INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION

3060 Raymond Street Data Center

City of Santa Clara

Community Development Department
1500 Warburton Avenue
Santa Clara, CA 95050

March 6, 2023

This page intentionally left blank

City of Santa Clara
The Center of What's Possible

NOTICE

NOTICE OF AVAILABILITY
for Public Review of a
Mitigated Negative Declaration
Distribution Date: March 8, 2023

As authorized by the City of Santa Clara as a Lead Agency, the City hereby provides a **30-day public review period** for a Mitigated Negative Declaration (MND) prepared pursuant to the California Environmental Quality Act (CEQA) for the following project:

Project Title:	**3060 Raymond Street Data Center Project**
Files:	PLN21-15143
Location:	3060 Raymond Street, two contiguous parcels totaling 1.72 acres located on the south side of Raymond Street, approximately 410 feet south of Duane Avenue; APN's: 224-08-099 and 224-08-143
Applicant:	Arc Tec, Inc, Evan Sockalosky
Owner:	Ellis Partners, Dean Rubinson
Request:	Adoption of a **Mitigated Negative Declaration (MND)** for a Use Permit to allow for the conversion of a 24,422 square foot industrial building to a data center with installation of five 2,000 kilowatt backup generators, six cooling towers, equipment yards and on- and off-site improvements

INITIAL STUDY DETERMINATION

An Initial Study was completed by Circlepoint, in accordance with the California Environmental Quality Act (CEQA), and is available for review online on the City's website at **www.santaclaraca.gov/CEQA** and the Central Library at 2635 Homestead Road in the City of Santa Clara, Based upon the Initial Study, insofar as the project involves a Use Permit to allow for the conversion of an industrial building to a data center with associate on- and off-site improvements, the ***project will not have a significant effect on the environment*** because mitigation measures have been incorporated into/added to the project by conditions of approval that will reduce potential impacts to a less than significant level.

COMMENTS

Comments may be filed with the City in response to the preparation of this Mitigated Negative Declaration, within the review period **beginning March 8, 2023 and ending April 6, 2023**, pursuant to Section 15073 of the CEQA Guidelines. Responses received in writing on or before the date of review or verbally at the time of the review of this project will be considered along with the proposed Mitigated Negative Declaration.

Lead Agency: City of Santa Clara Planning Division
Contact: Debby Fernandez, Email: dfernandez@santaclaraca.gov
1500 Warburton Avenue, Santa Clara, CA 95050
Phone (408) 615-2450, Fax: (408)247-9857

Andrew Crabtree
Director of Community Development, City of Santa Clara

Date: 3-6-2023

This page intentionally left blank

3060 RAYMOND STREET DATA CENTER
3060 Raymond Street
PLN21-15143

INITIAL STUDY
WITH PROPOSED
MITIGATED NEGATIVE DECLARATION (MND)

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

Prepared By:

Circlepoint
42 S First Street, Suite D
San José, CA 95113

March 6, 2023

This page intentionally left blank

Table of Contents

List of Figures

List of Tables

Appendices

Initial Study and Environmental Checklist Form

1. Project title	3060 Raymond Street 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	Debby Fernandez, (408) 615.2450
4. Project location	3060 Raymond Street Data Center
5. Project sponsor's name and address	Colovore, LLC
6. General plan designation	Low-Intensity Office/R&D
7. Zoning	ML-Light Industrial
9. Description of project	The project would make changes to the existing industrial building on the site including: seismic upgrades to the building, upsizing the power supply from 1.6 megawatt (MW) to 9 MW (provided by two new 4.5 MW feeds from SVP), installation of five 2,000-kilowatt (kW) back-up generators, and installation of five 427-ton free cooling chillers. No new SVP substations would be required or constructed as part of this upsizing.
10. Surrounding land uses and setting	The 1.7-acre project site is zoned ML – Light Industrial. The project site is in Santa Clara south of Highway US-101 and east of the San Tomas Expressway. The project site has frontage on Raymond St. Surrounding land uses are predominantly Light Industrial and there are no sensitive receptors within close proximity to the site.
11. Other public agencies whose approval is required (e.g. permits, financial approval, or participation agreements)	None

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “potentially significant impact” as indicated by the checklist on the following pages.

