Prime Data Center

FINAL INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION

City of Santa Clara

Community Development Department
1500 Warburton Avenue
Santa Clara, CA 95050

September 2024

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PRIME DATA CENTER

1231 Comstock Street

PLN22-00282

FINAL INITIAL STUDY WITH PROPOSED

MITIGATED NEGATIVE DECLARATION (MND)

Prepared For:

City of Santa Clara
Community Development Department
1500 Warburton Avenue
Santa Clara, CA 95050

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September 2024

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

INITIAL STUDY AND ENVIRONMENTAL CHECKLIST FORM

1. Project title	1231 Comstock Prime Data Center
2. Lead agency name and address	City of Santa Clara, 1500 Warburton Avenue Santa Clara, CA 95050
3. Contact person and phone number	Daniel Sobczak (408) 615-2485
4. Project location	1231 Comstock Street, Santa Clara, CA 95054
5. Project sponsor's name and address	Russ Langbein 400 North Ervay, #131465 Dallas, TX 75313
6. General plan designation	Low Intensity Office Research and Development
7. Zoning	Light Industrial (ML) and Low Intensity Office/Research & Development (LO-RD)
9. Description of project	The applicant proposes to demolish an existing 24,278 square foot, one-story, concrete and brick furniture store that was originally constructed on the site in 1974 and replace it with a new, four-story data center building with a surface parking lot. The new building will be approximately 109,520 square-feet. Construction would be completed over approximately 24-36 months.
10. Surrounding land uses and setting	Land use designations surrounding the project site consist of Light Industrial to the east and west and north, and Heavy Industrial to the south. The project site is surrounded by industrial buildings on all sides.
11. Other public agencies whose approval is required (e.g. permits, financial approval, or participation agreements)	None

1. PROJECT INFORMATION

1.1. Project Location and Setting

The approximately 1.37-acre project site (APN 224-08-120) is located within the City of Santa Clara (City), in the Silicon Valley region of the larger San Francisco Bay Area. The project site is in the central part of Santa Clara, just south of US Highway 101 (US-101) and east of the San Tomas Expressway.

Current zoning designations surrounding the project site consist of ML – Light Industrial to the north, east and west; and MH – Heavy Industrial to the south. The proposed project site is currently zoned as ML – Light Industrial and the General Plan designation is Low Intensity Office Research & Development. Land use designations surrounding the project site consist of High Intensity Office / Research & Development to the north and west, Low Intensity Office / Research & Development to the east, and Light Industrial to the south. The proposed project site is currently designated for Low Intensity Office / Research & Development land uses.

The City the process of implementing a citywide zoning code update to improve consistency with the City's General Plan. The updated zoning code was adopted in January 2024 and is published on the City's website.[1] An updated zoning map is anticipated to go before the Council in July 2024. Under the updated zoning map, zoning designations surrounding the project site will be revised to High Intensity Office / Research and Development (HO-RD) to the north, Low Intensity Office / Research and Development (LO-RD) to the east and west, and Light Industrial to the south. The project site will be designated LO-RD under the updated zoning map, and under the updated code, the LO-RD zone permits the use of data centers as a conditional use. However, under Section 18.02.070.A of the updated zoning code, any application determined to be complete by the Project Clearance Committee prior to the effective date of the updated zoning code is processed under the prior code. Consequently, the zoning designations specified in the November 2023 Public Review Draft of the zoning code update have been included in this IS/MND document for reference and informational purposes only.

The surrounding developments consists of one- to five-story buildings with large surface parking lots. Nearby uses include data centers, research and development buildings and a construction equipment company. Buildings are generally set back from the street by landscaped areas, fencing and surface parking. Street-side trees occur intermittently throughout the area, often breaking up views of existing buildings from the street. The project site is currently developed as a one-story building and a surface parking lot. The nearest sensitive receptors to the project site are the Granada Islamic School which is located approximately 1,065 feet northwest of the project site, and residential receptors which are located approximately 3,300 feet north of the project site.

The project site is bound by Comstock Street to the south and adjacent buildings to the north, east and west. Corporate offices and a shipping yard for Owens Corning (construction supplier) are immediately

[1] City of Santa Clara. 2024. *Zoning Code Update*. Retrieved from: https://www.santaclaraca.gov/our-city/departments-a-f/community-development/planning-division/zoning/zoning-code-update. Accessed on: April 23, 2024

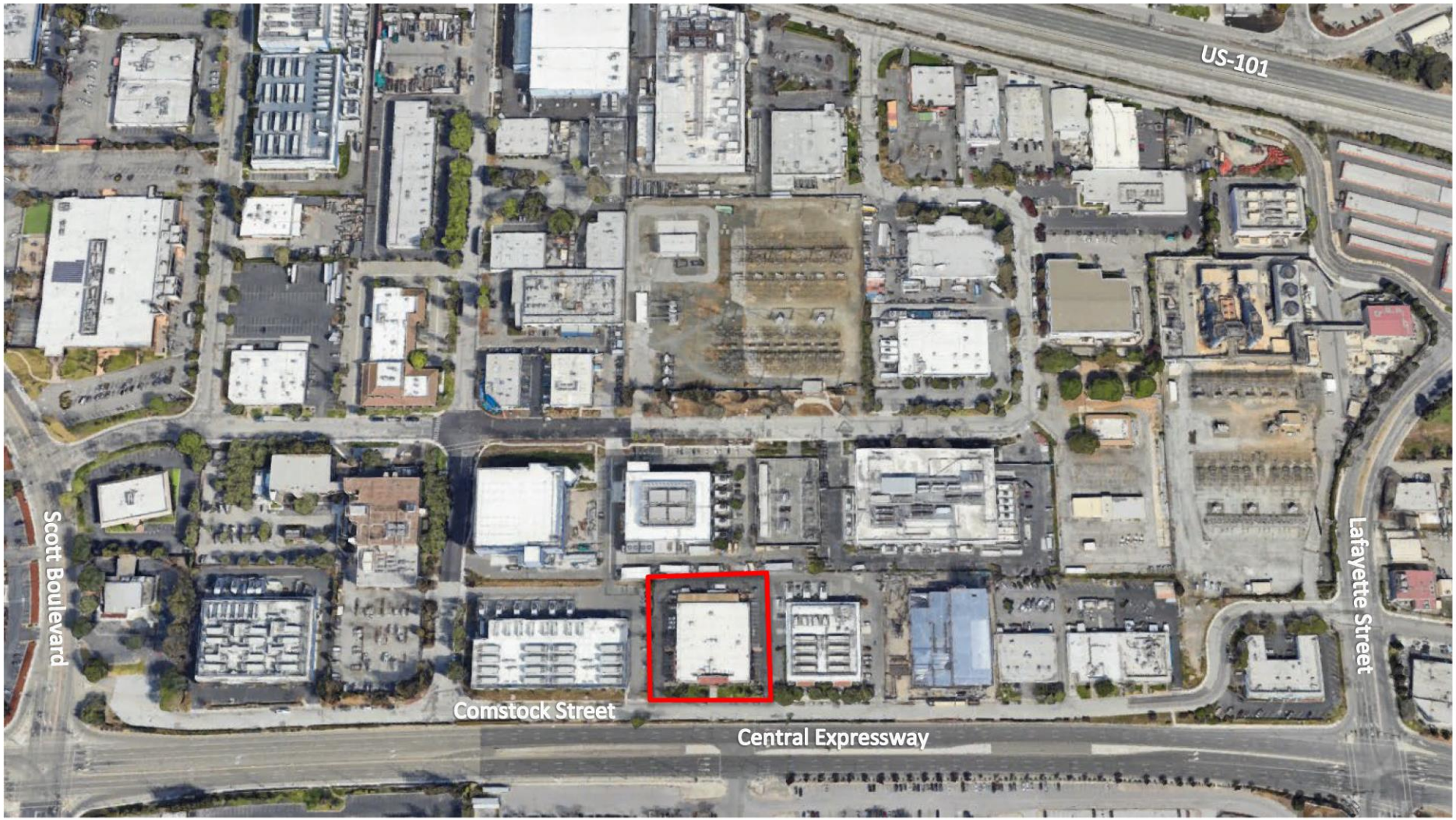
to the south. There are various offices and data centers for Digital Reality Silicon Valley adjacent to the project site from the north, east and west. **Figure 1-1** provides an overview map of the project site.

1.2. Site Conditions

Development currently on the project site consists of an approximately 24,278 square-foot single-story light industrial building and a 24,710-square-foot parking lot that was originally constructed in 1974. The building is currently in use by Mark Thomas Home as a showroom. The existing building is set back from the roadway and parcel lines on all sides, and is surrounded on the northern, eastern, and western sides with surface parking. The northern side of the building is set back from Comstock Street with ornamental landscaping and trees and a paved pedestrian walkway.

The project site includes 25 ornamental trees. As described in **Section 1.3, Project Description**, all trees onsite would be removed as a part of the project, however, the new project design will include new landscaping and tree plantings as required by the City. City code requires trees that are removed to be replaced at a 2:1 ratio including. The project would plant 5 trees planted onsite and 45 planted offsite. Due to lack of space on project site, the City is allowing the project to proceed with these limitations and will work with the applicant to meet City requirements.

There are two curb cuts which allow vehicles to enter the site from Comstock Street. Primary pedestrian access is also from Comstock Street. The project site currently has a total of 35 parking spaces, including three accessible spaces consistent with Americans with Disabilities Act (ADA) requirements for the existing land use.



Legend

Project Site

N

Not to Scale

Project Location Map Figure **1-1**

Source: Circlepoint, 2024

1.3. Project Description

As part of the project, the existing single-story building would be demolished, and the associated parking lot would be removed. A four-story, approximately 109,520 square-foot data center would replace the existing uses on the site. The data center would be approximately 80 feet in height and would house computer servers and supporting equipment for private clients. **Table 1-1** compares the existing structure on the project sire to the proposed development.

Clients would either use the project as a place to relocate their existing servers or as a place to operate new servers and expand their server capacity. Total capacity of the data center would be 13.5 Megawatt (MW). Six 3,000-kilowatt (kW) diesel generators would be added to the site to provide power to the data center.

Precise information on required off-site improvements to Silicon Valley Power (SVP) facilities to support the data center is not known at this time. For the purposes of this analysis, it is assumed that all offsite improvements would be within existing utility corridors in developed areas, generally along existing streets and right of ways. Furthermore, it is assumed that any major infrastructure improvement projects by SVP are covered in the respective California Public Utilities Commission (CPUC) approved plan and have accordingly been evaluated under CEQA. In addition, it is assumed that the data center would operate using 3,000kW from opening day. This ensures that the maximum greenhouse gas emissions are captured.

Site improvements would include the data center building, a covered loading dock (sloped down -4 feet below grade), exterior lighting, perimeter fencing surrounding the entire property and subsequent gated driveway access, parking lot, and perimeter landscaping (see **Figure 1-2**).

Table 1-1 Comparison of Existing Structure and Proposed Development

	Existing Structure	Proposed Development
Height	1 Story	4 Stories
Parking (sq ft)	24,710 sq ft.	20,809 sq ft.
Building Footprint	24,278 sq ft.	109,520 sq ft.

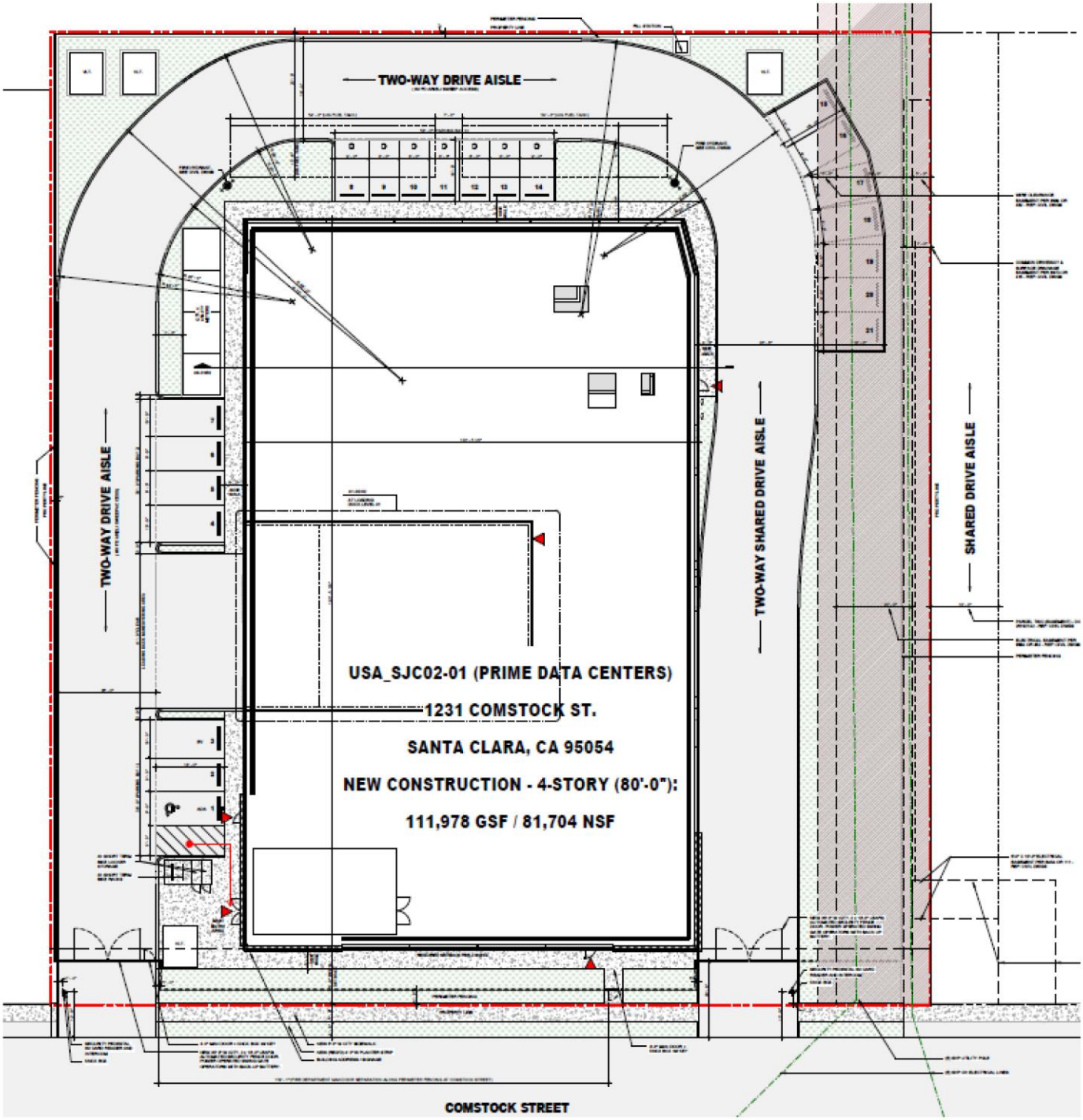
Source: Prime Data Center, 2023

Building Design

The data center would be carbon steel frame construction and would have an exterior aluminum curtainwall system with vision glazing or spandrel panels, paired with painted Exterior Finished Insulation System (EFIS) and composite panels, all of which are materials chosen to match the texture and finish of adjacent data centers. In addition, Prime Data Centers has elected to have strategically placed ribbed concrete panels, designed to passively remove heat out of the data center's data halls and galleries, to help reduce building energy costs and ultimately reduce environmental and resource impacts. Elevations are shown in **Figure 1-3** and **Figure 1-4** and renderings of the data center are shown in **Figure 1-5**. The aforementioned exterior glazing would break up the façade with large, continuous sections of glazing spanning from the base to the roofline. Rooftop equipment and the rooftop staircase access and elevator would be screened from view from the surrounding area by a Composite Metal

Panel (CMP) screen wall system which would measure 11 feet in height and would include screening up to 18 feet above the finished roof surface as required by code. The screen wall would be set back from the roof edge to provide distinct massing and materiality interested of the building façade.

Because of the limited site area, the project does not propose a specific outdoor location for an equipment yard; select and limited equipment is proposed to be in outdoor areas of the site. The diesel generators for the data center would be housed on Level 01 of the new data center. Two underground fuel storage tanks for the generators will be located below the drive aisle at the north end of the site.



