3-P5 Maintain emergency traffic preemption controls for traffic signals.

Environmental Setting

Local

Fire protection

Fire protection services for the project site are provided by the SCFD which is comprised of 154 paid employees and a robust volunteer reserve. The SCFD has nine fire stations and responds to over 9,000 calls annually. The closest fire station to the project site is Fire Station 8 located at 2400 Agnew Road, approximately 1.47 miles southeast of the project site.[114]

Police protection

Police service to the project site is provided by Santa Clara Police Department (SCPD) which operates from its headquarters at 601 El Camino Real, approximately 3.9 miles southwest from the project site, and the Northside Police Station at 3992 Rivermark Parkway, approximately 2.2 miles southeast of the project site. The SCPD has 153 sworn officers, 79 support personnel and a varying number of part-time or per diem employees, volunteers, and Police Reserves.[115]

Schools and Parks

The Santa Clara Parks and Recreation Department (Department) provides parks and recreational services in the City. The Department is responsible for maintaining and programming the various parks and recreation facilities and works cooperatively with public agencies in coordinating all recreational activities within the City. Overall, as of May 2023, the Department maintains and operates Central Park, a 45.04-acre community park (45.04 acres improved and Central Park North 34.93 acres unimproved, resulting in 79.97 acres), 31 neighborhood parks (125.572 acres improved and 5.220 acres unimproved resulting in 130.792 acres), 13 mini parks (2.59 acres improved and 3.189 acres unimproved resulting in 5.779 acres), public open space (16.13 acres improved and 40.08 acres unimproved resulting in 56.21 acres), recreational facilities (23.898 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 (48.588 acres) throughout the City totaling approximately 269.408 improved acres and 83.619 unimproved acres. Community parks are over fifteen acres, neighborhood parks are one to fifteen acres and mini parks are typically less than one acre in size. There are no City parks within walking distance (a 10-minute walk) of the project site.

According to the General Plan, six public school districts serve in the City: 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 closest

[114] City of Santa Clara.2019. *About the Santa Clara Fire Department*. Available: https://www.joinscfd.org/about-scfd. Accessed: July 3, 2023.

[115] Santa Clara Police Department.2020. *About Us*. Available: https://www.santaclaraca.gov/our-city/departments-g-z/police-department/about-us. Accessed: July 3, 2023.

SCUSD schools to the project site are Fairwood Explorer Elementary School, located at 1110 Fairwood Avenue.[116]

Impact Discussion

b. 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:

i. Fire Protection impacts?

OR

ii. Police Protection?

Less than Significant Impact. As described above, fire and police protection are currently provided by the SCFD and the SCPD. Implementation of the project would create an incremental increase in demand for police and fire services by introducing a daily maximum of 700 employees. However, the project is consistent with current zoning and General Plan land use designations and therefore any additional demand on fire services or police protection created by the incremental change in on-site employees has already been accounted for in the City's General Plan and Zoning Code. In addition, the project would be constructed in accordance with current fire codes, including those specifying emergency vehicle access and reduction of fire hazards and would pay fees for the expansion of fire services. Therefore, this impact would be less than significant and no mitigation is required.

iii. Schools?

OR

iv. Parks?

Less than Significant Impact. The project would not include any residential uses. As stated in the introduction, this analysis assumes that all 700 on-site project employees would be new in the City. However, this increase in the daily employee population in the City is consistent with growth projected in the General Plan. Although future employees might use City parks or trails including the Calabazas trail for running and similar outdoor exercise, this use would be unlikely to place a major physical burden on existing parks. Furthermore, the new employment use would not increase demand for schools. Therefore, the project would not have a significant impact on school or park facilities in the City and no mitigation is required.

[116]Santa Clara Unified School District. 2023. *School Directory*. Available: https://www.santaclarausd.org/site/Default.aspx?PageType=1&SiteID=8&ChannelID=44&DirectoryType=6. Accessed: July 3, 2023.

v. Other public facilities?

No Impact. Open space and other public facilities such as libraries are typically provided to serve residents within the City. Given the project has no residential component, project implementation would not increase demand for other public facilities. Therefore, no impact would occur.

2.16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Regulatory Setting

State

Local

Santa Clara 2010-2035 General Plan[117]

The following General Plan policies related to recreation are applicable to the project:

5.3.5-P3 Encourage industrial development to participate in the identification and funding of 25 acres for park and recreational facilities to serve employment centers north of the Caltrain railroad tracks.

5.8.5-P1 Require new development and City employees to implement transportation demand management programs that can include site-design measures, including preferred carpool and vanpool parking, enhanced pedestrian access, bicycle storage and recreational facilities.

Environmental Setting

As discussed under **Section 2.15, Public Services**, the Santa Clara Parks and Recreation Department (Department) provides parks and recreational services in the City. The Department is responsible for maintaining and programming the various parks and recreation facilities and works cooperatively with public agencies in coordinating all recreational activities within the City. Overall, as of May 2023, the Department maintains and operates Central Park, a 45.04-acre community park (45.04 acres improved and Central Park North 34.93 acres unimproved, resulting in 79.97 acres), 31 neighborhood parks (125.572 acres improved and 5.220 acres unimproved resulting in 130.792 acres), 13 mini parks (2.59 acres improved and 3.189 acres unimproved resulting in 5.779 acres), public open space (16.13 acres improved and 40.08 acres unimproved resulting in 56.21 acres), recreational facilities (23.898 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 (48.588 acres) throughout the City totaling

[117] City of Santa Clara. 2010. *2010-2035 General Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: July 3, 2023.

approximately 269.408 improved acres and 83.619 unimproved acres. There are no City parks within walking distance (a 10-minute walk) of the project site.