- ☐ 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
- ☐ Population and Housing
- ☐ Public Services
- ☐ 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.

3-6-2023

Andrew Crabtree
Director of Community Development
City of Santa Clara

Date

1 Project Information

Project Title	3060 Raymond Street Data Center
Lead agency contact and address	City of Santa Clara, 1500 Warburton Avenue Santa Clara, CA 95050
File Number	PLN21-15143
Project Location	3060 Raymond St., Santa Clara, CA 95054
Property Owner/Project Sponsor	Colovore, LLC
Property APN	224-08-099; 224-08-143
General Plan Designation	Low-Intensity Office/R&D
Zoning	ML – Light Industrial
Council District	2

1.1 Project Location and Setting

The approximately 1.7-acre project site comprises two parcels: one 1.35-acre parcel at 3060 Raymond Street (Assessor's Parcel Number [APN] 224-08-099) and one 0.35-acre parcel immediately to the west (APN 224-08-143) within the City of Santa Clara (City), in the Silicon Valley region of the larger San Francisco Bay Area (Bay Area). The project site is approximately 0.1 mile south of U.S. Highway 101 (US-101) and 0.7 mile east of the San Tomas Expressway. City of Santa Clara 2010-2035 General Plan (General Plan) land use designations surrounding the project site consist of Low-Intensity Office/R&D to the north, south, and east; and Light Industrial to the west. The project site's General Plan land use designation is Low-Intensity Office/R&D and the zoning is ML – Light Industrial.

Surrounding development consists primarily of one- to three-story buildings with large surface parking lots. Nearby uses include commercial businesses, data centers, research and development buildings, and digital technology-oriented uses. An indoor shooting range and wholesale carpet business exist north of the project site. Data warehouses are located east and south of the project site. Additionally, an electric sub-station is located just west of the project site. Buildings in the area, including the project site, 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.