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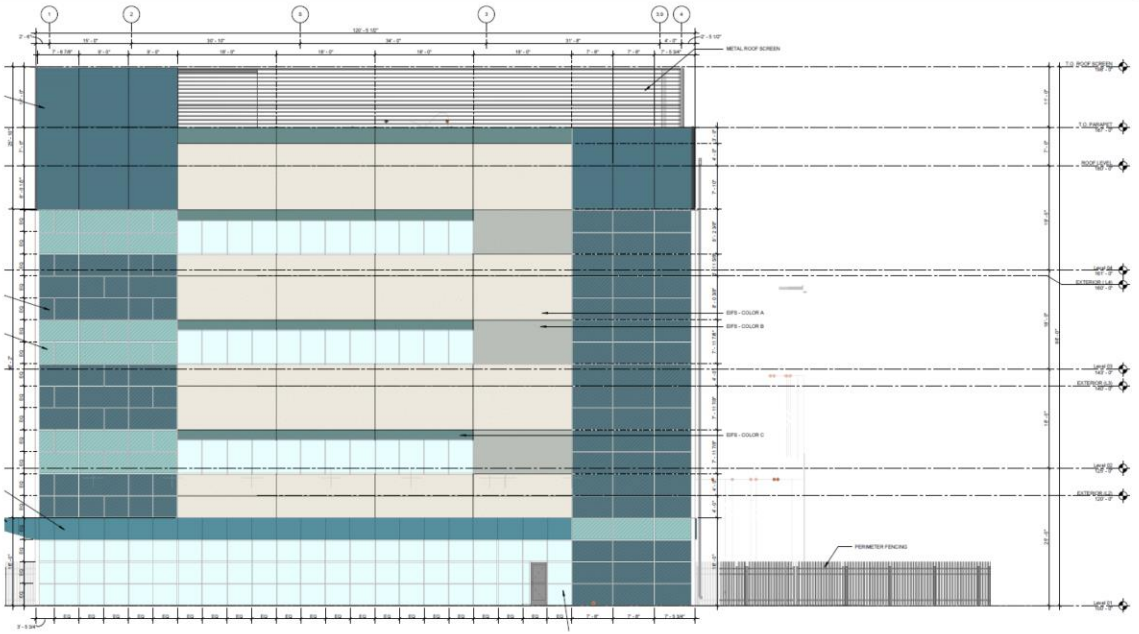
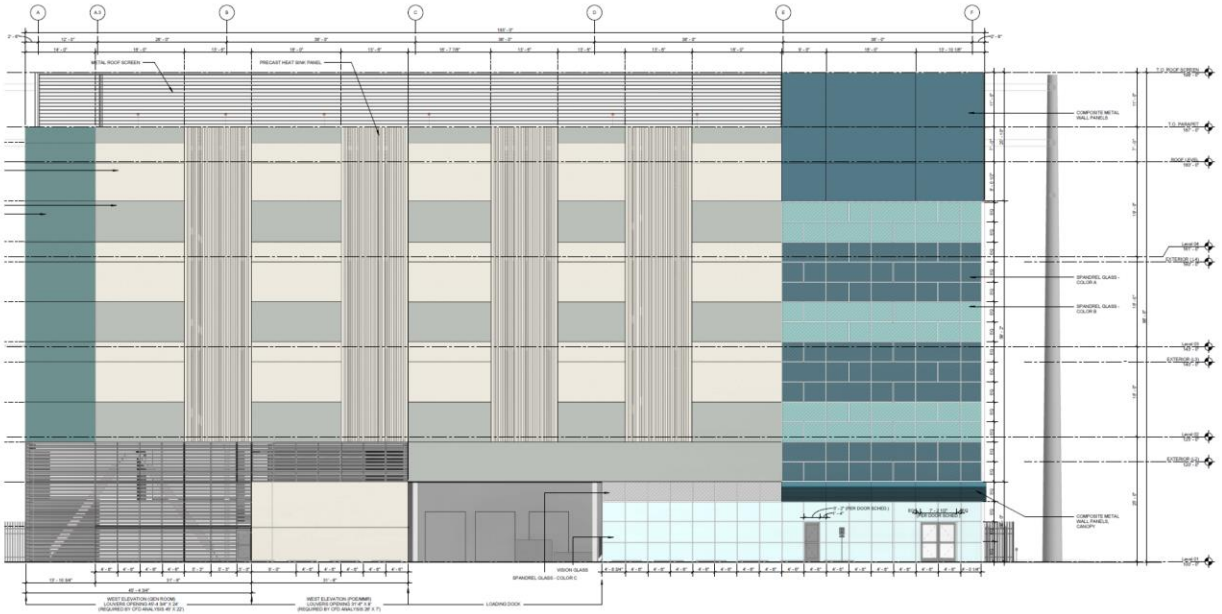
Site Plan Figure **1-2**

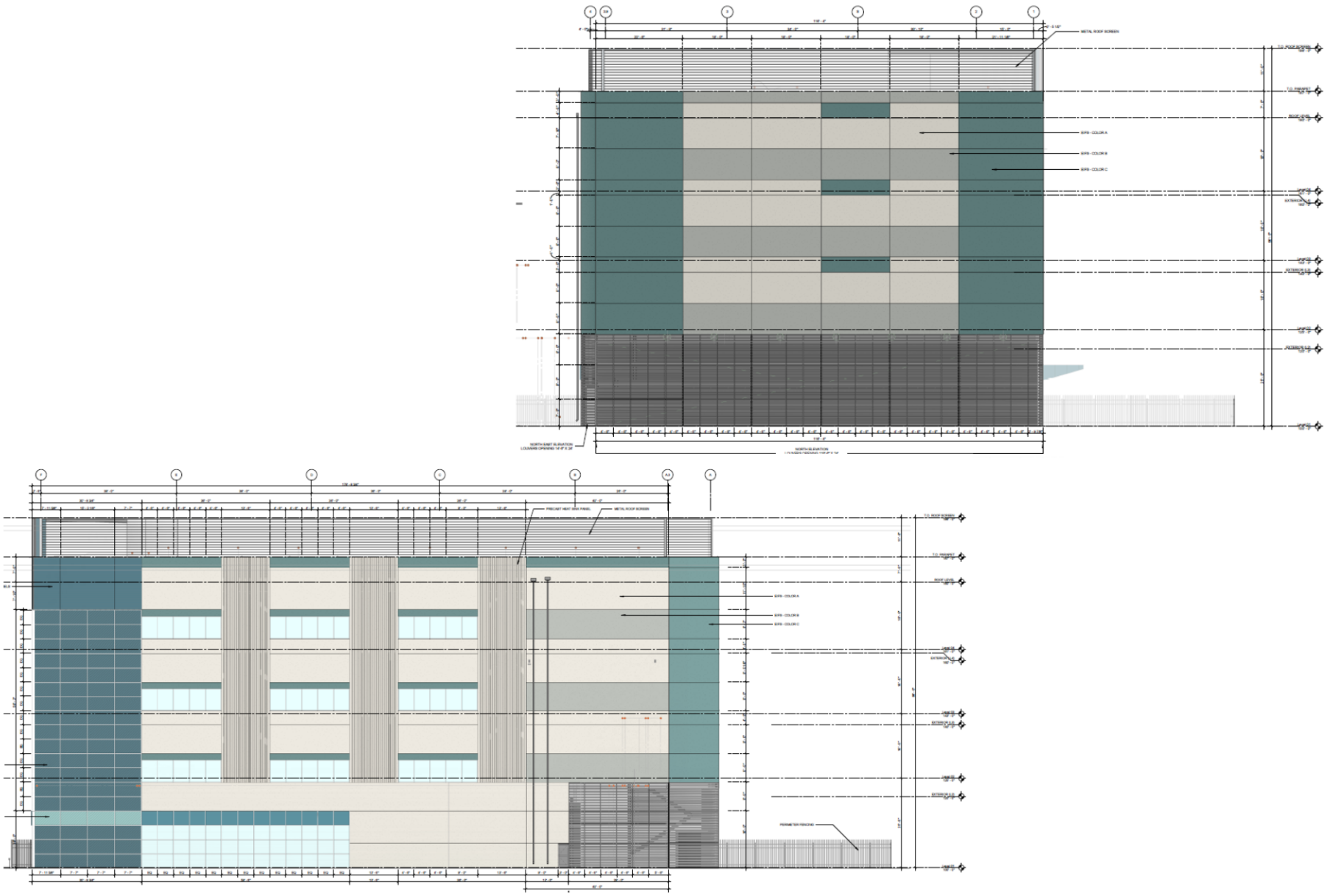
Source: Prime Data Cetner, 2024





Project Elevations (South & West) Figure **1-3**

Source: Circlepoint, 2023



Project Elevations (North & East) Figure **1-4**

Source: Circlepoint, 2023

Exterior Rendering Figure **1-5**

Source: Circlepoint, 2023

Major Equipment

Table 1-2 provides a list of the major equipment that would be located on site as part of the project.

Table 1-2. Major Equipment

Equipment	Quantity	Location
3,000 kilowatt (KW) standby generators	6	Inside the data center
Air Cooled Chillers	7	Roof
Fuel Tanks	2	North, adjacent to the data center
Dedicated Outside Air Units	2	Roof

Source: Prime Data Center, 2023

Parking and Site Access

The existing parking lot would be removed to construct the data center. Based on the usage of parking for this project, a total of 21 spaces would be provided on site. The parking lot would be provided along the northern and western side of the building.

As shown in **Figure 1-2** and described above, two primary site access points would remain from Comstock Street. The existing parking lot is not gated; the proposed parking lot would be gated at both site access points. The design and dimensions of the driveways would be updated to meet the City's current design requirements as provided in the City's Standard Details. The two driveways along Comstock Street would also provide access for service vehicles and fire trucks. Existing pedestrian access to the site from Comstock would be available at the westernmost access point only, adjacent to the main entry and lobby of the building. These improvements would be in conformance with electrical vehicle standards in Title 24 of the California Code of Regulations and with the Americans with Disabilities Act (ADA) Accessibility Guidelines, the 2022 California Building Code, 2022 California Green Building Standards Code, and the City of Santa Clara "Reach Code".

Landscaping and Trees

The project would include landscaping consistent with the surrounding buildings to comply with the City's design requirements. Construction of the proposed data center and parking lot would require removal of 25 non-protected trees; the new project design will include new landscaping and tree plantings as required by the City of Santa Clara. The proposed replacement trees would be replaced at a 2:1 ratio including 5 trees planted onsite and 45 planted offsite consistent with the City's Tree Ordinance. Up to five trees (London Planetree, Marina Strawberry Tree) are located on neighboring properties immediately adjacent to the proposed project site. All five of these trees would remain in place.

As shown in **Figure 1-2**, perimeter landscaping surrounding the existing building would be removed and partially replaced. New landscaping is proposed between the parking bays and replacement landscaping would be installed along the southern property boundary facing Comstock Street.

1.4. Project Operation

Backup Energy Supply

A data center relies upon a constant supply of power to allow servers to operate continuously: 24 hours per day, seven days per week, with average noise levels typically between 70-80 dBA.[2] To ensure continuous energy supply, the project would utilize six three (3) MW backup diesel generators. The backup generators are designed to start up quickly in the event of a power failure. All generators would be located under the parking lot of the data center building. The equipment specification sheet for the backup generators indicates that the generators create an average sound pressure level (SPL) of 98 dBA from 23 feet. However, since the backup generators would be located underground, any noise generated by the equipment during testing or maintenance would be substantially attenuated. Emissions from combustion engines for stationary uses, including diesel generators, are regulated by the US Environmental Protection Agency (EPA). Engine emission standards have been categorized into a tiering system that designates maximum pollutant emissions. All new generators would have EPA Tier 4 equivalent engines and would be outfitted with diesel particulate filters. The generator engines would be fueled using ultra-low sulfur diesel fuel with a maximum sulfur content of 15 parts per million (ppm). All generator engines would be equipped with California Air Resources Board (CARB) Level 3 verified diesel particulate filters (DPFs) with a minimum control efficiency of 85 percent removal of particulate matter.

All backup generators would be run for short periods for testing and maintenance purposes, but otherwise will not operate unless there is a disturbance or interruption of the utility power supply. For the purposes of this analysis, it is assumed that each backup generator will be tested during normal business hours for one hour per month, for a total of twelve hours per year. Bay Area Air Quality Management District's (BAAQMD) Authority to Construct and CARB's Airborne Toxic Control Measures limits each engine to no more than 50 hours annually for reliability purposes (i.e., testing and maintenance). In addition, the applicant would limit operation to one engine at a time for routine testing activities, which would be conducted in accordance with manufacturer's recommendations. The generators would have maintenance testing performed throughout the year to ensure performance when needed during a power failure. All generators would be operated strictly in accordance with permitted hours as determined by BAAQMD. Furthermore, the backup generators would be consistent with the noise requirements outlined in Chapter 3.10, Regulation of Noise and Vibration of the City code and Section 5.10.6, Noise Goals and Policies of the City's General Plan.

Generators will be installed, as briefly noted in the Building Design Section, on the north side of the building on Level 01. This will provide easy connection to the two sub-base 30,000-gallon fuel storage tanks required for this equipment. The sub-base fuel storage tanks would be provisioned with fuel ports to allow refilling from the paved loop road surrounding the data center. Additionally, the project would include five (5) active uninterruptable power supplies (UPS), direct-current (DC) plant energy equipment (batteries) for backup power, and one catcher system. Each system includes two (2) 900 kW parallel

[2] Miljković, Dubravko. Noise within a Data Center. Available: https://www.researchgate.net/publication/304079164_Noise within_a_Data_Center. Accessed: July 1, 2024.

UPS's. UPS and batteries would be located on the second, third and fourth floor, on the north wall of the data center.

Battery technology for commercial UPS systems is lead-acid type, and a nickel zinc battery option could potentially be used. The batteries would be placed in cabinets and installed next to the associated UPS module in a temperature-controlled room for optimum efficiency and battery life. The quantity of batteries is dictated by the length of time the back-up generators need to start and reach full operating power. This is typically less than one minute; however, a safety factor is added which results in an average of five to six minutes of battery power available.

Cooling

Servers convert electrical energy into heat as they operate and need to be kept cool. Therefore, cooling systems are a critical component of data center operation. Cooling systems would be installed to remove heat, ensuring servers operate safely and effectively. The project would include seven modular air-cooled chillers and two Dedicated Outside Air Units located on the roof of the data center.

Employees

It is anticipated that up to eight employees would typically be working in the building during daytime work hours, and up to five employees per shift would work in the building in the evening and overnight, for a total of up to 20 employees every 24 hours. As needed, technical support personnel would also be present on the site.

Vehicle Trips

Truck trips would occur during project operation to deliver and remove equipment as needed. Passenger vehicle trips to the site would be minimal, consisting of employees traveling to the site for work and occasional client visits.

Energy Usage

Major sources of energy demand for project operations would be client servers and the cooling system. Overall, the daily power usage would vary depending on how many servers are up and running and how intensely the data center's clients are running their servers. The building would require very little lighting. Lighting would be used only to support small areas such as a security area, lobby, and office/conference room.

Operational Noise

The sources of operational noise from the project site would consist of the 3.0 MW backup diesel generators, exhaust fans, rooftop air-cooled chillers, and rooftop DOAS systems. Design of this building adheres to the limitation of 70 dBA consistent with State and City noise requirements. The generators are for emergency backup use only and would only produce noise during a utility power failure and during short periods of routine testing and maintenance. Construction

Construction would be completed over approximately 24-36 months. For the purposes of this analysis, construction was assumed to begin in May 2024 and end in May 2026. While this may no longer be

feasible, the assumption presents a conservative analysis scenario because construction impacts tend to become less severe over time as new technologies are adopted and new regulations to into effect.

Conventional construction equipment would be used, such as excavators, backhoes, and both light-duty trucks and heavy-duty dump trucks. Truck trips are expected to reach the project site via US-101, Lafayette Street, Central Expressway, Scott Boulevard, and Comstock Street. Truck trips for off haul of excavated materials are expected to travel along these same routes and arterials to dispose of construction demolition debris. All mobile off-road equipment (wheeled or tracked) greater than 50 horsepower used during construction activities would meet the U.S. EPA Tier 4 final standards.

Permits and Approvals

The project applicant is seeking approval from the City's Development Review Hearing. The approval is anticipated after the Development Review Hearing considers the application at a publicly noticed meeting. In addition, the Project will require the following permits and approvals:

- Conditional Use Permit
- Demolition Permit
- Building Permit
- Minor Modification

2. EVALUATION OF ENVIRONMENTAL IMPACTS

This Initial Study evaluates impacts based on the California Environmental Quality Act (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 reduce any significant impacts to a less than significant level and an EIR will not be required.
- **Section 2.21, Mandatory Findings of Significance**, 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 impact in the absence of mitigation 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
- ☐ Agriculture and Forestry Resources
- ☐ Air Quality
- ☒ Biological Resources
- ☒ Cultural Resources
- ☐ Energy
- ☒ Geology and Soils
- ☐ Greenhouse Gas Emissions
- ☐ Hazards and Hazardous Materials
- ☐ Hydrology and Water Quality
- ☐ Land Use and Planning
- ☐ Mineral Resources
- ☐ Noise and Vibration
- ☐ Population and Housing
- ☐ Public Services
- ☐ Parks and Recreation
- ☐ Transportation
- ☒ Tribal Cultural Resources
- ☐ Utilities and Service Systems
- ☐ Wildfire
- ☒ Mandatory Findings of Significance

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
Acting Director of Community Development
City of Santa Clara

Date

2.1. Aesthetics

	Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
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 is managed by the California Department of Transportation (Caltrans). The purpose of this program is to protect and enhance the natural scenic beauty of the California highway system and adjacent corridors through special conservations measures. Currently, there are no state-designated scenic highways in the City of Santa Clara. Interstate 280 from the San Mateo County line to State Route (SR) 17 is eligible to become a state Scenic Highway but it has not been officially designated. State highways may be identified as eligible depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. When evaluating development proposals along eligible highways, local authorities may consider potential effects on travelers' enjoyment of local views.

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 particular 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.

City of Santa Clara City Code Chapter 18.76-Architectural Review Process

Chapter18.76 (Section 18.120 of the zoning code update) of the City's code requires that new development projects undergo a Design Review Hearing. The City's Architectural Review process requires that the Director of Community Development or a designee review plans and drawings submitted for design, aesthetic considerations, and consistency with zoning standards prior to submittal for building permits. The review takes place at a publicly noticed Development Review Hearing and the hearing officer follows the City's Community Design Guidelines. The purpose of these guidelines is to provide a manual of consistent development standards in the interest of continued maintenance and enhancement of the high-quality living and working environment of the City.

Environmental Setting

The project site is within a fully developed, industrial area of the City. The topography of the site is flat, with views of the eastern and western foothills that are partially blocked by existing industrial, commercial, and office structures surrounding the site. The surrounding development consists of one- to five-story office, industrial, and commercial buildings. The closest residences are located approximately 0.62 miles to the north of the project site. Land uses adjacent to the project site include a telecommunications service provider to the north and east, a data center to the west, and a manufacturing facility to the south. The buildings are generally set back from the street by landscaped areas, and street parking along Comstock Street. The Norman Y Mineta San José International Airport is located approximately 0.7 miles southeast of the site. Air traffic, along with truck and other vehicle traffic, is readily apparent in the area surrounding the project site.

The visual character of the project site is an urban built environment. The project site is currently developed with a one-story commercial building and showroom with a paved surface parking area. The project site is flat with trees and landscaping features located along the southern portion of the site facing Comstock Street. There are no scenic resources on site, and the site is not visible from a scenic highway.

Viewers of the project would primarily include drivers along Comstock Street and Central Expressway, 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

The following discussion is based in part on a Bird-Safe Design Memorandum prepared for the project in January 2024. A copy of this report is included as **Appendix A** to this Initial Study.

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

No Impact. The General Plan does not designate any 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 scenic highways in the City.[3] Interstate 280 has been identified as eligible for scenic highway designation; however, the project site is approximately 6.3 miles from I-280 and separated from the highway by extensive areas of urban development. The City's General Plan EIR lists the Santa Cruz Mountains, Diablo Range, San Tomas Aquino Creek, and the Guadalupe River as visual resources within the City. The topography of the project area is relatively flat and prominent viewpoints of the mountains are limited, as buildings, trees, and infrastructure (e.g. utility lines, elevated roadways, etc.) obscure viewpoints. Views of the mountains are only available when roadways provide a break in the built environment or are elevated. The foothills to the east and west are partially visible through the Comstock Street throughway and the project would not obstruct this view. 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 current character of the project area is built-up with single- and multi-story industrial buildings and has few landscaped areas. As described above, the project site is an existing furniture store and showroom that is zoned for light industrial use (LO-RD in the zoning code update). There would be a change from a one-story to a larger, four-story structure. Though the new structure would be larger in mass and scale than the existing building, the proposed data center facility would be similar in scale to nearby development, and its design is consistent with the requirements of the Light Industrial (ML) zoning designation as well as consistent with the requirements of the LO-RD zoning designation specified in the zoning code update. The project would be subject to review by the City's design review process, including a public hearing before the Director of Community Development or designee, which would ensure the project conforms to the City's adopted Community Design

[3] California Department of Transportation. California Scenic Highway Mapping System. Available: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa . Accessed: January 24, 2024.