Impact Discussion

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

and

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

Less than Significant Impact. The project would not include any residential uses. Although future employees might use City parks or trails for running and similar outdoor exercise, this use would be unlikely to place a major physical burden on existing parks and would not require the construction or expansion of recreational facilities. It is anticipated that at most, 700 employees would be present at the project site daily. Therefore, the project would not have a significant impact on parks facilities in the City and no mitigation would be required.

2.17 Transportation

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

Regulatory Setting

State

Regional Transportation Plan

The MTC is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Santa Clara County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted Plan Bay Area 2040 in July 2017, which includes a Regional Transportation Plan to guide regional transportation investment for revenues from Federal, State, regional and local sources through 2040.[118]

Senate Bill 743

Enacted in 2013, SB 743 establishes criteria for determining the significance of transportation impacts using a vehicle miles traveled (VMT) metric intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. Specifically, SB 743 requires the replacement of automobile delay—described solely by level of service (LOS) or similar measures of vehicular capacity or traffic congestion—with VMT as the recommended metric for determining the significance of transportation impacts. The Governor's Office of Planning and Research (OPR) approved the CEQA Guidelines implementing SB 743 on December 28, 2018. Local jurisdictions are required to implement a VMT policy by July 1, 2020.

[118] Metropolitan Transportation Commission and Association of Bay Area Governments (MTC and ABAG). 2017. *Plan Bay Area 2040 – Regional Transportation Plan and Sustainable Communities Strategy for the San Francisco Bay Area 2017-2040*. July 26, 2017. Available: https://mtc.ca.gov/sites/default/files/Final_Plan_Bay_Area_2040.pdf. Accessed: June 30, 2023.

Local

Santa Clara 2010-2035 General Plan[119]

The Transportation Demand Management Goals and Policies section of the General Plan addresses the City's goals, policies, and implementing actions regarding transportation and demand management. The following General Plan policies related to transportation are applicable to the project:

5.8.5-P1 Require new development and City employees to implement transportation demand management programs that can include site-design measures, including preferred carpool and vanpool parking, enhanced pedestrian access, bicycle storage and recreational facilities.

5.8.5-P3 Encourage all new development to provide on-site bicycle facilities and pedestrian circulation.

5.8.5-P4 Encourage new development to participate in shuttle programs to access local transit services within the City, including buses, light rail, Bay Area Rapid Transit, Caltrain, Altamont Commuter Express Yellow Shuttle and Lawrence Caltrain Bowers/Walsh Shuttle services.

5.8.5-P6 Encourage transportation demand management programs that include shared bicycle and autos for part-time use by employees and residents to reduce the need for personal vehicles.

5.8.5-P7 Promote programs that reduce peak hour trips, such as flexible work hours, telecommuting, home-based businesses and off-site business centers, and encourage businesses to provide alternate, off-peak hours for operations.

5.8.5-P9 Promote transportation demand management programs that provide education, information and coordination to connect residents and employees with alternate transportation opportunities.

City of Santa Clara Transportation Policy

The Santa Clara City Council approved a new Transportation Analysis Policy in June 2020. The policy establishes land use and transportation project requirements for evaluating transportation impacts under CEQA using Vehicle Miles Traveled (VMT) methodology consistent with SB 743. The policy includes baselines, thresholds, and criteria for exempting certain types of projects from VMT analysis. The policy also formalizes the Transportation Operational Analysis (TOA) requirement outside of CEQA.

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

[119] City of Santa Clara. 2010. *2010-2035 General Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: July 3, 2023.

management plan, a land use impact analysis program, and a capital improvement element. VTA has review responsibility for proposed development projects that generate 100 peak hour trips or more and that are expected to affect CMP-designated intersections. In conformance with the CMP, Projects are required to evaluate regional transportation facilities including CMP designated intersections, freeway, expressway, onramps and offramps, and all transit facilities under VTA purview. Projects that generate less than 100 peak hour trips are not required to evaluate these facilities in accordance with the CMP Guidelines. Further, while the CMP is an applicable policy, congestion and traffic volumes are not considered environmental issues under CEQA.

Pedestrian Master Plan

The City of Santa Clara's adopted Pedestrian Master Plan was approved by City Council on February 25, 2020. The plan identifies opportunities for pedestrian improvements through project recommendations and aims to expand the existing network, complete network gaps, provide greater connectivity to public transportation, increase mobility; and encourage the public to choose more sustainable modes of transportation. Implementation of this plan will make walking a more viable transportation option in Santa Clara and will reduce environmental impacts while making the community healthier and safer.