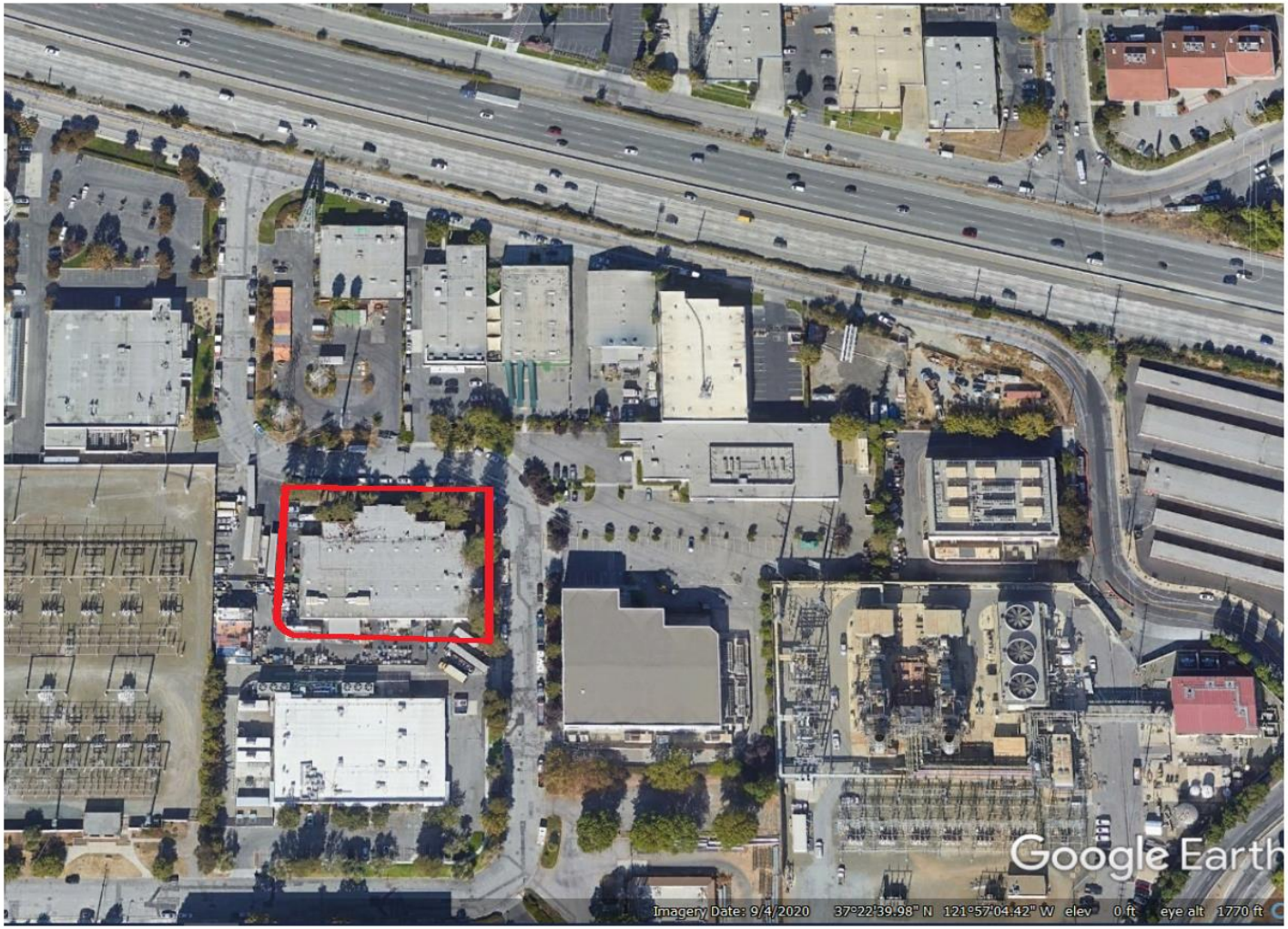
The project site is bounded by Raymond Street to the north and east, a separate data center site located at 1115 Space Park Drive to the south, and an electrical sub-station to the west. Other data centers are located across Raymond Street to the east at 3045 Raymond Street, to the northwest at 1350 Duane Avenue, and across Space Park Drive to the south at 1100 Space Park Drive. The closest residential uses

are located approximately 0.5 mile north along Lafayette Street. **Figure 1** provides an overview map showing the location of existing data centers and other adjacent uses.

The project site is developed with a two-story industrial building and parking lot. Since 2014, the building has been occupied by UNIXSurplus, a wholesale distributor of computer and networking equipment, for computer equipment disassembly and component sales. The existing building is set back from Raymond Street by landscaping to the north and east and surrounded by surface parking lots to the west and south. The property landscaping includes 14 existing trees, consisting primarily of coast redwoods (*Sequoia sempervirens*).

There are two curb-cuts which allow vehicles to enter the site from Raymond Street. No sidewalks currently exist along the Raymond Street frontage. The site includes utility connections (water, sewer, and electrical) and a Silicon Valley Power (SVP) utility easement that runs along the western edge of the site.

Figure 1. Project Location



Legend

Project Site

N

Not to Scale

Project Location Map Figure 1

Source: Google Earth, 2021

1.2 Project Description

The project would make changes to the existing industrial building on the site including: seismic upgrades to the building, upsizing the power supply from 1.6 megawatt (MW)to 9 MW (provided by two new 4.5 MW feeds from SVP), installation of five 2,000-kilowatt (kW) back-up generators (each would include an associated 4,000-gallon above ground diesel tank), and installation of five 427-ton free cooling chillers. No new SVP substations would be required or constructed as part of this upsizing.