Guidelines. 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 Comstock Street as well as on the northwest corner of the project site. Perimeter landscaping along Comstock Street of the project site would create a setback condition resembling the surrounding areas. Similar to 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 would continue to consist of industrial buildings set back from the roadway with fencing and intermittent trees and vegetation.

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. 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 as a result 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 similar to 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. Furthermore, the project intends to incorporate additional bird-safe lighting design measures that will minimize lighting impacts. These measures include exterior lighting that adheres to the LEED light pollution reduction measures, lighting that is directed in a downward fashion to avoid disorienting migrating and nocturnal birds, and maintaining exterior building fixtures to automatically shut off from midnight until 6 a.m. With the incorporation of these measures, the project would further reduce potential glare impacts by incorporating measures consistent with the American Bird Conservancy Bird Safe Design Standards along with the U.S. Green Building Council LEED "Bird Collision Deterrence" and "Light Pollution Reduction" standards.

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. However, it 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

	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 nonagricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or with 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 Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural, and conservation of these lands over time. Agricultural land is rated according to soil quality and irrigation status. The best quality land is called

Prime Farmland. In CEQA analyses, the FMMP classifications and published county maps are used to identify whether agricultural resources that could be affected are present on-site or in the project area.[4]

California Land Conservation Act

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

Fire and Resource Assessment Program

The California Department of Forestry and Fire Protection (CAL FIRE) identifies forest land, timberland, and lands zoned for timberland production that can support forestry resources. 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 the project site.[6]

Environmental Setting

The project site and surroundings do not contain any designated farmland or land subject of a Williamson Act contract. According to the California Department of Conservation's Important Farmlands 2020 Map, the project site is designated as Urban Built-Up Land. The Urban Built-Up Land classification is defined as land that that has a building density of at least 1 unit to 1.5 acres or approximately 6 structures to a 10-acre parcel.[7]

The project site and surrounding properties are designated for and developed with urban uses. The project site is currently developed with a commercial building and showroom. There are no agricultural or forest lands in the vicinity of the project site.

[4] California Department of Conservation. *Farmland Mapping and Monitoring Program.*http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx. Accessed: February 5, 2024.

[5] California Department of Conservation. *Williamson Act-Program Overview.*https://www.conservation.ca.gov/dlrp/wa/Pages/wa_overview.aspx. Accessed: February 5, 2024.

[6] California Department of Forestry and Fire Protection. *Fire and Resource Assessment Program.* https://www.fire.ca.gov/Home/What-We-Do/Fire-Resource-Assessment-Program/Assessment. Accessed: February 5, 2024.

[7] California Department of Conservation. 2023. *California Important Farmland Finder.* Retrieved from: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed: January 24, 2024.

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 nonagricultural use?

OR

b) Conflict with existing zoning for agricultural use, or with a Williamson Act contract?

No Impact. The project site is developed with industrial buildings and is zoned for light industrial uses (LO-RD under the zoning code update). 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.[8] 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 (LO-RD under the zoning code update) and does not contain forest land or other similar resources and the project site is currently developed with a furniture retail store. 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.

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 (LO-RD under the zoning code update) 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.

[8] 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: February 5, 2024.

2.3. Air Quality

	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 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 January 2024. A copy of this report is included as **Appendix B** to this Initial Study

Regulatory Setting

Local Climate and Meteorology

The project site is located 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.

Regional Climate and Air Pollution in the SFBAAB

The City of Santa Clara is located 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. 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.[9]

[9] Bay Area Air Quality Management District (BAAQMD). 2017. *California Environmental Quality Act: Air Quality Guidelines*. Retrieved from: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed: February 1, 2024

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, 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.[10]

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),[11] 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 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

[10] BAAQMD. 2017. *California Environmental Quality Act: Air Quality Guidelines*. Retrieved from: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed: February 1, 2024

[11] 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.

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.[12]

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.[13]

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.[14] NO_2 absorbs blue light and causes a

[12]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: February 5, 2024.

[13] 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: February 5, 2024.

[14]United States Environmental Protection Agency. 2022. *Basic Information about NO2*.Available: https://www.epa.gov/no2-pollution/basic-information-about-no2#Effects. Accessed: February 5, 2024.

reddish-brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of O_3/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.[15]

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.[16]

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 U.S. 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.[17] 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,

[15]United States Environmental Protection Agency (U.S. EPA). 2023. *Sulfur Dioxide Basics*. https://www.epa.gov/so2-pollution/sulfur-dioxide-basics#effects. Accessed: February 5, 2024

[16] California Air Resource Board. 2023. *Overview: Diesel Exhaust & Health .N.d*. Available: https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health. Accessed: February 5, 2024.

[17] U.S. EPA. 2013. *Policy Assessment for the Review of the Lead National Ambient Air Quality Standards, External Review Draft.* Retrieved from: https://www3.epa.gov/ttn/naaqs/standards/pb/data/010913_pb-draft-pa.pdf. Accessed: February 1, 2024

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 discussed above, 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]

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

[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: February 5, 2024.

[19] California Air Resource Board. 2022. *Overview: Diesel Exhaust & Health*. Available: https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health. Accessed: February 5, 2024.

[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: February 5, 2024.

[21]California Air Resources Board. 2023. National Ambient Air Quality Standards. Available: https://ww2.arb.ca.gov/resources/national-ambient-air-quality-standards. Accessed: February 5, 2024.

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.

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. As a result, human health impacts caused by the air pollutants discussed above 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. The NAAQS and the underlying science that forms the basis of the NAAQS are reviewed every

[22] United States Environmental Protection Agency. 2023. *NAAQS Table*. Available: https://www.epa.gov/criteria-airpollutants/naaqs-table. Accessed: February 5, 2024.

[23] California Air Resources Board. 2023. California Ambient Air Quality Standards. Available: https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards. Accessed: February 5, 2024.

five years to determine whether updates are necessary to continue protecting public health with an adequate margin of safety.

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 /m3 (rolling 3-month avg) 1.5 µg /m3 (calendar quarter)	1.5 µg /m3 (30-day avg)
Particulate Matter (PM10)	150 µg /m3 (24-hr avg)	50 µg /m3 (24-hr avg) 20 µg /m3 (annual avg)
Particulate Matter (PM2.5)	35 µg /m3 (24-hr avg) 12 µg /m3 (annual avg)	12 µg /m3 (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 average)
Sulfates	No Federal Standards	25 µg/m3 (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; $\mu g/m^3$ = micrograms per cubic meter

Source: CARB, 2016

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. Error! Reference source not found. 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. Similar to 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 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 (SIP)

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 U.S. 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 $PM_{2.5}$.[24] 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.

[24] United States Environmental Protection Agency. 2023. *Nonattainment Areas for Criteria Pollutants (Green Book*). Available: https://www.epa.gov/green-book. Accessed: February 5, 2024.

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 .[25] 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.[26]

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

[25] 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: February 5, 2024.

[26] 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: February 5, 2024.

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. Error! Reference source not found. 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** below**.**

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 Error! Reference source not found.. 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: BAAQMD, 2023

Local

City of Santa Clara 2010-2035 General Plan [27]

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.

[27] City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: February 5, 2024.

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

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 3.7 miles southeast of the project site, was used for ozone, nitrogen dioxide, PM10, and PM2.5 measurements. SO2 is not monitored in Santa Clara County and therefore is not reported. CO data was not available from the monitoring station.

Table 2-4 indicates the number of days that each of the federal and state standards have been exceeded at this station in the years 2020, 2021, and 2022. The data indicates that the 8-hour ozone CAAQS and NAAQS were exceeded for all three years. The 1-hour ozone CAAQS were exceeded for 2020 and 2021. The PM10 CAAQS was exceeded in 2020 and the PM2.5 NAAQS was exceeded in 2020, 2021 and 2022. As shown in **Table 2-4**, no other state or federal standards were exceeded at these monitoring stations.

Table 2-4 Ambient Air Quality – Monitoring Station Measurements

Pollutant	2020	2021	2022
Ozone (ppm), Worst 1-Hour	0.106	0.098	0.09
Number of days above CAAQS (>0.09 ppm)	1	3	0
Number of days above NAAQS (>0.12 ppm)	0	0	0
Ozone (ppm), Worst 8-Hour Average	0.085	0.084	0.074
Number of days above CAAQS (>0.070 ppm)	2	4	1
Number of days above NAAQS (>0.070 ppm)	2	4	1
Nitrogen Dioxide (ppm), Worst 1-Hour	0.052	0.048	0.047
Number of days above CAAQS (>0.180 ppm)	0	0	0
Number of days above NAAQS (>0.100 ppm)	0	0	0
Particulate Matter <10 microns (μg/m3), Worst 24 Hours	137.1	45.1	44.5
Number of days above CAAQS (>50 μg/m3)	10	0	0
Number of days above NAAQS (>150 g/m3)	0	0	0
Particulate Matter <2.5 microns (μg/m3), Worst 24 Hours	120.5	38.1	36.2
Number of days above NAAQS (>35 μg/m3)	12	1	2

ppm = parts per million; μg/m3 = micrograms per cubic meter; CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard

Notes: Measurements from CARB at the nearest monitoring station (158b Jackson Street in San José).

Source: CARB, 2024

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.[28][29] The sensitive receptors nearest to the project site are the Granada Islamic School approximately 1,065 feet to the northwest and residential receptors located approximately 3,300 feet to the north 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.[30] 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 from off-site. Construction of the proposed project was analyzed based on the land use type and square footage described provided by the applicant, which includes a 24,278 square foot data center and 32,271 square feet of surface parking lot. Construction of the proposed project was assumed to begin in May 2024 and end no sooner than May 2026, and possibly as late as May 2027, for an approximately 24-36-month duration. Based on applicant-provided land uses, the CalEEMod provides assumptions for equipment lists and vehicle trips. During the demolition phase, the project would export approximately 377 cubic yards of soil from installation of underground storage tanks for diesel fuel. In addition, the existing one-story building would be demolished (approximately 27,625 square feet). It is assumed that construction equipment used would be diesel-powered and the project would

[28] California Air Resources Board (CARB). 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. Retrieved from: https://ww3.arb.ca.gov/ch/handbook.pdf. Accessed: February 1, 2024.

[29] Office of Environmental Health Hazard Assessment (OEHHA). 2015. *Air Toxics Hot Spots Program.* Retrieved from: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed: February 1, 2024.

[30] 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: February 5, 2024.

comply with applicable regulatory standards, such as BAAQMD's Basic Best Management Practices fugitive dust control measures and Regulation 8 Rule 3, Architectural Coating.

Construction GHG emissions are typically amortized over the project life cycle, as the nature of construction emissions is relatively intense and occur over a shorter time period compared to operational emissions. Neither BAAQMD nor the City of Santa Clara have provided guidance on what the amortization period for individual projects should be. The Association of Environmental Professionals (2016) recommends GHG emissions from construction be amortized over 30 years.

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 115,000 MWh per year. It is assumed that energy consumption will operate on 100 percent carbon neutral energy to meet compliance with Santa Clara CAP Action B-1-7; therefore, no indirect GHG emissions were assumed for project energy use from the data center.
- **Water Demand.** Water source emissions are based on CalEEMod defaults.
- **Employee Vehicle Trips.** The project assumed CalEEMod defaults for employee vehicle trips.
- **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.
- **Emergency Diesel Generators:** It is assumed that six (6)3,000-kilowatt (kW) emergency diesel generators will be installed to support facility operations. Emission factors were provided by the applicant for the Miratech selective catalytic reduction (SCR) control equipment. It is assumed each generator will be tested for one (1) hour per month for a total of twelve (12) hours per year.

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 (2017 Plan) that describes how the jurisdiction will meet air quality standards. The most recently adopted air quality plan is the BAAQMD 2017 Plan. The 2017 Plan 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 Plan 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.
- 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 described in the response to **threshold b)** below, 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 2-5**, the proposed 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.

Table 2-5 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 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 proposed 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.
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 ABAG's 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 proposed 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.

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 proposed 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 labels, 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 federal or State ambient air quality standard?

Construction Emissions

Less than Significant Impact. Project construction would involve activities that have the potential to generate air pollutant emissions. **Table 2-6** summarizes the estimated maximum daily emissions of ROG, NO_x, CO, PM_{10} exhaust, $PM_{2.5}$ exhaust, and SO_x during project construction. As shown in **Table 2-6**, project construction emissions for all criteria pollutants would be below the BAAQMD average daily thresholds of significance and therefore would be less than significant.

Table 2-6 Project Construction Emissions

	Average Daily Emissions (lbs/day)					
	ROG	NO_x	CO	SO_x	PM_{10} (exhaust)	$PM_{2.5}$ (exhaust)
2024	1	9	9	<1	1	1
2025	1	10	12	<1	1	<1
2026	3	2	3	<1	<1	<1
Maximum Daily Emissions	**3**	**10**	**12**	**<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)

CalEEMod worksheets in Appendix B.

Source: Rincon Consultants, 2024

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, which 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:

- 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 certification can be for the original equipment or equipment that is retrofitted to meet the Tier 4 Final standards.
- 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 2-7**. Generators were calculated outside of CalEEMod and are displayed as a separate item. 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 2-7 Project Operational Emissions

	Average Daily Emissions (lbs/day)					
	ROG	NO_x	CO	SO_x	PM_{10} (exhaust)	$PM_{2.5}$ (exhaust)
Average Daily Emissions	3	<1	2	<1	<1	<1
Generator Daily Emissions	5	18	93	<1	1	1
Total Project Emissions	**8**	**18**	**95**	**<1**	**1**	**1**
BAAQMD Threshold	54	54	N/A	N/A	82	54
Threshold Exceeded?	**No**	**No**	**N/A**	**N/A**	**No**	**No**
Annual Emissions (tons/year)						
Project Annual Emissions	1	<1	<1	<1	<1	<1
Generator Annual Emissions	<1	<1	1	<1	<1	<1
Total Project Emissions	**1**	**<1**	**1**	**<1**	**<1**	**<1**
BAAQMD Thresholds	10	10	N/A	N/A	15	10
Threshold Exceeded?	**No**	**No**	**N/A**	**N/A**	**No**	**No**

Average daily and annual emissions. See Table 2.6 "Operations Emissions by Sector, Mitigated". See CalEEMod worksheets in Appendix B. Numbers may not add up due to rounding.

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

Source: Rincon Consultants, 2024.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. The project site is located approximately 1,065 feet to the southeast of the nearest sensitive receptor. This section analyzes the potential for 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.[31]

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

[31] CARB. 2016. *Ambient Air Quality Standards.* Retrieved from: http://www.arb.ca.gov/research/aaqs/aaqs2.pdf. Accessed: February 1, 2024.

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).

The project would demolish an in-use retail furniture store and construct a data center and surface parking lot. The project would generate 20 daily vehicle trips for workers (without considering any potential increase over previous furniture store trips). 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

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 proposed project's construction would occur over approximately 24 to 36 months with sensitive receptors located approximately 1,065 feet to the southeast. 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. Risk is also correlated to exposure age of sensitive receptors, captured by “age sensitivity factors.” Sensitive receptors in the third trimester of pregnancy up to age two are more sensitive to TAC exposures. Age sensitivity would more strongly apply to the residential sensitive receptors than the school sensitive receptors.

The proposed project would be consistent with the applicable AQMP requirements and control strategies intended to reduce emissions from construction equipment and activities. The proposed 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. BAAQMD identifies that projects may have significant TAC cumulative impacts when constructed within 1,000 feet of sensitive receptors. Therefore, based on the relatively large distance to the nearest sensitive receptors, it is assumed that project construction would not result in potentially significant TAC emissions. Impacts would be less than significant, and no mitigation is required.

Operation

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. Although the project intends to install emergency diesel generators, the usage of them would be temporary and intermittent for testing and maintenance or otherwise unpredictable for emergencies. Also, the nearest sensitive receptor is relatively far away at 1,065 feet. Therefore, project operation would not expose off-site sensitive receptors to significant amounts of carcinogenic or TACs and operational impacts would be less than significant, and no mitigation is required.

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 and on a temporary and intermittent basis from the usage of emergency diesel generators. 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 proposed project would not generate objectionable odors affecting a substantial number of people, and impacts would be less than significant, and no mitigation is required.

2.4. Biological Resources

	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 candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the California Department of Fish and Game 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 Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse impact on state or federally protected wetlands a (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 an established 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?	☐	☐	☐	☒

The following discussion is based in part on a Biological Resources Assessment Memorandum prepared for the project in January 2024. A copy of this report is included as **Appendix C** to this Initial Study

Regulatory Setting

Federal and State

Endangered Species Act

Individual plant and animal species listed as rare, threatened, or endangered under the California and federal Endangered Species Act are considered special-status species. Federal and state endangered species legislation has provided the United States Fish and Wildfire Service (USFWS) and the California Department of Fish and Wildfire (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project would result in the taking of a species listed as threatened or endangered. The State of California defines a "taking" of a listed species as "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, Sections 15380(b) and (c) of the CEQA Guidelines provide that all potential rate or sensitive species, or habitats, capable of supporting rare species, must be considered as part of the environmental review process. These 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.[32] 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 Corp 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.

[32] United States Department of the Interior. 2017. *Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take.* Available: https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf. Accessed: February 5, 2024.

Fish and Game Code Section 1602

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

Regional and Local

Santa Clara Valley Habitat Plan/Natural Community Conservation Plan

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

Santa Clara 2010-2035 General Plan[33]

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-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.