Bicycle Master Plan Update 2018

The Bicycle Master Plan Update 2018 was approved by the Bicycle and Pedestrian Advisory Committee at their June 24, 2019, meeting and also approved by City Council at their September 24, 2019 meeting. The plan establishes a long-term vision for improving bicycling in Santa Clara through policy, programs, and project recommendations. Through implementation of this plan, the City aims to become a world class bicycling community that prioritizes health and sustainability for its residents and visitors.

Environmental Setting

Regional Access

Regional access to the project site is provided by SR-237, located north of the project site. SR-237 is an east-west freeway which extends westward from Mountain View to Milpitas. Primary access to and from SR-237 is provided via Great America Parkway and Lawrence Expressway.

Local Access

The project site is accessed from two driveways on Patrick Henry Drive. Roadways that provide primary vehicular circulation to the project site include Great America Parkway, Tasman Drive, Mountain View-Alviso Road, and Patrick Henry Drive. Access provided by each roadway is discussed in the following:

- **Great America Parkway** is a six-lane divided north-south arterial in the vicinity of the project site. Great America Parkway connects SR-237 and Tasman Drive.
- **Tasman Drive** is a four-lane arterial that connects local businesses surrounding Great America Parkway and Patrick Henry Drive. Tasman Drive stems from Morse Avenue and terminates at Great Mall Parkway.
- **Mountain View-Alviso Road** is a two-lane side street that connects Great America Parkway and Lawrence Station Road.
- **Patrick Henry Drive** is a two-lane side street that connects Mountain View-Alviso Rd and Tasman Drive.

The City's General Plan provides traffic conditions in the vicinity of the project site for existing (2008) and future (2035) conditions. In 2013, Governor Brown signed Senate Bill 743. SB 743 directed the State OPR to develop new CEQA guidelines and to replace LOS as the evaluation measure for transportation impacts under CEQA with another measure such as VMT. VMT measures the amount of vehicle trip making and trip length and is a direct measurement of greenhouse gas emissions. A reduction in VMT would promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses that reduces the reliance on individual vehicles. The City of Santa Clara recently adopted a VMT Transportation Analysis Policy for Environmental Review.

The Santa Clara VTA provides bus services within Santa Clara County. Five local bus routes operate in the project vicinity: routes 20, 55, 57, 59, and the ACE Green shuttle. Route 20 operates between the Sunnyvale Transit Center and Milpitas Transit Center with a stop 0.4 miles south of the project site on Mission College Boulevard. Route 55 operates between Stelling Road and Stevens Creek and Old Ironsides and Tasman Drive with a stop 0.35 miles south of the project site on Tasman Drive. Route 57 operates between the Santa Clara Convention Center and West Valley Community College Transit Center with a stop 0.35-miles south of the project site on Tasman Drive. Route 59 operates from Stevens Creek Boulevard and Saratoga and the Baypointe Station with a stop 0.35 miles south of the project site on Tasman Drive. The ACE Green shuttle operates between the America Center Terminal and the Great America ACE Amtrak Station, with a stop located on the east side of the project site on Patrick Henry Drive, near the corner of Bunker Hill Lane. The VTA Light Rail System operates near the project station. The Blue Line and the Greenline stop 0.35 miles south of the project site on Tasman Drive at the Old Ironsides Station.

Impact Discussion

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

Less than Significant Impact. As shown below, the project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities.

Transit Facilities

The project would not permanently disrupt existing transit service and would not conflict with any planned transit facilities. The project site is not identified as a future transit hub or other transit facility in any City planning document. The project would not directly or indirectly impact transit services, as it would include development of the site consistent with the General Plan, land use and zoning, and would not interfere with or disrupt any transit service or infrastructure.

The project would not conflict with applicable General Plan policies relating to transit. The closest bus stop is the ACE Green Shuttle stop located east of the project site on Patrick Henry Drive, near the corner of Bunker Hill Lane. The project is not proposing transit stop improvements along the project frontage. However, the project will include sidewalks along Patrick Henry Drive, preserving pedestrian access to the existing bus stop.

The project would provide on-site parking as required by the City, and as the City has determined it to be appropriate for the project. Therefore, the project would not conflict with General Plan Policy 5.8.3-P9 which addresses reduced on-site parking.

Based on the size and scope of the project, the City has determined that the project is not required to participate in a public/private partnership to provide new transit options.

Roadways

The project would not conflict with any applicable General Plan policies resulting in impacts to the roadway system. The project will complete any required sidewalk improvements in accordance with the City's conditions of approval.

The project would not generate 100 or more peak hour trips; therefore, no roadway operational analysis is required. While congestion is no longer a CEQA issue, for informational purposes this IS/MND has reviewed the applicable VTA Congestion Management Plan and determined the project would not conflict with applicable policies relating to congestion.

Pedestrian and Bicycle Facilities

The project would not impact existing or planned bicycle or pedestrian facilities. Project improvements would be within the project parcel and would not include the public right-of-way. Therefore, the project would not create new hazardous conditions for pedestrians or bicyclists. The project would include curb cuts with access to existing roadways, for vehicles to enter and exit the project site. These improvements would be designed and implemented consistent with acceptable geometries and sightlines to avoid risks to bicyclists and pedestrians, as required by the City for all development projects.