Additional site improvements would include upgrades to existing hardscape, parking areas, and landscaping, to improve appearance and meet applicable ADA standards (see **Figure 2**). Sidewalks would be added along Raymond Street to the north and east to facilitate pedestrian access to the project site. A new connection to the existing recycled water line that runs along Raymond Street to the east of the project site would be added on the south side of the building.

Building Design

The exterior of the existing 24,422 square foot building would be refinished with an updated materials palette including stucco, aluminum, painted metal, and glazed windows. The overall design of the building would remain the same, with the most obvious new elements being the new generators located on the west side of the building and air cooled chillers located on the south side of the building.

Major Equipment

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

Table 1. Major Equipment

Equipment	Quantity	Location
2000 kW standby generators	5	On the west side of the data center
427-ton free cooling chillers	6	On the south side of the data center building

Source: Ellis Partners, 2021.

Parking and Site Access

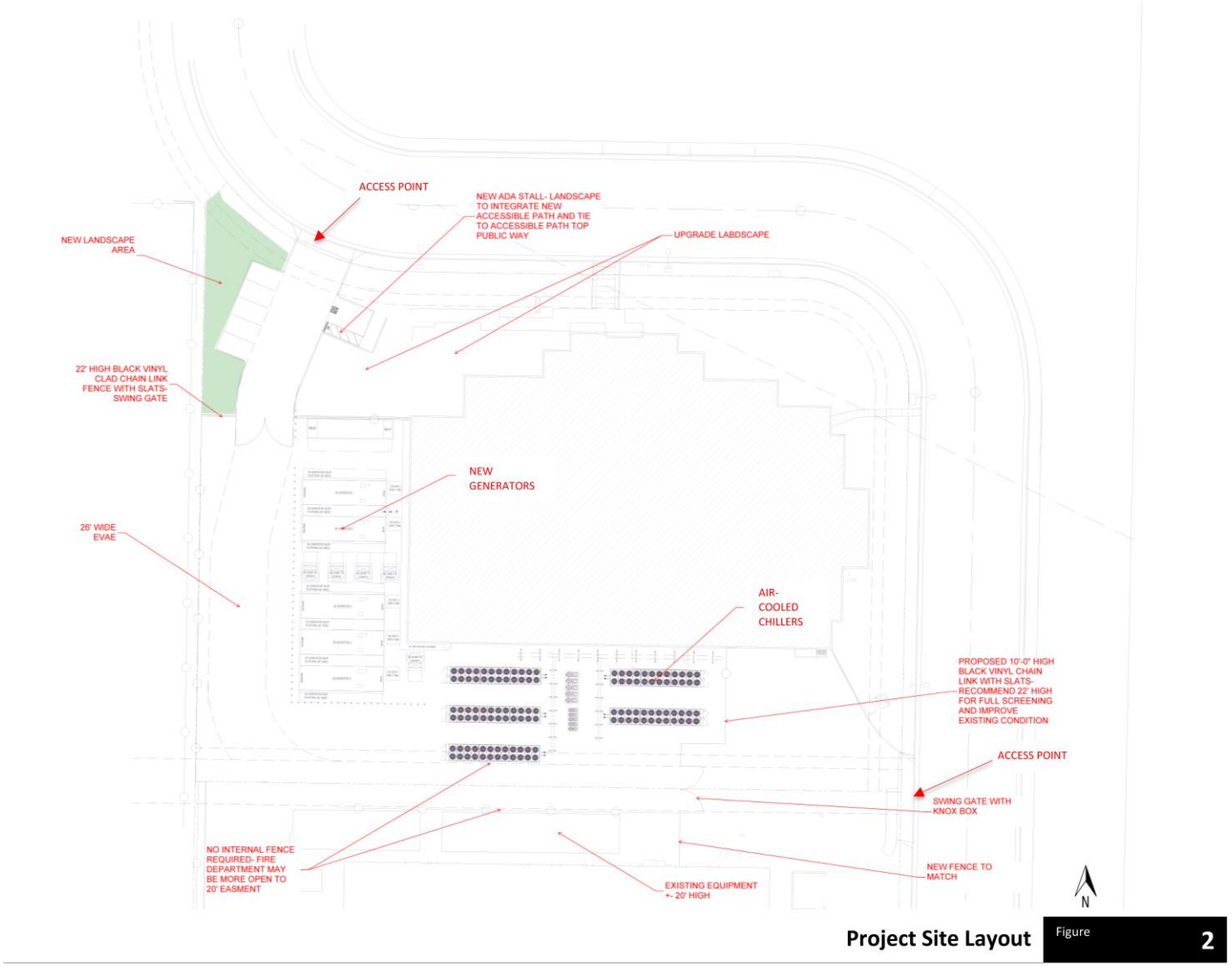
The existing parking lot would be upgraded to meet ADA standards and to improve the appearance of the project site. The project site currently has a total of 22 parking spaces, including 2 accessible spaces. With implementation of the project, the on-site parking would be reduced to the minimum requirement of 6 total spaces, one of which would be ADA-accessible.