Santa Clara City Code Section 12.35.080- Protected Trees

Section 12.35.080 under Chapter 12.35 of the City Code outlines what constitutes a protected tree in the City. The removal of any tree that qualifies as protected trees within the City requires a tree removal permit from the City's Community Development Department prior to removal. Section 12.35.080 of the City Code defines protected trees as:

- Heritage trees in all zoning districts
- All specimen trees with a diameter of 12 inches or more when measured at 54 inches above natural grade of the following species: (1) *Aesculus californica* (California buckeye); (2) *Acer*

[33] City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: February 5, 2024.

macrophyllum (big leaf maple); (3) *Cedrus deodara* (deodar cedar); (4) *Cedrus atlantica* "Glauca" (blue Atlas cedar); (5) *Cinnamomum camphora* (camphor tree); (6) *Platanus racemosa* (western sycamore); (7) *Quercus* (native oak tree species), including *Quercus agrifolia* (coast live oak), *Quercus lobata* (valley oak), *Quercus kelloggii* (black oak), *Quercus douglasii* (blue oak), *Quercus wislizeni* (interior live oak); (8) Sequoia sempervirens (coast redwood); (9) *Umbellularia californica* (bay laurel or California bay).

- Approved development trees
- A private tree which has a trunk with a diameter of thirty-eight (38) inches or more measured at fifty-four (54) inches above natural grade.
- A multibranched private tree which has major branches below fifty-four (54) inches above the natural grade with a diameter of thirty-eight (38) inches or more measured just below the first major trunk fork.

Environmental Setting

The project site is developed with a one-story furniture store and paved parking lot. Minimal landscaping and mature trees are located along the southern side of the property facing Comstock.

The area surrounding the project site is urbanized and comprised of industrial developments. Wildlife habitats in developed urban areas are low in species diversity. Species that use the habitat on the site are predominately urban adapted birds, such as rock doves, mourning doves, house sparrows, finches, and starlings. Special status plants and wildlife species are not present on the project site, although raptors (birds of prey) could use the trees on the site for nesting or as a roost. Raptors are protected by the Federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. Section 703, et seq).

Trees located on the project site are primarily non-native species in varying sizes and levels of health. As stated in the **Regulatory Settings** above, City policy is to protect all heritage trees, specimen trees referenced in Chapter 12.35, Section 12.35.080 of the City's code with a diameter of 12 inches in diameter or more as measured from 54 inches above the natural grade, approved development tree and any private tree which has a trunk with a diameter of 38 inches or more when measured at 54 inches above natural grade. Within the boundaries of the project site there are a total of 25 trees that will be removed, none of which are considered protected trees by the City. A summary of tree diameter and conditions is provided in **Table 2-8** below**.**

Table 2-8 Summary of Existing On-Site Trees

Common Name	DBH	Condition	On Site/Off site Protect/Remove	Tree Mitigation Required
Washingtonia robusta	12”	Good	On Site/ Remove	No
Lagerstroemia indica	2”	Moderate	On Site/ Remove	No
Prunus cerasifera 'Thundercloud'	2”	Moderate	On Site/ Remove	No
Prunus cerasifera 'Thundercloud'	1”, 1”, 2”	Moderate	On Site/ Remove	No
Prunus cerasifera 'Thundercloud'	1”, 2”, 1”, 1”	Poor	On Site/ Remove	No
Prunus cerasifera 'Thundercloud'	1”, 2”, 3”, 1”	Moderate	On Site/ Remove	No
Prunus cerasifera 'Thundercloud'	1”, 2”, 2”, 3”	Moderate	On Site/ Remove	No
Lagerstroemia indica	2”	Good	On Site/ Remove	No
Olea europea	6”, 6”, 4”	Moderate	On Site/ Remove	No
Olea europea	5”, 6”, 7”, 8”	Moderate	On Site/ Remove	No
Olea europea	8”, 8”, 8”, 6”	Moderate	On Site/ Remove	No
Olea europea	8”, 9”, 9”	Moderate	On Site/ Remove	No
Lagerstroemia indica	1”	Poor	On Site/ Remove	No
Lagerstroemia indica	1”	Poor	On Site/ Remove	No
Olea europea	9”, 8”	Moderate	On Site/ Remove	No
Olea europea	9”, 6”, 6”	Moderate	On Site/ Remove	No
Olea europea	10”, 5”	Moderate	On Site/ Remove	No
Prunus cerasifera 'Thundercloud'	4”	Moderate	On Site/ Remove	No
Prunus cerasifera 'Thundercloud'	3”	Moderate	On Site/ Remove	No
Prunus cerasifera 'Thundercloud'	2”, 2”, 1”, 1”	Moderate	On Site/ Remove	No
Prunus cerasifera 'Thundercloud'	2”, 2”, 1”, 1”	Moderate	On Site/ Remove	No
Prunus cerasifera 'Thundercloud'	3”, 2”, 2”, 3”	Moderate	On Site/ Remove	No
Prunus cerasifera 'Thundercloud'	3”, 2”, 1”, 1”	Moderate	On Site/ Remove	No
Lagerstroemia indica	2”	Good	On Site/ Remove	No
Lagerstroemia indica	2”	Good	On Site/ Remove	No
Platanus acertfolla	18”	Good	Offsite/ Protect	Not Applicable
Arbus ‘Marina’	6”	Poor	Offsite/ Protect	Not Applicable
Arbus ‘Marina’	10”	Good	Offsite/ Protect	Not Applicable
Arbus ‘Marina’	8”	Good	Offsite/ Protect	Not Applicable
Arbus ‘Marina’	12”	Good	Offsite/ Protect	Not Applicable

Source: WLCA, 2022

Impact Discussion

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

Less than Significant Impact with Mitigation. No special-status plants have the potential to occur within the study area, which is composed of developed areas and landscaped vegetation. There are no natural communities capable of supporting special-status plants within the project site. The study area contains potentially suitable habitat for special-status species and nesting birds, but none of the species are expected to inhabit the project site. Both species with the potential to occur have only a low potential to occur, in which they could incidentally occur within the developed and landscaped areas when dispersing or foraging. Potential impacts for each species with potential to occur on-site are discussed below.

Western Bumble Bee

Significant impacts to western bumble bees may occur if a colony is present on the project site and is excavated or crushed. Since no suitable nesting habitat (burrows, proper substrate) were found in the study area, bumble bee colonies are not expected to occur. While foraging individuals passing through the project area could be injured or killed during construction, the probability of this occurring is low based on the low likelihood of bumble bee presence, and the impact would be less than significant.

Monarch Butterfly – California Overwintering Population

Significant impacts to monarch butterfly populations may occur if an overwintering colony is disturbed. No suitable overwintering roosting habitat was found to occur in the study area. If work occurs during migratory flight periods (approximately September-October and February-April), injury or mortality to individuals entering the work area could occur. However, given the low likelihood of monarch presence and the nature of construction activities, the impact to monarch butterfly would be less than significant.

Nesting Birds

Native bird nests protected by CFGC Section 3503 are likely to occur within the project vicinity and impacts to nesting birds could occur if work is scheduled during the nesting bird season (generally February 1 through August). Direct impacts to nesting birds could occur through removal of vegetation if active nests are present. Impacts could also occur if active nests are present near active construction or staging areas, such that construction-related disturbance results in nest abandonment and mortality, which would be a significant impact.

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

BIO MM-1: Nesting Bird Survey

To the degree feasible, construction should be scheduled to occur outside the nesting bird season from September 15 through January 15. If construction occurs during the nesting bird season (January 15 through September 15), pre-construction surveys will be conducted by a qualified biologist no more than one week prior to construction to determine the presence/absence of

nesting birds within the project site. If active nests are found, the qualified biologist will establish an appropriate buffer, taking into account the species sensitivity and physical location of the nest (line of site to the work area). In no cases will the buffer be smaller than 50 feet for non-raptor bird species and 200 feet for raptor species. To prevent encroachment, the established buffer(s) will be clearly marked by high visibility material. The established buffer(s) will remain in effect until the young have fledged or the nest has been abandoned as confirmed by the qualified biologist.

With implementation of **BIO MM-1,** nesting birds would be protected from disturbance and other direct and indirect impacts from construction. Therefore, impacts to nesting birds would be less than significant.

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 Game or U.S. Fish and Wildlife Service?

No Impact. The project site is developed and located in an urbanized area. There are no riparian habitats located within or adjacent to the site, and the project does not support other sensitive natural communities. For these reasons, the project would not have a substantial adverse effect on any riparian habitat or other sensitive community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. Therefore, there would be no impact to riparian habitats or other sensitive communities as a result of the project.

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

No Impact. The project site is developed and located in an urbanized area. The project site does not contain state or federally protected wetlands. Therefore, there would be no impact to federally protected wetlands or jurisdictional waters as a result of the project.

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

No Impact. The project site is developed and surrounded by urban development. No significant wildlife movement corridors or habitat linkages are present in the study area. Due to the existing dense urban setting of the area and the small area of landscape cover, the project is not likely to interfere substantially with the movement of wildlife species. For these reasons, the project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

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

Less than Significant Impact. The Santa Clara General Plan and City Code include policies and ordinances to protect biological resources. The proposed project would occur entirely within developed or landscaped areas and would avoid impacts to sensitive biological resources. All tree species to be

removed from the project area are within private property and are not within the public right of way. None of the trees on the project site are listed as city-designated heritage trees. Therefore, no conflicts with local policies or ordinances protecting biological resources are expected.

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 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.[34] 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.

[34] Santa Clara Valley Habitat Agency. 2012. *Santa Clara Valley Habitat Plan, Chapter 3: Physical and Biological Resources*. Available: https://scvha.maps.arcgis.com/apps/webappviewer/index.html?id=f2268679c2fa49489e3f7d6e8377837e. Accessed: January 24, 2024.

2.5. Cultural Resources

	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 as defined in 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 formal cemeteries?	☐	☒	☐	☐

This discussion is based in part on the findings of a CHRIS search request documented in the approved IS/MND for a proposed data center on the adjacent property at 1111 Comstock Street in 2023, and based, in part, on a new CHRIS search request which was completed for this project on February 12, 2024, and has been included as **Appendix D** of this IS/MND document. The CHRIS search for the adjacent project is relevant to the current project because these searches include the site of a proposed project as well as a buffer area. In this case, the current project site is within the buffer area of the earlier project.

Regulatory Setting

Cultural resources are evidence of past human occupation and activity and include both historical and archaeological resources. These resources may be located above ground or below ground and have significance in history, prehistory, architecture, architecture of cultural of the nation, State of California, or local or tribal communities.

Federal and State

National Historic Preservation Act

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

California Register of Historical Resources

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

cultural significance. The CRHR identifies historical 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.[35][36]

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 process 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: location, design, setting, materials, workmanship, feeling, and association.

California Native American Historical, Cultural, and Sacred Sites Act

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

Public Resources Code Sections 5097 and 5097.98

Section 15064.5 of the CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American humans 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 as well as 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

[35] 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: February 5, 2024.

[36] California Office of Historic Preservation. 2011. CEQA Guidelines Section 15064.5 (a)(3) and California Office of Historic Preservation Technical Assistance Series #6. Available: https://ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf. Accessed: February 5, 2024.

remains. The code section also stipulates the procedures that the descendants may follow for treating or disposing of the remains and associated grave goods.

Environmental Setting

Historic Resources

The project site has been developed with the existing office building since 1974. Buildings surrounding the site were constructed in 1968 or later. According to a review of historical records, the project site was undeveloped land from at least 1889 through 1938. Circa 1939, aerial photographs depict the project site being utilized for agricultural uses. Circa 1974, the site was developed with the current commercial/industrial structure. According to the CHRIS search prepared for this project, the State Office of Historic Preservation Built Environment Resources Directory (OHP BERD) lists no recorded buildings or structures within or adjacent to the project area. In addition to these inventories, the Northwest Information Center (NWIC) base maps show no recorded buildings or structures within the proposed Comstock Prime Data Center project area.

Archaeological/Prehistoric Resources

Although there is no immediate evidence that would suggest the presence of subsurface cultural resources, the project site is located in a culturally sensitive area due to known prehistoric and historic occupation of Santa Clara and proximity to the nearby creek.[37] The project site is located approximately 1.2 miles west of the Guadalupe River and 0.73 miles east of the San Tomas Aquino Creek. Native American settlements are commonly associated with the abundant food supply in the Santa Clara Valley. Aside from the sites already identified within the City, there may be other undiscovered archaeological sites. In addition, historic occupation of Santa Clara has been well documented, and the City has a strong record reflecting early settlement by Spanish missionaries. The project is located approximately 1.92 miles north from the second location of Mission Santa Clara. No archaeological sites have been recorded within or adjacent to the project area. The project area has not been previously studied for its cultural resource potential however, given the similarities of the environmental settings of known Native American resource site and the project site, there is a moderate to high potential for unrecorded Native American resources to be within the proposed Comstock Prime Data Center project area. (see **Appendix D**)

Impact Discussion

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

No Impact. The existing furniture store was constructed in 1974 and is not classified as a historic resource nor is it eligible to be listed on the CRHR, NRHP, or local register since it is less than 50 years of age. The buildings directly adjacent to the project site and in the immediate project area are not classified as historic by the City of Santa Clara and are not currently eligible for inclusion on the CRHR

[37] City of Santa Clara, 2020. *Initial Study 1111 Comstock Data Center*. Accessed November 3, 2023.

given they are less than 50 years of age and are of a common or modern architectural style.[38] Development of the project site would not physically damage or materially impair the integrity of any historic building. Implementation of the proposed project would, therefore, have no impact on any designated or eligible historic structures**.**

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

Less than Significant with Mitigation. Although there are no known prehistoric archaeological deposits on or adjacent to the site, there is a moderate to high potential for Native American sites within the project area. Construction on-site could result in the exposure or destruction of undiscovered subsurface prehistoric archaeological resources. If the exposure or destruction of subsurface prehistoric resources were to occur, it would be considered a significant impact. Therefore, the project will incorporate **CUL MM-1.1** and **CUL MM-1.2**, 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-1.1: 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 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.

[38] City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan*. *Appendix 8.9: Historic Preservation and Resource Inventory.* Retrieved from: https://www.santaclaraca.gov/home/showpublisheddocument/12893/635713044859030000. Accessed: February 5, 2023.

- 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.

CUL MM-1.2: Discovery of prehistoric or historic resources during construction

In the event that prehistoric or historic resources that are not discovered during presence/absence testing are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped, the Director of Community Development will be notified, and the archaeologist will examine the find and make appropriate recommendations prior to issuance of building permits. If the find is deemed significant, a Treatment Plan will be prepared as outlined in **CUL MM-1.1**.

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

Less than Significant with Mitigation. Although there are no known human remains on the site, construction on-site could result in the exposure or destruction of undiscovered subsurface prehistoric human remains. If the exposure or destruction of these resources were to occur, it would be considered a significant impact. Therefore, the project will incorporate **CUL MM-2**, described below, to reduce the potential of disturbance of human remains 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

In the event that 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 make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner will notify the 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

	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?	☐	☐	☒	☐

The following discussion is based in part on an Energy Report prepared for the project in January 2024. A copy of this report is included as **Appendix B** to this Initial Study.

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) 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.[39] Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.[40]

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 2019 Building Energy Efficiency Standards for new residential and non-residential buildings, which went into effect on January 1, 2020. Part 6 requires the design of building

[39] California Building Standards Commission (CBSC). 2022. *California Building Standards Code*. Available: https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo. Accessed: February 5, 2024.

[40] California Energy Commission (CEC). 2019. *2019 Build Energy Efficiency Standards*. Available: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency. Accessed: February 5, 2024.

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 2019 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. Under the 2019 Standards, nonresidential buildings will be 30 percent more energy-efficient compared to the 2016 Standards.

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 (24 CCR, Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code (CBC), and is updated every 3 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 updated in 2016. The 2016 Standards, which became effective on January 1, 2017, establish green building criteria for residential and nonresidential projects. The CEC adopted updates to the 2016 Standards in 2019 and 2022, the latter of which came into effect on January 1, 2023.

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.

City of Santa Clara City Code Chapter 15.36- Energy Code

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 2016 California Energy Code, 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[41]

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.

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

In 2021, California used 277,764 gigawatt-hours (GWh) of electricity, of which 35 percent were from renewable resources .[42] California also consumed approximately 11,923 million U.S. therms (MMthm) of natural gas in 2022.[43] The project site would be provided with electricity by Silicon Valley Power and natural gas by Pacific Gas & Electric (PG&E). **Table 2-9** and **Table 2-10** show the electricity and natural gas consumption by sector and total for Silicon Valley Power and PG&E. In 2021, Silicon Valley Power provided approximately 1.6 percent of the total electricity used in California. Also in 2021, PG&E provided approximately 37.5 percent of the total natural gas usage in California.

[41] City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: February 5, 2024.

[42] California Energy Commission (CEC).2023. *Revised Transportation Energy Demand Forecast 2018-2030.*Retrieved from: https://efiling.energy.ca.gov/getdocument.aspx?tn=221893. Accessed: February 1, 2024.

[43] CEC.2023. *Gas Consumption by County.* Retrieved from: http://www.ecdms.energy.ca.gov/gasbycounty.aspx. Accessed: February 1, 2024.

Table 2-9 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: CEC 2023c

Table 2-10 Natural Gas Consumption in PG&E Service Area in 2021

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Total Usage
52.5	834.9	50.4	1,429.8	223.5	1,877.0	4,467.1

Notes: All usage expressed in MMThm

Source: CEC 2023d

Petroleum

In 2021, the transportation sector used approximately 83 percent of the petroleum consumed in the state.[44] Californians presently consume over 19 billion gallons of motor vehicle fuels per year.[45] 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.[46]

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

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.

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[44] U.S. Energy Information Administration (U.S. EIA). 2023. Table C14. *Total Energy Consumption Estimates per Capita by End-Use Sector*, Ranked by State, 2020. Retrieved from: https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_sum/html/rank_use_capita.html&sid=US&sid=CA. Accessed: February 1, 2024.

[45] CEC. 2018. *Revised Transportation Energy Demand Forecast 2018-2030.* Retrieved from: https://efiling.energy.ca.gov/getdocument.aspx?tn=221893. Accessed: February 1, 2024.

[46] CEC. 2018. *Revised Transportation Energy Demand Forecast 2018-2030.* Retrieved from: https://efiling.energy.ca.gov/getdocument.aspx?tn=221893. Accessed: February 1, 2024.

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. **Table 2-11** presents the estimated construction phase energy consumption, indicating construction equipment and hauling and vendor trips would consume 44,522 gallons of diesel fuel, and worker trips would consume about 963 gallons of other petroleum fuel over the project construction period.