The project would not interfere with bicycle or pedestrian access to the site and would provide a short-term bicycle rack at grade with space for 4 bicycles, as well as a long-term bicycle storage room subsurface with space for up to 43 bikes.

The project would be consistent with applicable City policies related to bicycle and pedestrian activity, including the General Plan, Pedestrian Master Plan, and 2018 Bicycle Master Plan Update. Related to the General Plan, the project would provide sidewalks and bicycle storage in compliance with City requirements. Therefore, the project would not conflict with or obstruct implementation of these policies.

b. Conflict or be consistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less than Significant Impact. The project site is located less than 0.5 miles from a major transit stop as well as several transit stops on a High-Quality Transit Corridor, including the Old Ironsides VTA light rail station and the VTA bus route 57 stop on Tasman Drive at Old Ironsides Drive. Based on CEQA Guidelines Section 15064.3(b)(1), certain land use projects within 0.5 miles of a transit stop along an existing high-quality transit corridor or major transit stop should be presumed to cause a less than significant transportation impact.

On June 23, 2020, the Santa Clara City Council adopted a resolution establishing a new Transportation Analysis Policy to address Senate Bill 743, transitioning CEQA significance thresholds away from level of service to VMT. The City's Transportation Analysis Policy echoes CEQA Guidelines Section 15064.3(b)(1)

in setting criteria to exempt projects from a quantitative VMT analysis. Because the project site is within 0.5 miles of a transit stop along a high-quality transit corridor, has a minimum FAR of 0.75, includes transit-oriented design elements and promotes multimodal transportation networks, and meets all requirements of the City's policy, it is exempt from VMT analysis. Therefore, the project would not conflict with CEQA Guidelines section 15064.3, and the project's impact on transportation is less than significant. No mitigation is required.

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

No Impact. The project does not include any changes to local streets, intersections, or involve incompatible land uses. Access to the project site would continue to be provided via curb cuts on Patrick Henry Drive. There would be no reconfiguring of nearby streets such as Bunker Hill Lane or Tasman Drive. As such, the project would not introduce or increase hazards to design features. No impact would occur.

d. Result in inadequate emergency access?

No Impact. Emergency access to the project site would continue to be provided by existing roadways. Emergency access would be provided via curb cuts on Patrick Henry Drive. As a condition of approval, the project would be required to comply with all emergency access standards of the Santa Clara Fire Department and Police Department. Therefore, the project would not result in inadequate emergency access. No impact would occur.

2.18 Tribal Cultural Resources

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

Regulatory Setting

State

Assembly Bill 52

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

Under AB 52, TCRs are defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
    - Included or determined to be eligible for inclusion in the California Register of Historic Resources, or
    - Included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC, §5024.1(c). In applying the aforesaid criteria, the lead agency shall consider the significance of the resource to a California Native American tribe (PRC, §21074[a]). 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 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.

California Native American Historical, Cultural, and Sacred Sites Act

Section 5097.9 – 5097.991 of the Public Resource Code (the California Native American Historical, Cultural, and Sacred Sites Act) applies to both State and private lands, providing protection to Native American historical and cultural resources, and sacred sites, and identifies the powers and duties of the NAHC. The act requires that upon discovery of human remains, construction or excavation activity must cease and the county coroner be notified.

Local

Santa Clara 2010-2035 General Plan[120]

The following General Plan policies related to tribal cultural resources are applicable to the project:

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-P3 Consult with California Native American tribes prior to considering amendments to the City's General Plan.

[120] City of Santa Clara. 2010. *2010-2035 General Plan*. Available at: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: July 11, 2023.

5.6.3-P4 Require that a qualified paleontologist/archaeologist monitor all grading and/or excavation if there is a potential to affect archeological or paleontological resources, including sites within 500 feet of natural water courses and in the Old Quad neighborhood.

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.

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.

Environmental Setting

Information in this section was incorporated from a Sacred Lands File search and a CHRIS records search, which were completed for the project site in August 2022.

Impact Discussion

b. 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:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)

OR

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

Less than Significant with Mitigation. As stated in **Section 2.5, Cultural Resources**, there are no known archaeological or built historic resources on the project site. However, it was determined that there was a moderate likelihood to encounter potential archaeological or buried cultural resources on the site.

A Sacred Lands File search was requested on July 7, 2022. The Sacred Lands File, operated by the NAHC is a confidential set of records containing places of religious or social significance to Native Americans. A response from the NAHC was received on August 2, 2022, and indicated that Native American culture sites have not previously been identified on the project site. The response from the NAHC also contained a list of contacts for Native American tribes who may also have knowledge of potential cultural resources on the project site. The NAHC recommended consultation with nine tribes associated with the region. On September 13, 2023, the City sent letters via email to the following Native American Tribes: Amah Mutsun Tribal Ban, Amah Mutsun Tribal Band of Mission San Juan Bautista, Indian Canyon Mutsun Band of Costanoan, Indian Canyon Mutsun Band of Costanoan, Muwekma Ohlone Indian Tribe of the SF Bay Area, North Valley Yokuts Tribe, The Ohlone Indian Tribe, Wuksache Indian Tribe/Eshom

Valley Band, and Tamien Nation. The emails and letters contained information about the project; an inquiry for any unrecorded Native American cultural resources or other areas of concern within or adjacent to the project site; and a solicitation of comments, questions, or concerns with regard to the project. To date, one response from the Amah Mutsun Tribal Band of San Juan Batista, who requested that SLF and CHRIS records searches be undertaken, and that the following measures be employed to reduce the risk of impacts to Tribal cultural resources:

- All crews, individuals, and personnel who will be moving any earth be Cultural Sensitivity trained;
- A qualified California trained archaeological monitor be present during any earth movement; and
- A qualified Native American Monitor be present during any earth movement.