As shown in **Figure 2**, two primary site access points would remain from Raymond Street. 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 Raymond Street would also provide access for service vehicles and fire trucks. Pedestrian access to the site from Raymond Street would be improved through the addition of a new sidewalk along the project site's Raymond Street frontage.

Landscaping and Trees

The project would upgrade the existing landscaping on the project site, consistent with the City's design standards. Up to 5 of the existing 14 trees may be removed to facilitate the addition of a new sidewalk along Raymond Street. Trees would be replaced at a minimum of 2:1 ratio on-site.

Figure 2. Project Site Layout



Source: ARC TEC, 2022

1.3 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, 7 days per week. To ensure continuous energy supply, the project would utilize five 2000-kW backup diesel generators. The backup generators are designed to start up quickly in the event of a power failure. All generators would be located on the west side of the data center building.

Emissions from combustion engines for stationary uses, including diesel generators, are regulated by the U.S. 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 IV 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 with a minimum control efficiency of 85 percent removal of particulate matter.

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 the Bay Area Air Quality Management District (BAAQMD). Each generator would rest on top of a 4,000-gallon above ground fuel storage tank.

Additionally, the project would include uninterruptable power supplies (UPS) and direct-current plant energy equipment (batteries) for backup power. Batteries would provide enough energy to cover the critical load of six MW in the event of a power failure. UPS and batteries would be a distributive redundant deployment facilitated by eight single module UPS systems.

Battery technology for commercial UPS systems is lead-acid type. The batteries are placed in cabinets and installed next to the associated UPS module in a temperature-controlled room within the building 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 1 minute; however, a safety factor is added which results in an average of 5 to 6 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 five air cooled chillers on a closed cooling loop on the south side of the data center building. This closed-loop cooling system would require little-to-no water intake after an initial filling during the construction period.

Employees

It is anticipated that up to 7 full-time employees would be required for operation of the data center, compared to the up to 35 employees required for the existing industrial use. As needed, technical support personnel would also be present on the site. As needed, client and technical support personnel would also be present on the site. During a typical business day the total number of visitors in a twenty four hour period would be around 15.

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 as needed, client and technical support personnel visits. Because operation of the site would require fewer employees compared to existing conditions, the number of vehicle trips to and from are expected to be reduced commensurately.

Energy Usage

Major sources of energy demand for project operations would be client servers and the cooling system. The facility would use an estimated maximum of 6 MW for a maximum load of 144,000 kilowatt-hours (kWh) daily.[1] It will take a few years of operation to ramp up to maximum power usage. Overall, the daily power usage would vary depending on how many servers are 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, building entries and parking lot.

1.4 Construction

Project implementation would require installation of new equipment and new landscaping features surrounding the existing building. The existing building would be reinforced to exceed current seismic code standards. The seismic upgrade work would include the addition of interior steel strongbacks and potentially braced frames, interior shotcrete shear walls and roof diaphragm strengthening. This work would take approximately six months to complete and would be performed with mobile construction equipment such as excavators, small cranes, gradalls, and concrete pump trucks. Tower cranes would not be required for the project. The majority of the seismic work would take place on the interior of the enclosed building which would provide substantial dust control. Daily dust control and erosion control measures will be implemented for any exterior earthwork.