Table 2-11 Proposed Project Construction Energy Usage

Source	Gallons of Fuel
Diesel Fuel (Construction Equipment)	23,581
Diesel Fuel (Hauling and Vendor Trips)	9,901
Other Petroleum Fuel (Worker Trips)	10,977
Total	**44,460**

Source: Rincon Consultants, 2024

The construction energy estimates represent a conservative estimate as 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, and the construction-phase impact related to energy consumption would be less than significant.

Operation

Less than Significant Impact. The operation of the project would increase area energy demand from greater electricity consumption. Electricity would be used to provide power for data halls (computer servers), heating and cooling systems, lighting, appliances, and water use. The project would result in a net decrease of daily vehicle trips compared to existing conditions. Gasoline consumption is typically attributed to the trips generated from people employed by the project.

It is assumed that energy consumption will operate on 100 percent carbon neutral energy to meet compliance with Santa Clara CAP Action B-1-7. As mentioned, the project would be served by Silicon Valley Power, which provided more than 4,382 GWh of electricity in 2021. A will-serve letter is being requested from Silicon Valley Power to confirm there would be sufficient supplies for the project and it would not place a significant demand on the electrical supply. Natural gas is not included on the project site; therefore, it is excluded from this analysis.

The project would also comply with all standards set in California Building Code (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. Furthermore, the project would further reduce its use of nonrenewable energy resources as the electricity generated by renewable resources provided by SCE continues to increase to comply with state requirements through Senate Bill 100, which requires electricity providers to increase procurement from eligible renewable energy resources 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.

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. The project's impact would be less than significant, and no mitigation would be required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than Significant Impact. As discussed in the Regulatory Setting section above, the City's General Plan and CAP 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 2-12**. As shown therein, the proposed project would be consistent with renewable energy and energy efficiency plans. Therefore, impacts would be less than significant, and no mitigation is required.

Table 2-12 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 proposed 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 would be 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.	**Consistent.** The proposed building would comply with the latest iteration of Title 24 standards. 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 water efficient bathroom utilities, and high efficiency HVAC and water heater systems. Therefore, the project

Energy Efficiency Goal or Policy	Project Consistency
• **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.	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.
Santa Clara 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 would comply with Action B-1-7.

Sources: City of Santa Clara 2010 and 2022

2.7. Geology and Soils

	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 Section 1803.5.3 of the California Building Code (2022), creating substantial risks to life or property?	☐	☒	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

This section is based in part on the Preliminary Geotechnical Investigation prepared for this project in November 2021. A copy of this report has been included as **Appendix E** of this Initial Study.

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[47]

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

Seismic Hazards Mapping Act

The Seismic Hazard Mapping Act (SHMA) was passed in 1990 following the 1989 Loma Prieta earthquake. The SHMA directs the California Geological Survey (CGS) to identify and map areas prone to liquefaction, earthquake induced landslides, and amplified ground shaking. CGS has completed seismic hazard mapping for the portions of California most susceptible to liquefication, 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 California Building Standards Code (CBC) prescribes standards for constructing safe buildings. The CBC contains provisions for earthquake safety based on factors such as occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires that a site-specific

[47] 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: January 24, 2024.

geotechnical investigation report be prepared for most development projects to evaluate seismic and geologic conditions such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years.

California Division of Occupational Safety and Health Regulations

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

Public Resources Code Section 5097.5

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

Local

City of Santa Clara General Plan

General Plan policies applicable to geology and soils include, but are not limited to the following:

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

Santa Clara City Code Title 15- Buildings and Construction

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

Environmental Setting

The project site is located in the Santa Clara Valley, a relatively flat alluvial basin, bounded by the Santa Cruz Mountains to the southwest and west, the Diablo Mountain Range to the east, and the San Francisco Bay to the north. According to previous geotechnical investigations in the vicinity, the project site is likely underlain by alluvial deposits consisting of moderately compressible, medium stiff to hard clary. Near surface clay is anticipated to be highly expansive. Expansive soils refer to soils that undergoes large volume changes with changes in moisture content. The historic high groundwater level is approximately between five and 10 feet bgs (see **Appendix E**). Previous investigations encountered groundwater at approximately five to 10 feet bgs. Groundwater is expected to fluctuate depending on tide, rainfall and seasonal conditions.

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.[48] . However, the project site is located within a State-designated Liquefaction Hazard Zone as well as a Santa Clara County Liquefaction Hazard Zone.[4950] Liquefaction is the result of seismic activity and is characterized as the transformation of loose water-saturated soils from a solid state to a liquid state after ground shaking. There

While the project is not within an Earthquake Fault Zone, the San Francisco Bay Area region has multiple seismically active faults, making the area subject to strong ground shaking in the event of an earthquake. The location of the faults closest to the project site and other faults of the region can be seen in Figure 3 of **Appendix E**. For each of these faults, as well as other active faults within 30 miles of the project site, the distance from the project site and mean Moment Magnitude is summarized in **Table 2-13**. Mean Characteristic Moment Magnitude is an energy-based scale and provides a physically meaningful measure of the size of a faulting event. Moment magnitude is directed related to average slip and fault rupture area. Given the site's proximity to the faults, moderate to severe earthquakes can cause strong ground shaking at the site.

Table 2-13 Approximate Distances to Nearby Fault Zones

Fault Segment	Approximate Distance From the Project Site (Miles)	Direction from Site	Mean Characteristic Moment Magnitude
Total Hayward-Roger's Creek Healdsburg	6.8	Northeast	7.6
Monte Vista-Shannon	7.4	Southwest	7.0
Total Calaveras	9.3	East	7.5
Mission (connected)	9.3	Northeast	6.1

[48] California Department of Conservation. 2023. *California Earthquake Hazards Zone Application.* Available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Retrieved: December 22, 2023.

[49] California Department of Conservation. 2016. *Earthquake Zones of Required Investigation*. Available: https://maps.conservation.ca.gov/cgs/EQZApp/. Accessed: December 22, 2023.

[50] City of Santa Clara. 2010. Santa Clara General Plan 2010-2035. Figure 5.10-1 Liquefaction Hazard. Available at: https://www.santaclaraca.gov/home/showpublisheddocument/13934/635729106120730000. Retrieved: December 22, 2023.

Fault Segment	Approximate Distance From the Project Site (Miles)	Direction from Site	Mean Characteristic Moment Magnitude
San Andreas 1906 event	11.2	Southwest	8.1
Pilarcitos	12.4	West	6.7
Butano	14.3	Southwest	6.7
Sargent	16.1	South	6.8
Total San Gregorio	24.2	West	7.6
Greenville Connected	24.2	East	7.1
Mont Diablo Thrust	25.5	Northeast	6.6

Source: Langan Engineering and Environmental Services, 2021

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of an exposed slope. The project site and surrounding area is generally flat, and the closest open face is the San Tomas Aquino Creek channel, over 3,000 feet west of the site. Therefore, we preliminarily conclude the potential for lateral spreading at the site is low. Field exploration should be performed during the design-level geotechnical investigation to further evaluate lateral spreading potential.

Paleontological Resources

The project site is underlain by Holocene basin deposits.[51] Geologic units of Holocene age are generally not considered sensitive for paleontological resources because biological remains younger than 10,000 years are not usually considered fossils; however, these recent sediments overlie sediments of older Pleistocene sediments with high potential to contain paleontological resources.[52] These older sediments, often found at depths of 10 feet or more below the ground surface, have yielded the fossil remains of plants and extinct terrestrial Pleistocene vertebrates.

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?

[51] City of Santa Clara. 2011. *Integrated Final EIR for the City of Santa Clara Draft 2010-2035 General Plan. Figure 4.5-1.* Retrieved from: https://www.santaclaraca.gov/our-city/departments-a-f/community-development/planning-division/general-plan. Accessed: February 2, 2024

[52] City of Santa Clara. 2011. Integrated Final EIR for the City of Santa Clara Draft 2010-2035 General Plan. Retrieved from: https://www.santaclaraca.gov/our-city/departments-a-f/community-development/planning-division/general-plan. Accessed: February 2, 2024

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 nearby faults that are active in the region have the potential to cause moderate to strong ground shaking at the project site. The intensity of the ground motions and potential damage done by ground shaking would depend on the characteristics of the generating fault, the distance to the fault and rupture zone, the magnitude, duration and other site-specific geological conditions. These potential seismic ground shaking risks are typical in the San Francisco Bay Are region, given the regions history of strong seismic ground sharking during a large earthquake event. While the potential for strong seismic ground shaking cannot be eliminated, the project would be constructed to comply with relevant earthquake-resistant construction standards and practices, including the 2022 California Building Code (CBC) standards. Compliance with these standards and practices would reduce the risks associated with strong 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.[53] Previous geotechnical reports near the site provided estimates of approximately up to 0.5 inch of liquefaction-induced settlement could occur during a major earthquake in medium dense sandy layers that are below the water table. The project would be constructed to comply with the 2022 CBC Building Standards, including all applicable seismic standards for structures. Compliance with the 2022 CBC reduces potential risks associated with settlement from seismically-induced liquefaction. The project will also include the following condition of approval which 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 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,

[53] 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: December 27, 2023.

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

iv. Landslides?

No Impact. According to the California Department of Conservation's Geologic Hazards Map, the project site is not located within a landslide zone.[54] Furthermore, 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 required to comply with the City's Best Management Practices for erosion and sedimentation control and would be subject to the requirements of Provision C.3 if the City's National Pollutant Discharge Elimination System (NPDES) permit. The project would also be required to comply with the Santa Clara Valley Urban Runoff Pollution Prevention Program which prescribes low impact development based post-construction stormwater control measures in order to incorporate post construction storm design, source control and treatment measures. The topic of soil erosion is described in detail in **Section 2.10, Hydrology and Water Quality**. Therefore, 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 refers to a type of ground failure that is related to liquefaction. It consists of the horizontal displacement of flat lying alluvial material toward an open face channel, such as the steep bank of a stream channel. The nearest open face channel is San Tomas Aquino Creek which is approximately 0.73 miles west of the project site. Due to its distance from an open face channel, as well as the relative flat topography of the project site, the project is not expected to be exposed to slope instability, lateral spreading, or landslide related hazards. Therefore, the impacts would be less than significant, and no mitigation is required.

[54] California Department of Conservation. 2023. *Geologic Hazards Web Map.* Available: https://maps.conservation.ca.gov/geologichazards/. Accessed: December 27, 2023.

d) Be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2022), creating substantial risks to life or property?

Less than Significant with Mitigation. A review of previous geotechnical reports determined that the existing near surface soil on the project site has high expansion potential (see **Appendix E)**. When moisture is introduced, expansive soils have the potential to undergo significant volume changes. These continuous changes in volume can cause building foundations to move unevenly and crack. To avoid risks associated with expansive soils, foundation design would be approved by City Engineers for compliance with Section 1803.5.3 of the California Building Code and the 2022 CBC general foundation design standards. Furthermore, **GEO MM-1** would be implemented to reduce potential impacts from expansive soils to a less than significant level.

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

GEO MM-1: Treatment of Expansive Soils

Expansive soils shall be addressed through treatment or removal, in order to reduce the potential for structural damage. Where highly expansive soil is encountered, it should be capped by up to 24 inches of imported (select) fill to construct any new building pads; 12 inches of select fill material should be placed beneath any proposed exterior concrete flatwork, including patio slabs and sidewalks. The select fill should extend at least five and two feet beyond the building slab and exterior concrete slab edges, respectively. Select fill should be non-hazardous, free of organic material, contain no rocks or lumps larger than three inches in greatest dimension, and have a low expansion potential (defined by a liquid limit of less than 40 and a plasticity index lower than 12).

With the implementation of **GEO MM-1,** potential risks associated with expansive soils would be reduced to a less than significant level.

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

No Impact. The City sewer system would treat wastewater generated by the project. The project site is currently developed and connected to existing City wastewater infrastructure. The project does not include the installation of 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 palaeontologic feature?

Less than Significant with Mitigation. The project site is currently developed with an existing single-story commercial building and surface parking lot. Ground disturbance from project construction activities would be primarily limited to previously disturbed areas. Project construction would require excavation and ground disturbing activities. 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. **GEO MM-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 **GEO MM-2** would reduce potential impacts to paleontological resources.

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

GEO MM-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 **GEO MM-2**, potential impacts to paleontological resources would be reduced to be less than significant.

2.8. Greenhouse Gas Emissions

	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?	☐	☐	☒	☐

The following discussion is based in part on a GHG emission report prepared for the project in January 2024. A copy of this report is included as **Appendix B** to this Initial Study.

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 discussed below, 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.[55] 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.[56]

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

[55] 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: February 5, 2024.

[56] California Air Resources Board. 2014. *AB 32 Scoping Plan Website*. Available: http://www.arb.ca.gov/cc/scopingplan/scopingplan.htm. Accessed: February 5, 2024.

MT of CO_2e by 2050.[57] 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.

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, achieve and maintain net negative greenhouse gas emissions and ensure that by 2045, statewide anthropogenic greenhouse gas emissions are reduced to at least 85% 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.[58] 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, further reductions in short-lived climate pollutants, support for sustainable development, increased action no 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".[59] 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.

[57] 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: February 5, 2024.

[58] 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: February 5, 2024.

[59] 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: February 5, 2024.

- 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.
- 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 in order 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;[60]
- Waste Reduction:
    - 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:[61]
    - 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 two (2) must be equipped with charging stations;
        - 1-75: 13 EV capable spaces of which three (3) must be equipped with charging stations;
        - 76-100: 17 EV capable spaces of which four (4) must be equipped with charging stations;
        - 101-150: 25 EV capable spaces of which six (6) must be equipped with charging stations;
        - 151-200: 35 EV capable spaces of which nine (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

[60] 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.

[61] 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).

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
- 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.

<u>California Integrated Waste Management Act (Assembly Bill 341)</u>

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.

<u>Executive Order N-79-20</u>

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.

If the above screening criteria are not met, a project would still 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, consistency with the City's CAP, which qualifies as a GHG reduction strategy, is used to determine significance 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.[62] "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.[63]

City of Santa Clara Climate Action Plan

The City of Santa Clara adopted an updated CAP on June 7, 2022.[64] 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:[65]

- 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[66]

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.

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[62] Association of Bay Area Governments. 2021. *Plan Bay Area 2050.* Available: https://www.planbayarea.org/finalplan2050. Accessed: February 5, 2024.

[63] Bay Area Metro. 2022. *Final Plan Bay Area 2050.* Available: https://www.planbayarea.org/finalplan2050. Accessed: February 5, 2024.

[64] City of Santa Clara. 2022. City of Santa Clara Climate Action Plan. Available: https://www.santaclaraca.gov/home/showpublisheddocument/78208/637970130098870000. Accessed: February 5, 2024.

[65] City of Santa Clara. 2022. City of Santa Clara Climate Action Plan. Available: https://www.santaclaraca.gov/home/showpublisheddocument/78208/637970130098870000. Accessed: February 5, 2024.

[66] City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: February 5, 2024.

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

Environmental Setting

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.[67][68]

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 in 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 CO2 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 CO2 was emitted. It is likely that anthropogenic activities have increased the global surface temperature by approximately 1.07 degrees Celsius between the years 2010 through 2019.

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[67] 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.

[68] Intergovernmental Panel on Climate Change (IPCC).2021. *The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.* Retrieved from: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf. Accessed: February 1, 2024.

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.[69]

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 3 percent respectively.[70]

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.[71] 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

[69] 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: February 5, 2024.

[70] 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: February 5, 2024.

[71] 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: February 5, 2024.

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.[72]

Local Emissions Inventory[73]

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.[74] 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

[72] 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: February 5, 2024.

[73] City of Santa Clara. 2022. *City of Santa Clara Climate Action Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/78208/637970130098870000. Accessed February 5, 2024.

[74] National Oceanic and Atmospheric Administration. 2023. *Global Climate Report for Annual 2022*. Available: https://www.ncdc.noaa.gov/sotc/global/202213. Accessed: February 5, 2024.

signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades.[75,76]

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.[77] 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?

OR

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 2-14.**

Table 2-14 Consistency with Santa Clara Emissions Reductions Strategies

Energy Efficiency Goal or Policy	Project Consistency
City of Santa Clara General Plan	
Policy 5.10.2-P2: Encourage development patterns that reduce vehicle miles traveled and air pollution.	**Consistent**. The project would include employee lunch areas, 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 transit, which promotes alternative modes of transportation.

[75] 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: February 5, 2024.

[76] International Panel on Climate Change. 2018. *Summary for Policymakers*. In: Global warming of 1.5°C. Available: https://www.ipcc.ch/sr15/. Accessed: February 5, 2024.

[77] California Natural Resources Agency. 2019. *California's Fourth Climate Change Assessment Statewide Summary Report*. Available: http://www.climateassessment.ca.gov/state/. Accessed. February 5, 2024.

Energy Efficiency Goal or Policy	Project Consistency
Santa Clara 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.	**Consistent.** The proposed project's data center area would be consistent with this measure.
Strategy B2: Improve Energy Efficiency	**Consistent.** The proposed project would be consistent with the latest iteration of the Title 24 Standards that would include energy efficient lighting and appliances.
Strategy N3: Improve water supply and conservation.	**Consistent.** The proposed project would include energy efficient plumbing fixtures.

Source: City of Santa Clara 2014 and 2022

As shown in **Table 2-14** above, the project would be consistent with the City of Santa Clara CAP. Therefore, the project would be consistent with a qualified GHG reduction strategy, and impacts would be less than significant, and no mitigation is required.

GHG Emissions for Information Purposes

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

Construction

Construction of the proposed project would generate temporary GHG emissions primarily as a result 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 2-15**, construction of the project would generate an estimated total of 948 MT of CO2e. Amortized over a 30-year period, construction of the project would generate an estimated total of 32 MT of CO2e per year.

Table 2-15 Estimated GHG Emissions during Construction

Year	Annual Emissions (MT of CO_2e)
2024	396
2025	438
2026	113
Total	**948**
Amortized over 30 years	**32**

MT = metric tons; CO2e = carbon dioxide equivalents

Source: Rincon Consultants, 2024.

See Appendix B for modeling results.

Operation

Operation of the proposed project would generate GHG emissions associated with area sources (e.g., landscape maintenance), energy and water usage, wastewater and solid waste generation, and testing and maintenance of emergency diesel generators. As shown in **Table 2-16,** total combined annual GHG emissions generated by the project would be approximately 307 MT of CO_2e per year. Therefore, the project's impact would be less than significant, and no mitigation would be required.