As described in Section 2.5, Cultural Resources, and this section, the City has completed both SLF and CHRIS records searches to determine the level of cultural and historic sensitivity on the project site. The City has incorporated the other recommendations into **CUL MM-1**.

The tribes that were identified and contacted by the City will also be given notice of the availability of this Draft IS/MND to ensure that they have the opportunity to comment on the project during the public draft circulation period.

In addition to tribal consultation, the implementation of **Mitigation Measure CUL- 1** and **CUL- 2** would ensure any previously unidentified Native American archeological resources or remains encountered during construction are handled appropriately. With implementation of these mitigation measures, impacts to tribal resources would be less than significant.

2.19 Utilities and Service Systems

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

Regulatory Setting

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 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 adopted its most recent UWMP in 2020.

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 (IWMP), 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

Enacted in 2011, AB 341 sets forth the requirements of the statewide mandatory commercial recycling program. Businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units in California are required to recycle. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Senate Bill 1383

Enacted in 2016, SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants the 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.

Regional

Santa Clara County Integrated Waste Management Plan

The County's Integrated Waste Management Plan (IWMP) was approved by the California Integrated Waste Management Board in 1996 and reviewed in 2004, 2007, 2011, and 2016. Each jurisdiction in the County has a landfill diversion requirement of 50 percent per year. According to the IWMP, the County has adequate capacity beyond 2030.[121]

Local

Santa Clara 2010-2035 General Plan[122]

The Conservation Goals and Policies sections of the General Plan addresses the City's goals, policies, and implementing actions regarding public utilities and service systems. The following General Plan policies related to utilities and service systems are applicable to the project:

5.10.1-P6 Require adequate wastewater treatment and sewer conveyance capacity for all new development.

5.10.1-P7 Encourage the use of local recycling facilities to divert waste from landfills.

[121] County of Santa Clara. 2010. *Five-Year CIWMP/RAIWMP Review Report*. Available: https://reducewaste.sccgov.org/sites/g/files/exjcpb691/files/CalRecycle709-rev7.pdf . Accessed: July 7, 2023.

[122] City of Santa Clara. 2010. *2010-2035 General Plan*. Available at: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: July 7, 2023.

5.10.1-P8 Increase to 80 percent reduction for solid waste tonnage by 2020, or as consistent with the CAP.

5.10.1-P9 Encourage curbside recycling and composting of organic and yard waste.

5.10.1-P10 Promote the reduction, recycling and safe disposal of household hazardous wastes through public education and awareness and through an increase in hazardous waste collection events.

Environmental Setting

Potable Water

The City provides water service through their Department of Water and Sewer Utilities and would serve the project site. The City's water and utilities system consists of approximately 335 miles of water mains, 7 storage tanks, and 26 wells that tap the underground aquifers and make up 62 percent of the City's water supply.[123] The City's water system produces and average of 16.3 million gallons per day, and has 28.8 million gallons of water storage capacity.[124] The remainder of the City's potable water supply is purchased from two wholesale water agencies: Valley Water and the San Francisco Hetch Hetchy System. Approximately 19 percent of the City's water use is composed of recycled water, discussed in the following subsections. Existing utility connections on site include domestic water, electrical, gas, and sewage pipelines on Patrick Henry Drive.

Recycled Water

Recycled water within the City is supplied from the jointly owned San José-Santa Clara Regional Wastewater Facility (RWF). Recycled water from the plant is delivered to the City through a system of water pipelines totaling 33 miles.[125] The City utilizes recycled water to offset and conserve use of potable water citywide. Recycled water is primarily used for irrigation within the City; however, several industries use recycled water in industrial processes, cooling towers, or for flushing toilets in dual plumbed buildings.[126]

Wastewater

Wastewater from the City is collected and treated at the RWF. The RWF provides primary, secondary, and tertiary treatment of wastewater and has capacity to treat 167 million gallons per day, with an average of 110 million gallons per day.[127]

[123] City of Santa Clara Water & Sewer Utility. 2020. *Water Utility*. Available: https://www.santaclaraca.gov/our-city/departments-g-z/water-sewer-utilities/water-utility. Accessed: July 3, 2023.

[124] City of Santa Clara Water & Sewer Utility. Fact Sheet, 2021. Available: https://www.santaclaraca.gov/our-city/departments-g-z/water-sewer-utilities/fact-sheet. Accessed: July 3, 2023.

[125] City of Santa Clara Water & Sewer Utilities. Recycled Water Utility. https://www.santaclaraca.gov/our-city/departments-g-z/water-sewer-utilities/recycled-water-utility. Accessed: July 3, 2023.