Table 2-16 Estimated Annual Operational GHG Emissions

Source	MT CO_2e
Mobile	163
Area	2
Energy	<1[78]
Water	63
Waste	42
Refrigerant	5
Total	275
Amortized Construction Emissions	32
Generator Emissions	<1
Total Net Project Emissions	**307**

MT = metric tons; CO2e = carbon dioxide equivalents

Source: Rincon Consultants, 2024

See Appendix B for modeling results.

[78] Based on applicant-provided information, the estimated annual electricity consumption is anticipated to be approximately 115,000 MWh per year. It is assumed that energy consumption will operate on 100 percent carbon neutral energy to meet compliance with Santa Clara CAP Action B-1-7; therefore, no indirect GHG emissions were assumed for project energy use from the data center.

2.9. Hazards and Hazardous Materials

	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?	☐	☐	☐	☒

The following discussion is based in part on a Phase I Environmental Site Assessment prepared for the project in October 2021. A copy of this report is included as **Appendix F** to this Initial Study

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.[79]

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

[79] United States Environmental Protection Agency (U.S. EPA). 2023. *Superfund: CERCLA Overview*. Available: https://www.epa.gov/superfund/superfund-cercla-overview. Accessed: February 5, 2024.

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.[80]

Federal Aviation Administration Regulations

Federal Aviation Regulations, Part 77, "Objects Affecting Navigable Airspace" (FAR Part 77) sets forth standards and review requirements for protecting airspace for safe aircraft operation, particularly by restricting the height of potential structures and minimizing other potential hazards (such as reflective surfaces, flashing lights, and electronic interference) to aircraft in flight. These regulations require that the FAA be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways.

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).[81]

Certified Unified Program Agency (CUPA)

The Santa Clara Fire Department (SCFD) Community Risk Reduction Division is the CUPA authorized by the California Environmental Protection Agency (Cal EPA) to implement six State environmental programs within the City. Each of the respective program goals are to reduce risks associated with the use of chemicals at a regulated facility. The six programs include:

- Hazardous Materials Business Plan and Area Plan Program
- Hazardous Materials Management Plan/Inventory Statement
- California Accidental Release Prevention Program
- Hazardous Waste Generator/Tiered Permitting Program
- Underground Storage Tank Program
- Aboveground Petroleum Storage Tank Program

[80] 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: February 5, 2024.

[81] California Environmental Protection Agency (CalEPA). 2023. *Cortese List Data Resources*. Available: https://calepa.ca.gov/sitecleanup/corteselist/. Accessed: February 5, 2024.

Government Code Section(s) 25280-25299.8

Sections 25280-25299.8 of the Government Code establish requirements for installing, owning and operating an underground storage tank (UST). Requirements in this section include but are not limited to ensuring that the UST is located an appropriate distance away from existing wells, minimum design standards for the installation of new tanks, processes for addressing unauthorized releases, and details of the process of closing a UST upon cease of operations. These sections also establish the local CUPA agency responsible for the enforcement and compliance of these code sections.

California Code of Regulations Title 23 Section 16

The California State Water Resources Control Board and Regional Water Quality Control Boards have adopted regulations, known as Chapter 16, Underground Tank Regulations, which are intended to protect the waters of the state from discharges of hazardous substances from underground storage tanks. Additionally, these regulations establish monitoring, unauthorized release reporting, and repair, upgrade and closure requirements.

Local

Santa Clara 2010-2035 General Plan[82]

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

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

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

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

5.10.5-P17 Require that grading and other construction activities comply with the Association of Bay Area Governments' Manual of Standards for Erosion and Sediment Control Measures and with the 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.

[82] City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: February 5, 2024.

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.

Santa Clara Emergency Operations Plan

In June 2016, the City of Santa Clara adopted an Emergency Operations Plan (EOP) to address the planned response of the City of Santa Clara to emergency situations associated with natural disasters and technological incidents, as well as chemical, biological, radiological, nuclear, and explosive emergencies. The EOP establishes the emergency organization, assign tasks, specifies policies and general procedures, and provides for coordination of planning efforts for emergency events such as earthquake, flooding, dam failure, and hazardous materials responses.

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

The project site is located approximately 0.7 miles northwest of the San José International Airport and is located within the Airport Influence Area (AIA) defined by the Santa Clara County Airport Land Use Commission's Comprehensive Land Use Plan (CLUP) for the San José International Airport.[83]

Environmental Setting

Current and Historic Use of the Project Site

The subject property is currently occupied by Mark Thomas Home for commercial use. Onsite operations consist of a retail furniture store, warehousing of furniture, minor repairs to furniture, general office uses and routine facility maintenance activities. The subject property consists of one 2-story building that is centrally located on the property. The ground floor of the building contains a retail furniture store, office areas, restrooms and a warehouse. In addition to the current structure, the subject property is improved with asphalt-paved parking/drive areas, concrete-paved walkways, high voltage transmission tower and landscaped areas.

According to a review of historical records, the project site was undeveloped land from at least 1889 through 1938. Circa 1939, aerial photographs depict the project site being utilized for agricultural uses. Circa 1974, the site was developed with the current commercial/industrial structure. Previous tenants

[83] Santa Clara County Airport Land Use Commission. 2010. Figure 8-Airport Influence Area. Retrieved from: https://plandev.sccgov.org/commissions-other-meetings/airport-land-use-commission#3925188384-2911751817. Accessed: February 1, 2024

include the Eastern Furniture Company (1985-1994); Eastern Wholesale Furniture Company of California (1996-1999); Eastern Furniture Company Timber & Rags (2004); and Eastern Furniture Company (2009-2017).

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. During previous site development activities, near surface soils (where residual agricultural chemical concentrations would have most likely been present, if at all) were likely mixed with fill material or disturbed during grading. Also, it is common that engineered fill material is placed over underlying soils as part of the development activities. These additional variables serve to further reduce the potential for exposure to residual agricultural chemicals.

On-Site Contamination

The Phase I ESA did not identify any significant sources of on-site contamination. A review of regulatory records of agencies including: CalEPA, Santa Clara County Environmental Health Department, BAAQMD, CARB, San Francisco Bay Regional Water Quality Control Board, and California Department of Toxic Substances Control found no records of hazardous substance use, storage or releases. The presence of underground storage tanks (UST) or above ground storage tanks were discovered. Furthermore, no evidence of the use of reportable quantities of hazardous substances was observed on the subject property. Small quantities of general maintenance supplies, paints and stains were found to be properly labeled and stored at the time of the assessment with no signs of leaks, stains, or spills. The storage and use of maintenance supplies does not appear to pose a significant threat to the environmental integrity of the project site at this time.

Off-Site Contamination

The immediately surrounding properties consist of an industrial building industrial building occupied by Digital Realty (1100 Space Park Drive) to the north, a data center owned by Digital Realty to the west (1525 Comstock Street), another industrial building owned by Digital Realty to the east (1201 Comstock Street), and Comstock Street and Central Expressway to the south.

The property at 1201 Comstock Street, identified as 1201 Comstock Partners LLC, is located adjacent to the east of the subject property. The AST database indicated that this site is a registered AST facility with one or more registered ASTs of unspecified contents. The CERS databases indicated that this site is a registered aboveground petroleum storage and chemical storage facility with reported violations. There are no listings pertaining to any spills or releases of hazardous substances at this site. Based on regulatory status, this site is not expected to represent a significant environmental concern.

The property, identified as 1525 Comstock Partners LLC/Digital 1525 Comstock at 1201 Comstock Street, is located adjacent to the west of the subject property. The AST database indicated that this site is a registered AST facility with one or more registered ASTs of unspecified contents. The CERS databases indicated that this site is a registered aboveground petroleum storage and chemical storage facility with reported violations. There are no listings pertaining to any spills or releases of hazardous substances at this site. Based on regulatory status, this site is not expected to represent a significant environmental concern.

The property, identified as Yahoo!, Precision Monolithics, Analog Devices at 1500 Space Park Drive, is located adjacent to the north of the subject property. The AST database indicated that this site is a registered AST facility with one or more ASTs with a total capacity of 20,000-gallons of unspecified contents. The SEMS databases indicated that this site was investigated and archived by USEPA on January 23, 1996. The RCRA database indicated that this site is a registered small quantity hazardous waste generator with no reported violations. The EnviroStor database indicated that this is a tiered permit facility that was referred to RWQCB as of November 18, 2013. The facility was historically used for manufacturing purposes and contained USTs. The potential contaminants of concern (COCs) included several volatile organic compounds (VOCs). The UST databases indicated that this site contained multiple "waste" USTs. EnviroStor records indicated that Bourns, Inc. has performed remedial measures that have reduced soil and groundwater contamination. One acid neutralization sump and two waste solvent storage tanks were removed from the site. A groundwater extraction and treatment system (GETS) was started in 1985 and was eventually expanded to include 15 operational groundwater extraction wells. Extracted groundwater was treated using two air strippers prior to discharge to the storm drain under a National Pollutant Discharge Elimination System permit. The cumulative mass of VOCs removed by the GETS since 1985 is approximately 540 pounds. The GETS was effective in reducing VOC concentrations, containing the plume, and reducing its lateral extent and overall mass. The GETS was shut down in March 2006 to allow for evaluation of monitored natural attenuation.

EnviroStor records indicated that this case is associated with the 1550 Space Park Drive site that is located approximately 50 feet to the west-northwest of the subject property. This case remains open and eligible for closure as of January 1, 2014. Based on groundwater gradient and results of the most recent groundwater sampling report, this site is not expected to represent a significant environmental concern.

Other Hazards

Airports

The project site is located approximately 0.7 miles northwest of San José Norman Y. Mineta International Airport. The project site is located within the Airport Influence Area (AIA) defined by the Santa Clara County Airport Land Use Commission's Comprehensive Land Use Plan (CLUP) for the San José International Airport. Development within the AIA can be subject to hazards from aircraft and also pose hazards to aircraft travelling to and from the airport. The AIA is a composite of areas surrounding the airport that are affected by noise, height, and safety considerations. These hazards are addressed in Federal and State regulations as well as in land use regulations and policies in the CLUP. The most recent CLUP for the Airport was adopted in 2011 and most recently updated in 2016.

As described previously, Federal Aviation Regulations, Part 77, "Objectives Affecting Navigable Airspace" (FAR Part 77), requires that the Federal Aviation Administration (FAA) be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above ground. The San José Airport released a contour map which includes height restrictions for new developments that could be a hazard to aircraft safety and would require FAA notification under FAR

Part 77. For the project site, any structure exceeding 30 feet in height above grade would require submittal to the FAA for airspace safety review.[84]

The project site is also located within Airport Safety Zones Traffic Pattern Zone (TPZ). The TPZ does not limit population density but does require that at least 10 percent of the gross area be devoted to open space. In addition, sports stadiums and similar uses with very high concentrations of people (greater than 20,000) are prohibited. The project site is not located in the vicinity of a private airstrip.

Wildfire

The project site is located in an urbanized area of Santa Clara. According to the California Department of Forestry and Fire Protection (CAL FIRE), the project site is not located within a moderate, high, or very high fire hazard severity zone (FHSZ).[85] The nearest Very High Fire Hazard Severity Zone (VHFHSZ) is located approximately 7.3 miles east of the project site near Alum Rock Park in East San José.

Asbestos and Lead Based Paint

Based on the age of the subject property building (pre-1978), there is a potential that Lead Based Paint (LBP) is present. Interior and exterior painted surfaces were observed in good condition and therefore LBP is not expected to represent a hazard.

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. As described in **Section 1.3, Project Description**, the construction of the project would include the installation of two 30,000 diesel fuel gallon USTs that would provide fuel for six 3,000 KW generators. Operation of the project would require the routine transport and use of fuel as needed for the generators. 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 Administration (OSHA) and California Division of Occupational Safety and Health (Cal OSHA) requirements.

Since the project would include the installation of two USTs, it would be required to comply with all applicable federal, state and local regulations regarding the installation, maintenance and operation of

[84] Federal Aviation Administration. 2023. *FAA Form 7460-1 Notice of Proposed Construction or Alteration*. Available: https://www.faa.gov/documentLibrary/media/Form/FAA_Form_7460-1_042023.pdf. Accessed: February 5, 2024

[85] California Department of Forestry and Fire Protection. 2023. *FHSZ Viewer.* Available: https://egis.fire.ca.gov/FHSZ/. Accessed: February 5, 2024

underground storage tanks. As the CUPA for Santa Clara, the Santa Clara Fire Department Community Risk Reduction Division (Community Risk Reduction Division) is authorized to enforce these regulations including the requirements of the Health and Safety Code Division 20, Chapter 6.7, Underground Storage of Hazardous Substances and 23 CCR Division 3, Chapter 16, Underground Tank Regulations. The Community Risk Reduction Division inspects facilities that store petroleum products in underground tanks for compliance with the aforementioned laws and applicable sections of the Federal Spill Prevention, Control, and Countermeasure (SPCC) rule. Installation of underground tanks on the project site would be subject to this inspection and project operation would comply with all relevant regulations.

With implementation of the required 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 Impact. 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. However, the majority of the subject property is either paved over or covered by building structures that minimize direct contact to any potential remaining concentrations in the soil.

Additionally, during previous site development activities, near surface soils (where residual agricultural chemical concentrations would have most likely been present, if at all) were likely mixed with fill material or disturbed during grading. Also, it is common that engineered fill material is placed over underlying soils as part of the development activities. These additional variables serve to further reduce the potential for exposure to residual agricultural chemicals (if any). However, provided that there is a history of agricultural related activities on the project site and surrounding area, the following condition of approval will be included as part of the project:

Condition of Approval

Due to the history of agricultural related activities on the project site and in the surrounding area, the project could experience potential hazards associated with residual agricultural chemicals in the soil if found in the project site. To identify and reduce the potential risks associated with these residual chemicals, the project will complete a Phase II Environmental Site Assessment to identify potential hazards prior to the commencement of construction activities. At a minimum, this Phase II Environmental Site Assessment will include baseline soil sampling to ensure there are no levels of soil contamination that exceed regulatory thresholds and recommendations to minimize risks to those working on the project site.

With the included condition of approval, the project's impact would be less than significant, and no mitigation is required.

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

Less than Significant Impact. The nearest school to the project site is Granada Islamic School located approximately 0.22 miles to the northwest of the project site at 3003 Scott Boulevard. Upon project implementation, paints, oils, absorbents, cleaners, and pesticides for landscaping would be used in small quantities. All potentially hazardous materials 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. As hazardous materials would be properly stored and disposed of on site, this impact would be less than significant, and no mitigation is required.

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?

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

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?

Less than Significant Impact. The project site is located approximately 0.7 miles northwest of the San José Norman Y. Mineta International Airport. According to Figure 5 and Figure 7 of the San José International Airport Land Use Compatibility Plan, the project is not located within any noise contours or safety zones of the San José Norman Y. Mineta International Airport.[86] Therefore, the proposed project would not expose people working in the project area to excessive aircraft overflight noise levels or safety hazards. The project's impact would be less than significant, and no mitigation is required.

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

Less than Significant Impact. The Santa Clara City Emergency Operations Plan was adopted by the City in 2016 to assign responsibilities to designated city leaders, employees, departments, agencies, boards, and community and volunteer organizations in the event of a disaster. Santa Clara Fire Department (SCFD) and Santa Clara Police Department currently serve 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

[86] Santa Clara County Airport Land Use Commission. 2016. Comprehensive Land Use Plan Santa Clara County. Retrieved from: https://stgenpln.blob.core.windows.net/document/ALUC_SJC_CLUP.pdf. Accessed. February 1, 2024.

surrounding area. Operation of the project would require a maximum of 20 employees to be on-site in a 24-hour period, however, this 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 located in a developed urban area containing no wildland areas. Neighboring cities such as Sunnyvale and San José adjacent to the City limits are also fully developed. The project is not adjacent to any High or Very High Fire Hazard Severity Zones or any 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, and no mitigation is required.

2.10. Hydrology and Water Quality

	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.[87] The plan covers the Santa Clara and Llagas subbasins, located entirely in Santa Clara County and satisfies the objectives of

[87] 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: February 5, 2024.

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.

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.[88] 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[89]

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[90], 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

[88] Santa Clara Valley Water District (Valley Water). 2020. 2020 *Urban Water Management Plan*. Available: https://fta.valleywater.org/dl/pggls1SeCr. Accessed: February 5, 2024.

[89] Santa Clara Valley Urban Runoff Pollution Prevention Program. 2016. *C.3 Stormwater Handbook*. Available: https://scvurppp.org/2016/06/20/c-3-stormwater-handbook-june-2016/. Accessed: February 5, 2024.

[90] 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.

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.

Local

Santa Clara 2010-2035 General Plan[91]

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 updated its UWMP in 2020. The project site is currently served by municipal water service.

[91] City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan*. Available at: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: February 5, 2024.

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 disturb more than 5,000 square feet 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 subwatersheds or catchment areas that are greater than or equal to 65 percent impervious (per the Santa Clara Hydromodification Management Applicability Map).

Groundwater

Previous geotechnical investigations for surrounding projects have encountered groundwater at depths ranging from five to 10 feet below the existing grade. Historic high groundwater level is also approximately between five and 10 feet below the existing grade. Fluctuations in groundwater levels are common due to seasonal fluctuations, 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.

Inundation

The project is located within the James J. Lenihan Dam inundation zone. James J. Lenihan Dam is located on Los Gatos Creek about 3 miles south of the town of Los Gatos. The dam was constructed in 1952. The Lexington Reservoir behind the dam is 2.5-miles-long and the second largest reservoir in the Valley Water District. The reservoir has a capacity of 19,044 acre-feet of water with a 412-acre surface. The downstream hazard of the dam is rated as extremely high.

Impact Discussion

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less than Significant Impact. The project site currently consists primarily of impervious surfaces with some landscaped areas along the southern portion of the project site facing Comstock Street. Implementation of the project would remove the existing structure and replace it with approximately

33,184 square feet of impervious surfaces including a data center building and a surface parking lot. Therefore, the project would be required to comply with the City's BMPs for erosion and sedimentation control during construction as outlined in the MRP.

Since the project would result in the disturbance of more than one acre of impervious surface 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. The project would be subject to post-construction Provision C.3 requirements, requiring the incorporation of source control design elements to keep pollutants away from stormwater.

Consistent with the City's LID requirements, the project would also include at least one bioretention area in landscaping design to ensure that particulates are removed from stormwater prior to discharge into a storm drain. 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 City's BMPs for erosion and sedimentation control during construction and the post construction control measures outlined in Provision C.3 of the MRP would further ensure that impacts to water quality or waste discharge are less than significant and 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. The City would provide potable water services to the project, which would include some groundwater, however the project would not include the extraction of groundwater via wells and no wells are proposed in the project. 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. The City's water supply planning includes projected increases in water demand due to densification and intensification of non-residential uses. The City's municipal water system currently has the capacity to provide up to 28.8 million gallons of water per day.

According to the City of Santa Clara 2020 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 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. San Tomas Aquino Creek is located approximately 0.73 miles to the west of the project site, and therefore the implementation of the project would not result in alteration of the creek or any work in or near the creek.

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 similar to existing conditions. Adherence to Provision C.3 of the MRP 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

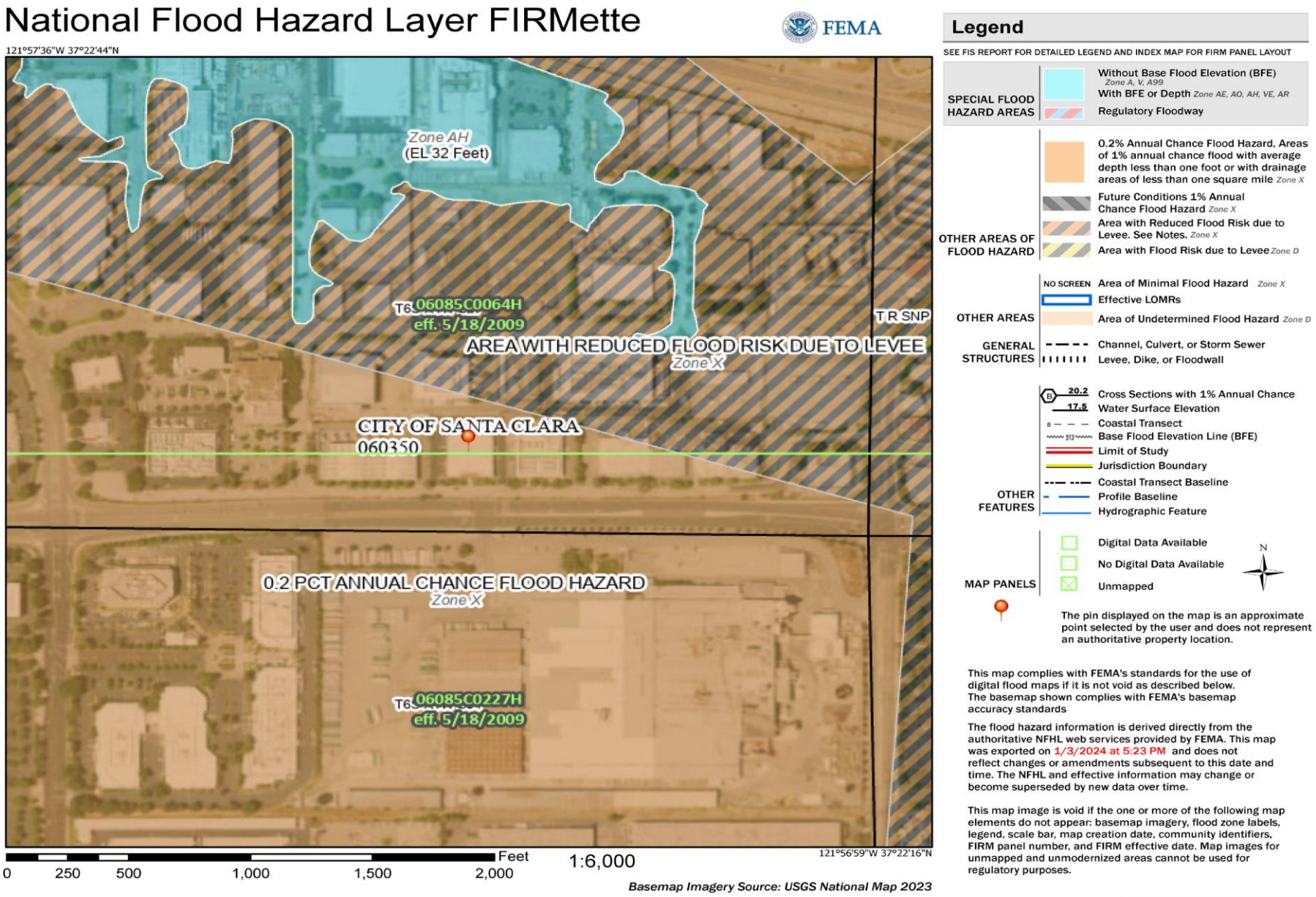
iv. impede or redirect flood flows?

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 stated above under **threshold (a)** above, 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 (unshaded), which is defined as an area with a 0.2 percent annual chance of flood hazard. 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.



FEMA FIRMette Map Figure **2-1**

Source: Circlepoint, 2024

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** above, the project is located within FEMA Flood Zone X (unshaded), which is defined as an area with a 0.2 percent annual chance of flood hazard. The project site is located adjacent to areas with reduced flood risk due to the presence of a levee. The project site is not located in a tsunami or seiche zone. The project site is located approximately 3.5 miles from the San Francisco Bay and approximately 25 miles from the Pacific Ocean and due to this distance, potential impacts related to tsunamis are minimal. Additionally, the project site is not susceptible to impacts resulting from seiches because of its distance from any large bodies of water. The project is located within the James J. Lenihan Dam inundation zone. The inundation zone assumes complete failure with a full reservoir. The actual extent and depth of inundation in the event of a failure would depend on the volume of storage in the reservoir at the time of failure. The risks of failure are reduced by several regulatory inspection programs, and risks to people and property in the inundation area are reduced by local hazard mitigation planning. The California Department of Water Resources (CDWR) Division of Safety of Dams is responsible for regular inspection of dams in California. CDWR and local agencies are responsible for minimizing the risks of dam failure thus avoiding the release of pollutants due to project inundation. 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.

2.11. Land Use and Planning

	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

Regional

Norman Y. Mineta San José International Airport

The project site is located 0.7 miles northwest of the San José International Airport and is located within the Airport Influence Area (AIA) defined by the Santa Clara County Airport Land Use Commission's Comprehensive Land Use Plan (CLUP) for the San José International Airport. Development within the AIA can be exposed to hazards from aircraft and pose hazards to aircraft travelling to and from the airport. The AIA is a composite of areas surrounding the airport that are affected by noise, height, and safety considerations. These hazards are addressed in Federal and State regulations as well as in land use regulations and policies in the CLUP. The most recent CLUP for the Airport was adopted in 2011 and updated in 2016.

The CLUP includes land use compatibility policies and standards, which form the basis for evaluating the land use compatibility of individual projects with the Airport and its operations. Standards in the CLUP focus on the three areas of ALUC responsibility 1) aircraft noise, 2) the safety of persons on the ground and in aircraft, and 3) the control of objects in navigable airspace.

Applicable CLUP land use policies to the project include:

- **G-7:** All new exterior lightning within the AIA shall be designed so as to create no interference with aircraft operations. Such lightning shall be constructed and located so that only the intended area is illuminated and off-site glare is fully controlled. The lightning shall be arrayed in such a manner that it cannot be mistaken for airport approach or runway lights by pilots
- **O-1:** All new projects within the AIA that are subject to discretionary review and approval shall be required to dedicate in compliance with state law , an avigation easement to the City of San José

Local

Santa Clara 2010-2035 General Plan[92]

The General Land Use Goals and Policies section of the General Plan addresses 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-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.

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.

5.10.5-P29 Continue to refer proposed projects located within the Airport Influence Area to the Airport Land Use Commission

5.10.5-P30 Review the location and design of development within Airport Land Use Commission jurisdiction for compatibility with the Airport Land Use Compatibility Plan

5.10.5-P32 Encourage all new projects within the Airport Influence Area to dedicate an avigation easement.

5.10.5-P33 Limit the height of structures in accordance with the Federal Aviation Administration Federal Aviation Regulations, FAR Part 77 Criteria

Environmental Setting

The project site has a General Plan land use designation of Low Intensity Office/R&D and will retain its designation for all phases. The Low Intensity Office/R&D designation is intended for campus-like office

[92] City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan*. Available at: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: February 5, 2024.

development that includes office and R&D, as well as medical facilities and free-standing data centers, with manufacturing uses limited to a maximum of 20 percent of the building area. It includes landscaped areas for employee activities and parking that may be surface, structured, or below grade. Accessory or secondary small scale supporting retail uses that serve local employees and visitors are also permitted. The maximum Floor Are Ratio (FAR) allowed under this designation is 1.00.

The site is currently developed with a one-story furniture store and showroom in addition to a paved surface parking lot. The approximately 1.37-acre project site is bound by Comstock Street to the south, and surrounded by light industrial uses to the west, north and east. The project site is zoned ML-Light Industrial and will be revised to LO-RD under the zoning map update. The ML-Light Industrial zoning designation under the October 2023 zoning code is intended for (but not limited to) commercial storage and wholesale distribution warehouses, plants and facilities for the manufacturing, processing, and repair of equipment and merchandise, and retail sales of industrial products, and uses of a similar nature. Retail commercial and service uses, kennels and lumber yards (and other similar uses) may also be allowed as a conditional use with City approval of a Conditional Use Permit. Under the zoning code update, LO-RD zoning designations allow for office and research and development uses, limited manufacturing, and employee-serving retail. Data centers are permitted under the LO-RD zoning designation as a conditional use and require a Conditional Use Permit. The project site is located within Part 77 Surface zone 212, which limits the building height to a maximum of 212 feet above mean sea level. The maximum permitted building height within this zone is 80 feet and the maximum building coverage is 75 percent.

Impact Discussion

a) 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 are a permitted use under the Low Intensity Office/R&D land use designation and data centers are a conditional use that require a Conditional Use Permit. The project is consistent with General Plan policies and goals.

The project site is zoned Light Industrial (LO-RD under the zoning code update/July 2024 zoning map update) and is surrounded by industrial development. Under the City's October 2023 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 outlined in the October 2023 zoning code and the LO-RD zoning district proposed in the zoning code update. Therefore, no impact would occur.

2.12. Mineral Resources

	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

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA) was enacted by the California Legislature in 1975 to address the need for continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property, and the environment. As mandated under SMARA, the State Geologist has designated mineral land classifications in order to help identify and protect mineral resources in areas within the state subject to urban expansion or other irreversible land uses which would preclude mineral extraction. SMARA also allowed the State Mining and Geology Board (SMGB), after receiving classification information from the State Geologist, to designate lands containing mineral deposits of regional or statewide significance.

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?**

OR

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?**

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 and Vibration

	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?	☐	☐	☒	☐

The following discussion is based in part on a Noise Study Report prepared for the project in January 2024. A copy of this report is included as **Appendix G** to this Initial Study

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*.[93] 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.

[93] 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: February 5, 2024.

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.

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 a Noise Element prepared per guidelines adopted by the Governor's Office of Planning and Research. The purpose of the Noise Element 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 2-17 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 73 dBA Day Night Average Sound Level/Community Noise Equivalent Level (DNL/CNEL) or less. The guidelines state that where the exterior noise levels are greater than 73 dBA DNL/CNEL and less than 83 dBA DNL/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 73 dBA DNL/CNEL or less. The guidelines state that where the exterior noise levels are greater than 68 dBA DNL/CNEL and less

than 77 dBA DNL/CNEL, the design of the project should include measures to reduce interior noise to acceptable levels.

Table 2-17 Noise and Land Use Compatibility Standards

Land Use	Compatible (dBA, DNL/CNEL)	Require Design Standard (dBA, DNL/CNEL)[1]	Incompatible (dBA, DNL/CNEL)[2]
Residential	<57	58-73	>73
Educational	<57	58-73	>73
Recreational	<67	68-77	>77
Commercial	<67	68-77	>77
Industrial	<73	73-83	>83
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 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.

City of Santa Clara City Code Chapter 9.10- Regulation of Noise and Vibration

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 below.

SCCC Section 9.10.40 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.[94]

Santa Clara County Airport Land Use Commission Land Use Plan

The Comprehensive Land Use Plan for San José International Airport adopted by the Santa Clara County Airport Land Use Commission (ALUC) contains standards for projects within the vicinity of San José International Airport which are relevant to this project. Noise compatibility for industrial uses located within the vicinity of the San José International Airport are considered generally acceptable when located within the 65 dBA to 70 dBA CNEL airport noise contour and generally unacceptable when located within the 70 dBA CNEL airport noise contour.

Environmental Setting

The most prominent source of noise in the project site vicinity is traffic noise from the Central Expressway and Comstock Street. Other noise sources are similar commercial and industrial uses surrounding the site. 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 the airport.[95]

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. Construction-related noise is only considered substantial if construction activities are proposed outside normal working hours or would occur for an extraordinarily long time. As described **Section 0, Construction**, construction would occur over approximately 24-36 months and would take place within the City's acceptable hours for construction activities to occur.

Construction activities would be located within 1,400 feet of the closest sensitive receptors but would typically be located at distances of 1,250 feet or further away depending on the exact location of the construction equipment on the project site. Due to the nature of construction, construction equipment

[94] City of Santa Clara. 2023. *City of Santa Clara City Code Chapter 9.10 Regulation of Noise and Vibration.* Retrieved from: https://www.codepublishing.com/CA/SantaClara/#!/html/SantaClara09/SantaClara0910.html. Accessed: February 5, 2024

[95] Santa Clara County Airport Land Use Commission. 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: February 5, 2024.

is typically dispersed in various areas of the site, with only a limited amount of equipment operating near a given location at a particular time.

The FTA 2018 *Transit Noise and Vibration Impact Assessment* document recommends this approach on page 177, stating that for the distance variable in its construction noise calculation "assumes that all equipment operates at the center of the project." Therefore, it is common, industry standard practice to analyze average construction noise from the center of the site because this is the approximate center of where noise is being generated, as equipment moves around the site throughout the workday. In accordance with FTA recommendations, construction noise from site preparation and grading was analyzed from the center of the site, as construction equipment for these phases would be moving throughout the site. Construction noise from site preparation, grading, building construction, paving and architectural coating were analyzed based upon the center of site to the sensitive receivers. The closest sensitive receiver to the project site is the Granada Islamic School to the northwest (1,165 feet), with the closest residences 3,300 feet to the north.

Table 2-18 identifies the estimated noise levels at the closest sensitive receivers from the center of the site based on the conservatively assumed combined use of all construction equipment during each phase of construction. As shown in the table, noise levels at the nearest sensitive receptors are well below the FTA threshold of 80 dBA L_{eq}. In addition, construction would occur within the allowed hours of the City's Code. Therefore, impacts would be less than significant, and no mitigation is required.

Table 2-18 Estimated Noise Levels by Construction Phase

Construction Phase	L_{eq} dBA		
	RCNM Reference Noise Level[1] 50 feet	Granada Islamic School to NW 1,065 feet	Residential to N 3,300 feet
Demolition	84	57	48
Site Preparation	83	56	47
Grading	83	56	47
Building Construction	77	50	41
Paving	78	51	42
Architectural Coating	74	47	38

1 RCNM reference noise levels are noise levels generated during each construction phase measured from a point 50 feet from the location of the construction phase. These reference noise levels are then used to calculate noise levels from the construction phase at a distance greater than 50 feet from the construction phase.

Source: Rincon Consultants, 2024

See Appendix B for modeling outputs.

Operation

As discussed above, the project would include seven Air Cooled Chiller units with a combined sound power level rated at 110 dBA, two Dedicated Outside Air Units with a combined sound power level rated at 95 dBA, four exhaust fans with a combined sound power level rated at 75 dBA and eight Condensing Units with a combined sound power level rated at 98 dBA. This brings the combined sound power level of the 22 units to 110 dBA, which is a SPL of approximately 102 dBA at 3 feet from the sources.

Assuming that the units were to run for an entire 24-hour period, the closest light industrial property line to the east, at a distance of approximately 115 feet from the center of the proposed mechanical rooftop area, would be exposed to a noise level of 65 dBA L_{max} accounting for approximately 5 dBA reduction from the rooftop parapet wall. The Granada Islamic School and nearest residences would be exposed to cooling unit noise levels of 46 dBA L_{max} and 36 dBA L_{max}, respectively. The center of the loading dock would expose the light industrial use located 90 feet to the west to a noise level of 70 dBA L_{max}. The Granada Islamic School and nearest residences would be exposed to cooling unit noise levels of 49 dBA L_{max} and 39 dBA L_{max}, respectively. Noise level estimates to the Granada Islamic School and nearest residences are conservative as they do not account for the substantial attenuation that would occur from other buildings in between the uses.

SCCC Section 9.10.40 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.; noise levels at commercial uses to 65 dBA during daytime hours and 60 dBA during nighttime hours; 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. The noise level estimates from cooling unit and loading dock noise would not exceed these standards, and impacts would be less than significant, and no mitigation is required.

Off-site Traffic Noise

The air quality modeling for the project estimated 200 daily vehicle trips (Rincon Consultants, Inc. 2024). Scott Boulevard has an existing average daily traffic (ADT) volume of approximately 16,160 between San Tomas Expressway and Central Expressway and Lafayette Street has an ADT volume of approximately 18,190 between the US 101 to Central Expressway. Using the formula of 10 x LOG (future traffic volume/existing traffic volume), project net trips would increase traffic noise by less than 0.1 dBA over existing conditions on Scott Boulevard and Lafayette Street. Therefore, the project would not cause a traffic noise increase of more than 1.5 dBA, the most stringent threshold. Off-site traffic noise impacts would be less than significant and no mitigation is required.

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

Less than Significant Impact. Construction activities known to generate excessive ground-borne 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 at a distance of 40 feet from the nearest off-site light industrial building to the north of the project site. A vibratory roller would create approximately 0.210 in/sec PPV at 25 feet .[96] Construction vibration at a distance of 40 feet would be approximately 0.104 in/sec PPV. Therefore, vibration from construction activity would be lower than the engineered concrete and masonry (no plaster) threshold of 0.3 in/sec PPV for light industrial/commercial buildings. Operation of the project would not include any substantial vibration sources. Therefore, impacts would be less than significant, and no mitigation is required.

[96] Federal Transportation Administration. 2018. *Transit Noise and Vibration Impact Assessment.* Retrieved from: 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: February 1, 2024.

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?

Less than Significant Impact. The San José International Airport is located approximately 0.6 miles to the east of the project site and Moffett Federal Airfield is located approximately 5 miles to the northwest of the project site. According to the San José International Airport Land Use Compatibility Plan Figure 5, the project is not located within noise contours of any airport.[97] Therefore, the proposed project would not expose people working in the project area to excessive aircraft overflight noise levels. Impacts would be less than significant, and no mitigation is required.