[126] City of Santa Clara Water and Sewer Utilities. 2015. *Urban Water Management Plan*. Available: http://santaclaraca.gov/home/showdocument?id=48088. Accessed: July 3, 2023.

[127] City of San José. *San José-Santa Clara Regional Wastewater Facility Fact Sheet*. Available: https://www.sanjoseca.gov/home/showdocument?id=32061. Accessed: July 3, 2023.

The City owns and operates the wastewater collection system within the City. According to the City's Urban Water Management Plan, the system includes over 270 miles of sewer mains and 7 pump stations to convey an average of 15 million gallons per day of wastewater to the RWF, located just north of Highway 237 in San José.

Under existing conditions, the project site has an average daily wastewater discharge of 41,035 gallons per day with a peak discharge of 102,588 gallons per day.

Solid Waste

According to the City's General Plan EIR, solid waste collection services are provided by Mission Trail Waste Systems through a contract with the City. Mission Trail Waste Systems also has a contract to implement the Clean Green portion of the City's recycling plan by collecting yard waste. The City has an arrangement with the owners of the Newby Island Landfill, located in San José, to provide disposal capacity for the City. The Newby Island Landfill is currently permitted to operate until 2041. Recycling services are provided through Stevens Creek Disposal and Recycling.

Electricity Services

Electric services within the City are provided by Silicon Valley Power (SVP). SVP owns more than 510-MW of electric-generating resources supplemented by purchase agreement for 261-MW of additional capacity for a total capacity of 771-MW. This capacity far exceeds the City's current peak electricity demand of approximately 526-MW.[128] No new generation peak capacity is necessary to meet the capacity requirements of new construction.

Impact Discussion

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

Less than Significant Impact. The project would include the installation of new water connections on the project site and would replace the existing main along its frontage. The project would include four air-cooled chillers located on the roof top of the building. Aside from a one-time fill up prior to the start of operation, these closed-loop chillers would require negligible additional water during operation. All proposed plumbing fixtures will be low flow and WaterSense Labeled, and the building design will LEED guidelines. Therefore, the project would not require new or expanded water facilities.

The project site is currently served by the RWF. The anticipated wastewater generated per employee is 20 gallons per person per 8 hours in a workday. It is anticipated that up to 700 employees would work every 24 hours. This level of employment is consistent with growth projections in the General Plan EIR, which found that impacts to public utilities would be less than significant with mitigation, except for solid waste. For a discussion of solid waste impacts, refer to **threshold d)**, below.

The project would include alterations to the project site to provide proper drainage. As discussed in **Section 2.10, Hydrology and Water Quality**, permitting requirements would ensure the project does not

[128] Silicon Valley Power. 2022. *Utility Fact Sheet*. Available: http://www.siliconvalleypower.com/svp-and-community/about-svp/utility-fact-sheet. Accessed: July 3, 2023.

result in a net increase in stormwater leaving the site. Onsite stormwater design is included in this analysis, and no offsite stormwater infrastructure improvements or changes would be needed. Therefore, the project would not require new or expanded stormwater facilities, other than those analyzed in this Initial Study.

As discussed in **Section 2.6, Energy**, the project would be served by SVP, which has adequate capacity for the project. The project includes construction of a new substation onsite, the environmental effects of which are analyzed in this Initial Study. No new or expanded offsite SVP facilities would be required to serve the project. The existing telecommunications facilities available onsite would be adequate to serve the project, and no offsite changes to gas or telecommunication facilities would be required. Therefore, this impact would be less than significant, and no mitigation is required.

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

Less than Significant Impact. The City's Water and Sewer Utilities system currently serves the project site. The project would require potable water for sinks in restrooms and the break area. Recycled water would be used for toilets, cooling, and irrigation. As previously discussed in **Section 2.10, Hydrology and Water Quality** and in the Valley Groundwater Management Plan, the City has sufficient potable water supplies to service the project. The project is consistent with growth anticipated in the General Plan EIR, which found that the City would have enough potable water to meet anticipated demand with implementation of mitigation measures. Therefore, there would be no need to develop additional resources or entitlements to serve the project. There would be a less than significant impact and no mitigation is required.

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

Less than Significant Impact. As stated in **Thresholds (a) and (b),** the RWF has available capacity to serve the project. Therefore, the project would not require the construction of new water or wastewater treatment facilities. Any impact would be less than significant and no mitigation is required.

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

Less than Significant Impact. Construction activities such as demolition, utility trenching, and foundation excavation would generate construction debris and excavated materials on site. Where feasible, such material would be used on site or recycled to reduce impacts on local and regional landfills. Material that cannot be feasibly used on site or recycled would be hauled offsite by trucks to the Newby Island Sanitary Landfill. The Newby Island Sanitary Landfill, located in San José, has an agreement with the City to provide disposal capacity through 2024. The 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.

Once operational, solid waste generated by the project would be disposed of at the Newby Island Sanitary Landfill. The project would adhere to the City's recycling and waste reduction programs. Given

this adherence, and the fact that the project would be served by a landfill with sufficient capacity, this impact would be less than significant and no mitigation is required.