[97] Santa Clara County Airport Land Use Commission. 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: February 1, 2024

2.14. Population and Housing

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

Regulatory Setting

Regional

Plan Bay Area 2050[98]

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).

Association of Bay Area Governments (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, Metropolitan Transportation Commission (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[99]

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

[98] Metropolitan Transportation Commission. 2023. *Plan Bay Area 2050.* Available: https://mtc.ca.gov/planning/long-range-planning/plan-bay-area-2050. Accessed: February 5, 2024.

[99] City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan*. Available at: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: February 5, 2024.

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.

5.3.2-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 U.S Census Bureau data, the City had a population of approximately 126,930 residents in 45,830 households as of July 2022.[100] According to ABAGs projections, approximately 52% of the 126,930 residents are employed residents.[101] There are approximately 137,000 jobs in the City (estimated by ABAG for 2020). By 2035, it is estimated that the City will have approximately 151,715 residents, 54,855 households, 169,590 jobs and 73,835 employed residents.[102]

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

The City of Santa Clara had an estimated 2.5 jobs for every employed resident in 2010.[103] The General Plan focuses on increased housing and the placement of housing near employment. As a result, the jobs to housing ratio is projected to slightly decrease to 2.48 by 2040.[104] Some employees who work within the City are, and still would be required to seek housing outside the community with full implementation of the General Plan.

The project site is currently developed with an industrial building and zoned for light industrial use and has a general plan designation of Low Intensity Office/ R&D. There are no residential units on site and therefore no residents will be displaced as a result of this project.

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[100] United States Census Bureau, 2022. *Quick Facts, Santa Clara city*. Available: https://www.census.gov/quickfacts/santaclaracitycalifornia. Accessed: February 5, 2024.

[101] 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: February 5, 2024.

[102] 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: February 5, 2024.

[103] City of Santa Clara. 2014. *City of Santa Clara* 2010-2035 General Plan Appendix 8.12 Housing Element. Available: https://www.santaclaraca.gov/home/showpublisheddocument/13932/635713044859030000. Accessed: February 5, 2024.

[104] City of Santa Clara. 2014. *City of Santa Clara* 2010-2035 General Plan Appendix 8.12 Housing Element. Available: https://www.santaclaraca.gov/home/showpublisheddocument/13932/635713044859030000. Accessed: February 5, 2024.

Impact Discussion

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

No Impact. The project proposes a commercial/light industrial use that does not include the construction of residential units. The project is expected to require up to 20 employees on site every 24 hours. 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 induce population growth in the surrounding area. Additionally, the project does not include roadways or other utility extensions that could indirectly induce unplanned growth. Therefore, no impact would occur.

b) Displace substantial numbers of existing 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.

2.15. Public Services

	Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
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-P5 Maintain emergency traffic preemption controls for traffic signals.

Environmental Setting

Fire Protection

The City of Santa Clara Fire Department (SCFD) consists of nine stations distributed throughout the City to provide fire protection services. The closest fire station to the project site is Station 2 located at 1900 Walsh Avenue and is approximately 0.4 miles southwest of the project site.

SCFD's primary objective is to swiftly deploy extensively trained and well-equipped personnel to emergency scenes, ensuring a rapid and effective response. This commitment is encapsulated in the goal of maintaining a city-wide response time of less than 5 minutes and 30 seconds (5:30) to 90% of all high-level emergency calls.[105] This response time metric is crucial in safeguarding public safety and minimizing the impact of emergencies on individuals and property within the community. It is important to note that response time is measured from the moment a call is dispatched to the arrival of firefighting and rescue units at the incident location. SCFD diligently monitors and analyzes response time data to continually refine strategies and allocate resources, ensuring they effectively meet the community's evolving needs.

The City also participates in the Santa Clara County Fire and Rescue Mutual Aid Response Plan to further ensure that fires and other emergencies are handled efficiently. Fire departments from neighboring and nearby jurisdictions and the Santa Clara County Fire Department are participating members of this plan. Neighboring departments work in conjunction to reduce reflex and response times. When a developing fire overburdens one department, other departments will send the necessary task force to reduce the burden.

Police Protection

The City of Santa Clara Police Department (SCPD) headquarters is located at 601 El Camino Real Parkway, approximately 1.7 miles north of the project site. The nearest SCPD station is located at 3992 Rivermark Parkway, approximately 1.4 miles north of the project site. The SCPD has 232 full-time employees (153 sworn officers and 79 civilians) and a varying number of part-time or per diem employees, community volunteers, police reserves and chaplains.[106]

Schools and Parks

The Santa Clara Parks and Recreation 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. As of February 2020, the Department maintains and operates the City's 26 neighborhood parks, five mini parks, one community park, three open space sites and 14 recreation facilities. Recreation facilities include Community Centers, neighborhood park buildings and ten joint use facilities, playgrounds, restrooms, picnic areas, turf, trees, vegetation, and athletic fields. The closest

[105] This information was obtained through written communication from the Santa Clara Fire Department on March 19, 2024

[106] City of Santa Clara. 2020. *Santa Clara Department: About Us Factsheet*. Available: https://www.santaclaraca.gov/our-city/departments-g-z/police-department/about-us/fact-sheet. Accessed February 5, 2024

neighborhood park is Montague Park located approximately 1.0 mile to the northeast of the project site. Additionally, the Reed & Grant Sports Park and Reed Street Dog Park is located approximately 1.18 miles southeast 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 SCUSD schools to the project site are Students in the project area attend Montague Elementary School located at 750 Laurie Avenue approximately 1.0 mile north of the site and Bracher Elementary School located at 2700 Chromite Drive, approximately 1.1 miles southwest of the project site.[107]

Libraries

Library services are provided by the Santa Clara City Library (SCCL), The City of Santa Clara is served by the Central Park Library located at 2635 Homestead Road (approximately 2.5 miles south of the project site), Mission Library Family Reading Center located at 1098 Lexington Street (approximately 2.0 miles south of the project site), and Northside Branch Library located at 695 Moreland Way (approximately 1.5 miles northwest of the project site). These facilities total approximately 104,770 square feet (sf) and have approximately 457,210 items combined.

Impact Discussion

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i. Fire Protection?

OR

ii. Police Protection?

Less than Significant Impact. As described above, fire and police protection are currently provided by the SCFD and the SCPD. The project is consistent with current zoning and General Plan land use designations and therefore any additional demand on fire services or police protection has already been accounted for in the City's General Plan and Zoning Code. 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. In addition, as part of the City's permit and entitlement process, the project and relevant plan sets would require a review by qualified members of the SCFD to determine if the project presents a potential fire hazard and would then require the project to incorporate any recommendations or design refinements made by the SCFD to

[107] Santa Clara Unified School District. 2023. *School Locator*. Available: https://locator.pea.powerschool.com/?StudyID=217157. Accessed: December 12, 2023.

address potential fire hazards. Therefore, this impact would be less than significant, and no mitigation is required.

iii. Schools?

OR

iv. Parks?

No Impact. The project would not include any residential uses and the new employment opportunities created by the project would not increase demand for schools. The project would have no impact.

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. Parks and Recreation

	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

Local

Santa Clara 2010-2035 General Plan[108]

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 Parks and Recreation Department provides park 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. The closest neighborhood park is Montague Park located approximately one mile to the northeast of the project site, west of De La Cruz Boulevard. Effects to park and recreation resources are typically correlated to increases in population from the addition of residential uses.

[108] City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: February 5, 2024.

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?**

OR

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?**

No Impact. The project would not include any residential uses and the employment opportunities created by the project would not result in increased demand for parks or other public recreational facilities in the City. Therefore, the project would have no impact.

2.17. Transportation/Traffic

	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 inconsistent 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?	☐	☐	☐	☒

This discussion is based, in part, on the VMT Assessment Memorandum completed for this project in January 2024. A copy of this Memorandum has been included in this IS/MND document as **Appendix H.**

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.[109]

Senate Bill 743

SB 743 was passed in 2013 and 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

[109] 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: February 5, 2024.

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.

Local

Santa Clara 2010-2035 General Plan[110]

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.

Environmental Setting

Regional Access

Regional access to the project site is provided primarily by U.S Route 101 Highway located north of the project site. US 101 is a north-south highway that extends from San Francisco to Los Angeles. Primary access to the U.S 101 is provided via Lafayette Street and San Tomas Expressway. Additionally, Central Expressway provides regional access to the project site via an approximately 12.3 miles long east-west route that connects Palo Alto to the San José Mineta International Airport. Similar to the U.S 101, access

[110] City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: February 5, 2024

to Central Expressway is provided through Lafayette Street as well as Scott Boulevard to the west of the project site.

Local Access

The project site is primarily accessed by Comstock Street on the southern boundary. Roadways that provide vehicular circulation to the project site include Comstock Street, Lafayette Street, Space Park Drive, and Scott Boulevard. Access provided by each roadway is discussed below.

- **Comstock Street** is an unmarked two-lane local street that runs in an east-west direction and extends from Scott Boulevard to a cul de sac east of Lafayette Street.
- **Lafayette Street** is a four to five lane arterial road that runs in a north-south direction that provides access to Comstock Street to the east of the project site. North of Reed Street, Lafayette Street is comprised of six lanes with two lanes in each direction and a center turn lane. South of Reed Street, Lafayette Street converts to a four-lane roadway with two lanes flowing in each direction.
- **Scott Boulevard** is a four-lane arterial road that runs in a north-south direction that connects to Comstock Street west of the project site. Scott Boulevard also includes Class II bike lanes.

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. The nearest bus stops to the project site are the stops located at Scott Boulevard and Spark Park Drive, approximately 0.24 miles to west of the project site, and Scott Boulevard and Central Expressway which is located approximately 0.27 miles to the southwest of the project site. The primary bus routes that provide bus services for these stops include local route 59 and route 827 which provides shuttle services via the ACE Yellow line. Route 59 operates in between stops located at the intersection Saratoga Avenues/Stevens Creek Boulevard and Tasman Drive/Baypointe Parkway. The ACE Yellow line operates between the intersection of Scott Boulevard/San Tomas Expressway and the Great America ACE Amtrak 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

Up to 20 on-site employees would be required by the project on a given day. This could increase the use of public transportation in the surrounding area. The additional transit users would not interfere with the normal operations of transit services and would not exceed the capacity of the existing transit operations. Therefore, the project would have a less than significant impact on transit services.

Roadways

Implementation of the project would decrease the number of vehicle trips to the roadway network surrounding the project. The project would not alter the roadway circulation network. Therefore, the project would result in less than significant impacts on roadway operations.

Pedestrian Facilities

Because adequate pedestrian facilities already exist near the project site, no pedestrian improvements are proposed. The project would not alter or obstruct the existing pedestrian facilities. Therefore, the project would result in a less than significant impact on pedestrian facilities.

Bicycle Facilities

The project would not remove existing bicycle facilities and would not interfere with existing plans, policies, or ordinances corresponding to bicycle facilities. The project would provide secure bicycle storage with space for up to 6 bikes. Therefore, the project would enhance bicycle infrastructure on the project site and would not impact existing or planned bicycle facilities, such as local bike lanes. Given the above, this impact would be less than significant, and no mitigation would be required.

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

Less than Significant Impact. The City of Santa Clara adopted a VMT Transportation Analysis Policy for Environmental Review in 2020. The Policy sets forth procedures for determining project impacts on VMT based on the project description, characteristics, and location. The VMT methodology also includes screening criteria that are used to identify types, characteristics, and locations of projects that would not exceed the VMT thresholds of significance. If a project meets the screening criteria, it is then presumed that the project would result in a less than significant impact on VMT, and a detailed VMT analysis is not required. 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.

As stated in **threshold a**) above, the project would actually reduce the daily number of trips to the project site from 153 daily trips to 108 daily trips for a net new daily vehicle trips of -45. Based on CEQA Guidelines Section 15064.3(b)(1) Land Use projects that reduce VMT compared to existing conditions

should be presumed to cause a less than significant transportation impact. Therefore, the project would result in a less than significant impact, and 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 Comstock Street. The project would include 21 onsite parking spaces, which would be adequate to meet the anticipated parking demand for a data center. There would be no reconfiguring of nearby streets such as Comstock Street, Scott Boulevard or Lafayette Street. Therefore, 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 Comstock Street. 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

	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)?	☐	☒	☐	☐
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[111]

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.

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 on February 12, 2024.

Impact Discussion

a) 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

[111] City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan*. Available at: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: February 5, 2024.

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 December 20, 2023. 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 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 March 29, 2024 the City sent email notifications and letters 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, two responses have been received. The tribes that were identified and contacted by the City will 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 accordance with Section 21080.3.1 of the California Public Resources Code and AB 52, the City has provided a Notice of Opportunity to Native American Tribes to request consultation for projects within the city. To date, the City has not received any requests from regional tribes to be included on the AB 52 list.

In addition to tribal consultation, the implementation of **CUL MM-1** and **CUL MM-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

	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 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?	☐	☐	☒	☐
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 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

AB 341 was passed in 2011 and 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

SB 1383 was passed in 2022 and 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.[112]

Local

Santa Clara 2010-2035 General Plan[113]

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 follow General Plan policies related to utilities and service systems are applicable to the project:

[112] County of Santa Clara. 2010. *Five-Year CIWMP/RAIWMP Review Report*. Available: https://files.santaclaracounty.gov/migrated/CalRecycle709-rev7.pdf. Accessed: February 5, 2024.

[113] City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan*. Available at: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: February 5, 2024.

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.

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, seven storage tanks, and 26 wells that tap the underground aquifers and make up 62 percent of the City's water supply.[114] 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.[115] 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 below. Existing utility connections on site include domestic water, electrical, gas, and sewage pipelines on Comstock Street.

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.[116] The City utilizes recycled water in order 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.[117]

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[114] 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: February 5, 2024.

[115] City of Santa Clara Water & Sewer Utility. 2023. Fact Sheet, 2023. Available: https://www.santaclaraca.gov/our-city/departments-g-z/water-sewer-utilities/fact-sheet. Accessed: February 5, 2024.

[116] City of Santa Clara Water & Sewer Utilities. 2023. Recycled Water Utility. https://www.santaclaraca.gov/our-city/departments-g-z/water-sewer-utilities/recycled-water-utility. Accessed: February 5, 2024.

[117] City of Santa Clara Water and Sewer Utilities. 2015. *Urban Water Management Plan*. Available: http://santaclaraca.gov/home/showdocument?id=48088. Accessed: February 5, 2024.

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.[118]

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.

Solid Waste

The City maintains multiple, non-exclusive franchise hauler agreements to provide garbage, recycling, organics recycling, and debris bin services to businesses located on properties that are zoned for industrial use. The City requires these non-exclusive franchise haulers to provide a bundled service that includes garbage, recycling, and organics collection. Businesses located on parcels zoned for industrial use are free to select a hauler that best suits their needs. Additional information about these non-exclusive franchise haulers can be found on the City's website. The current term for these non-exclusive franchise haulers is set to expire on December 31, 2026.[119] . The City has an agreement with 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.

Natural Gas and Electricity Services

Electric and gas services within the City are provided by Silicon Valley Power (SVP) and PG&E, respectively. SVP owns more than 854.7MW of electric-generating resources. This capacity far exceeds the City's current peak electricity demand of approximately 669.2-MW.[120]

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 seven 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

[118] City of San José. 2016. *San José-Santa Clara Regional Wastewater Facility Fact Sheet*. Available: https://www.sanjoseca.gov/home/showdocument?id=32061. Accessed: February 5, 2024.

[119] City of Santa Clara. *Commercial and Industrial Garbage & Recycling*. Available: https://www.santaclaraca.gov/our-city/departments-g-z/public-works/environmental-programs/commercial-and-industrial-garbage-recycling. Accessed March 19, 2024.

[120] Silicon Valley Power. 2023. *Utility Fact Sheet*. Available: http://www.siliconvalleypower.com/svp-and-community/about-svp/utility-fact-sheet. Accessed: April 26, 2024.

flow and WaterSense Labeled. Therefore, the project would not require new or expanded water facilities.

The project site is currently served by the RWF. It is anticipated that up to 20 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, with the exception of 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 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. No new or expanded offsite SVP facilities would be required to serve the project. 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 restrooms, the break area, and to run the colling systems. 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)** above**,** 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 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 9 PPD set for the city by the CalRecycle. 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.

2.20. Wildfire

	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 (FHSZ)

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.[121] 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.

[121] CAL FIRE. *Fire Hazard Severity Zones Maps*. Available: https://osfm.fire.ca.gov/fire-hazard-severity-zones-maps-2022/. Accessed: February 5, 2024.

California Fire Code Chapter 47

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

California Public Resources Code Section 4442 through 4431

The California Public Resources Code includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment that uses an internal combustion engine; specify requirements for the safe use of gasoline-powered tools on forest-covered land, brush-covered land, or grass-covered land; and specify fire suppression equipment that must be provided 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.[122] 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 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[123]

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 located in an urbanized area of Santa Clara. According to the California Department of Forestry and Fire Protection (CAL FIRE), the project site is not located within a moderate, high, or very high fire hazard severity zone (FHSZ) or near any state responsibility areas.[124] The nearest Very High Fire Hazard Severity Zone (VHFHSZ) is located approximately 7.5 miles east of the project site in Alum Rock Park in East San José.

[122] 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: February 5, 2024.

[123] City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/56139/636619791319700000. Accessed: February 5, 2024.

[124] Cal FIRE. 2023. *Fire Hazard Severity Zone Viewer*. Available: https://egis.fire.ca.gov/FHSZ/. Accessed: February 5, 2024.

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 indirectly or directly interfere with emergency services during a 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, which 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.[125] The nearest Very High Fire Hazard Severity Zone (VHFHSZ) is located approximately 7.5 miles east of the project site in Alum Rock Park in East San José.

[125] Cal FIRE. 2023. *Fire Hazard Severity Zone Viewer*. Available: https://egis.fire.ca.gov/FHSZ/. Accessed: February 5, 2024.

2.21. Mandatory Findings of Significance

	Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a) Have the potential to degrade 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, 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) Have the potential to degrade 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, 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 2.4, Biological Resources, Section 2.5, Cultural Resources**, **Section 2.7, Geology and Soils** 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) 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 decrease compared to existing uses. Based on the decreased 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. However, the project would result in a net decrease in trips on local roadways as compared to existing land use. Therefore, the project's contribution to this significant impact would not be cumulatively considerable.

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. 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) 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.