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

Less than Significant Impact. AB 939 relates to solid waste diversion requirements for the State of California. In 1995, all jurisdictions in California were required by AB 939 to divert 25 percent of waste generation from landfills. By the year 2000, all California Jurisdictions were required to divert 50 percent of waste generation from landfills. The Solid Waste Disposal Measurement System Act, California Senate Bill 1016 (SB 1016), was passed in 2008 and required the AB 939 50 percent diversion requirement to be calculated in a per capita disposal rate equivalent.

In the year 2020, the City reported an annual per capita disposal rate of 5.6 pounds per day (PPD) per employee, which is below the Per Employee Disposal Target Rate of nine PPD set for the city by the CalRecycle.[129] The project would comply with relevant City requirements and policies related to waste disposal and recycling. Therefore, the project would not result in a new increase of solid waste in the City that would jeopardize the City's consistency with AB 939 and SB 1016. Therefore, the project would have a less than significant impact and no mitigation is required.

[129] California Department of Resources Recycling and Recovery (CalRecycle). Jurisdiction Diversion/Disposal Rate Summary (2007-Current). https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionPost2006. Accessed July 6, 2023

2.20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation	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:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage change?	☐	☐	☒	☐

Regulatory Setting

State

Fire Hazard Severity Zones

CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. FHSZs maps influence how people construct buildings and protect property to reduce to reduce risk associated with wildland fires.[130] FHSZs are divided into areas where the State has financial responsibility for wildland fire protection, known as State responsibility areas (SRAs), and areas where local governments have financial responsibility for wildland fire protection, known as local responsibility areas (LRAs). Homeowners living in an SRA are responsible for ensuring that their property is in compliance with California's building and fire codes. Only lands zoned for very high fire hazard are identified within LRAs.

California Fire Code Chapter 47

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

[130] CAL FIRE. *Fire Hazard Severity Zones Maps*. Available: https://osfm.fire.ca.gov/fire-hazard-severity-zones-maps-2022/. Accessed: July 3, 2023.

California Public Resources Code Section 4442 through 4431

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

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

California Code of Regulations Title 14

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

Fire Management Plans

CAL FIRE has developed an individual Unit Fire Management Plan for each of its 21 units and six contract counties. CAL FIRE has developed a strategic fire management plan for the Santa Clara Unit, which covers the project area and addresses citizen and firefighter safety, watersheds and water, timber, wildlife and habitat (including rare and endangered species), unique areas (scenic, cultural, and historic), recreation, range, structures, and air quality.[131] The plan includes stakeholder contributions and priorities and identifies strategic areas for pre-fire planning and fuel treatment as defined by the people who live and work with the local fire issues.

Regional

The California Department of Forestry and Fire Protection identifies fire hazards based on relevant factors such as fuels, terrain, and weather. There are no FHSZ within the urbanized portion of Santa

[131] California Department of Forestry and Fire Protection (CAL FIRE). 2022. *CAL FIRE Santa Clara Unit Strategic Fire Plan*. May 8, 2022. Available at https://osfm.fire.ca.gov/media/hjndvue2/2022-santa-clara-contra-costa-alameda-west-stanislaus-west-sann-joaquin-unit-fire-plan.pdf . Accessed: June 2023.

Clara County that are ranked with moderate to high fire susceptibility. The project site is and the majority of the City is not located within a Very High Fire Hazard Severity Zone (VHFHSZ).

Local

Santa Clara 2010-2035 General Plan[132]

The Goals and Policies of the General Plan address the City's goals, policies, and implementing actions regarding wildfire. The following General Plan policies related to wildfire are applicable to the project:

5.9.3-P1 Encourage design techniques that promote public and property safety in new development and public spaces.

5.10.5-P28 Continue to require all new development and subdivisions to meet or exceed the City's adopted Fire Code Provisions.

Environmental Setting

The project site is in a developed urbanized area just south of SR-237 and east of the Lawrence Expressway. The project site is developed with an existing one-story multi-use office space, parking lot and landscaping along Patrick Henry Drive. The California Department of Forestry and Fire Protection identifies fire hazards based on relevant factors such as fuels, terrain, and weather. There are no FHSZ within the urbanized portion of Santa Clara County that are ranked with moderate to high fire susceptibility.[133] The project site is, and most of the City is not located within or near a VHFHSZ.

Impact Discussion

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

OR

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

OR

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

OR

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

Less than Significant Impact. Given that the risk of wildfire at or near the project site is low, there is a similarly low potential for the project to interfere with emergency services indirectly or directly during a

[132] City of Santa Clara. 2010. *2010-2035 General Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: July 3, 2023.

[133] Cal FIRE. 2023. *Fire Hazard Severity Zone Viewer*. Available: https://egis.fire.ca.gov/FHSZ/. Accessed: July 3, 2023.

wildfire event. As mentioned in Section 2.15, Public Services, there are no formal evacuation routes or emergency response plans near the project site that would be impacted by the project. The project site and surrounding area are relatively flat and developed with urban uses, preclude factors such as slopes or strong winds from exacerbating wildfire risk. Similarly, post-fire impacts such as drainage changes and landslides would not occur as the project site and its surroundings are highly urbanized and do not have steep slopes or hillsides that would be susceptible to landslides or flooding. The project is located on an existing developed site and would not require the installation or maintenance of infrastructure that may exacerbate fire risk. Furthermore, the project site is not located within a FHSZ.[134] The nearest VHFHSZ is approximately 8 miles southwest from the project site, located around the Fremont Older Open Space Preserve in the City of Cupertino. This impact would be less than significant and no mitigation is required.

[134] Cal FIRE. 2023. *Fire Hazard Severity Zone Viewer*. Available: https://egis.fire.ca.gov/FHSZ/. Accessed: July 6, 2023.

2.21 Mandatory Findings of Significance

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

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

Less than Significant with Mitigation. As described in **Section 2.3, Air Quality**, **Section 2.4, Biological Resources**, **Section 2.5, Cultural Resources**, **Section 2.7, Geology and Soils and Section 2.9 Hazards and Hazardous Materials**, and **Section 2.18, Tribal Cultural Resources**, the project includes mitigation measures to reduce potential impacts to wildlife and cultural resources. Implementation of mitigation measures described in this Initial Study would reduce all potentially significant impacts of the project to a less-than-significant level.

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

Less than Significant with Mitigation. Cumulative impact analysis determines whether an individual project in combination with other approved or foreseeable projects would result in significant impacts. If cumulative impacts could occur, cumulative analysis asks whether the project's contribution to the significant cumulative impact would be cumulatively considerable.

The analysis of cumulative impacts for each environmental factor can employ one of two methods to establish the effects of other past, current, and probable future projects. A lead agency may select a list of projects, including those outside the control of the agency, or, alternatively, a summary of projections. These projections may be from an adopted general plan or related planning document, or from a prior environmental document that has been adopted or certified, and these documents may describe or evaluate the regional or area-wide conditions contributing to the cumulative impact.

This Initial Study evaluates cumulative impacts using the City's General Plan Integrated EIR (2011). The General Plan Integrated EIR evaluated future development, as identified in the current General Plan, and concluded that the following significant environmental impacts would occur.

- Exacerbation of land use impacts arising from the jobs –housing imbalance;
- Degradation of traffic operations on regional roadways and highways within the City of an unacceptable level of service;
- Contribution to solid waste generation beyond available capacity after 2024;
- Contribution to GHG emission exceeding the City's emission reduction target for 2035; and
- Increase in localized traffic noise level on roadway segments throughout the City.

Transportation

As described in **Section 2.17, Transportation**, traffic operations would increase compared to existing uses. The City of Santa Clara determined that, based on the trip generation rate of the project, there would not be operational issues associated with these new trips. Additionally, the project would not alter the roadway circulation network. The General Plan Integrated EIR states that despite the General Plan's overall land use-transportation efficiency, future development would nonetheless generate substantial additional traffic volumes that would cause congestion along certain roadway segments within the City's jurisdiction for which, in most cases, no feasible mitigation (i.e., ability to add new travel lanes) exists. Because the project is consistent with the underlying Low Intensity Office/R&D General Plan land use designation, the project's contribution to this significant unavoidable impact is captured in the General Plan Integrated EIR's analysis. Therefore, the project's contribution to this impact would not be substantially greater or more severe than what was already identified.

Population and Housing

The General Plan Integrated EIR identified significant cumulative land use impacts from the build-out of the General Plan land use designations, in conjunction with other regional developments. The EIR concluded that the proposed land uses would create a regional jobs-housing imbalance, as workers who are unable to live near their employment would commute long distances from outlying areas. As described in **Section 2.14, Population and Housing**, the project would not result in a substantial increase in employment outside of what is anticipated in the General Plan. Therefore, the project's contribution to this significant impact would not be cumulatively considerable.

Utilities and Service Systems

As previously discussed in **Section 2.19, Utilities and Service Systems**, the project would not result in a significant increase in solid waste generation. Although the General Plan Integrated EIR identified solid waste generation as a significant impact, the amount of solid waste generated by the project operations would be minimal and is accounted for and analyzed in the General Plan. Therefore, the project's contribution to this significant cumulative impact would not be cumulatively considerable. Further, the Newby Island Landfill was permitted to operate until 2041 after the General Plan Integrated EIR was certified (the General Plan EIR assumed a 2024 closure date), making this impact potentially moot.

Greenhouse Gas Emissions

As previously discussed in **Section 2.8, Greenhouse Gas Emissions**, the project's GHG emissions would be consistent with applicable plans, policies, and regulations. Therefore, the project's contribution to this significant cumulative impact would not be cumulatively considerable.

Noise and Vibration

As previously discussed in **Section 2.13, Noise and Vibration**, the project would not exceed applicable noise level standards for the project site. Although the General Plan Integrated EIR identified a significant impact related to the localized noise increase in traffic noise level on roadway segments, the project would not result in a net increase in traffic on surrounding roadways and highways and would not contribute to an increase in traffic noise levels. Therefore, the project would not contribute to this significant cumulative impact.

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

Less than Significant with Mitigation. As previously discussed throughout this Initial Study, the project would not result in significant environmental impacts on human beings with implementation of mitigation measures. Mitigation measures are identified in this Initial Study to reduce potential significant impacts related to air quality, biological resources, geology and soils and hazards which could otherwise affect humans. Implementation of these mitigation measures would ensure that the project would not result in impacts that would cause significant impacts on human beings, either directly or indirectly.

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