Permits and Approvals

The project would require a Use Permit to allow for operation of a data center with diesel backup generators. The project would also require Planning Commission review and approval at a noticed public meeting.

[1] One kWh is defined as one kW of electricity used continuously for one hour.

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

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?	☐	☐	☐	☒

Environmental Setting

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 City's physical setting lends opportunities for many views of the community and surrounding natural features, including panoramic views of the Santa Cruz Mountains, the Diablo Range, and stretches of open space and undeveloped land in the Ulistac Natural Area. Scenic vistas can be viewed intermittently from the system of formal and informal trails that afford recreational and scenic opportunities for the community. 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. The City's General Plan identifies no scenic viewsheds on or near the project site. The California Department of Transportation (Caltrans) Scenic Highway Program has not designated any scenic highways or potentially eligible scenic highways in the project site vicinity. The General Plan identifies no scenic corridors within the City.

The site is within a developed, industrial area of the City. As detailed in **Section 1, Project Information,** surrounding development includes data centers, research and development buildings, and other digital

technology-oriented uses, as well as an electric sub-station just west of the project site. As described in **Section 1.1**, the project site is developed with a two-story industrial building and parking lot. The existing building is set back from Raymond Street by landscaping to the north and east, and surrounded by surface parking lots to the west and south.

Impact Discussion

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

No Impact. The project site is not located in or near any scenic vistas identified by the City. Additionally, views from the project site are dominated by other 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 map, there are no designated or eligible scenic highways in the project site vicinity.[2] Additionally, the project improvements would be entirely confined to the previously developed site. The only new structures would be mechanical equipment in the form of five back-up generators and six closed-circuit air cooled chillers. As discussed in the Environmental Setting section, views of the communities and natural features including panoramic views of the Santa Cruz Mountains, the Diablo Range, and stretches of open space are available throughout the City. However, views from the project site are obscured by existing development. Therefore, implementation of the project would not affect viewership of scenic resources, and the project would not impact scenic resources; no mitigation is required.

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?

No Impact. The project is located in an urbanized area and would be consistent with the existing industrial character of the site. The façade of the building would be enhanced with a new materials palette, including stucco, aluminum, painted metal, and glazed windows. New generators would be added on the west side of the building and air cooled chillers would be added on the south side of the building. This new equipment would not exceed the maximum height of the existing building, including the existing parapet. The existing parking lot would be upgraded to meet ADA standards and a sidewalk would be added along Raymond Street to the north and east to facilitate pedestrian access to the project site. Landscaping on the project site would require the removal of up to five trees to accommodate the new sidewalk. Removed trees would be replaced at a minimum 2:1 ratio on-site, consistent with General Plan Policy 5.3.1-P10. Landscaping would remain consistent with the City's design standards. The proposed improvements would enhance the appearance of the project site and

[2] California Department of Transportation. 2017. California State Scenic Highway System Map. Available: https://www.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed: October 2021.

would not conflict with applicable zoning and other regulations governing scenic quality. Therefore, no impact would occur.

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

No Impact. Under existing conditions, exterior lighting occurs 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 lighting conditions are also consistent with those generally found in urban environments and include streetlights, ambient light from adjacent development, and exterior safety lighting. While some of the existing lighting and glare sources would be replaced and/or upgraded as a result of the project, all new lighting and glare sources would comply with City regulations and would be subject to the City's design review process. Therefore, no impact would occur.

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?	☐	☐	☐	☒

Environmental Setting

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

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

According to California Public Resources Code (PRC) Section 12220(g), forest land is land that can support 10 percent native tree cover of any species under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

California PRC Section 4526 defines timberland as land that is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees. Land owned by the federal government and land designated by the State Board of Forestry and Fire Protection as experimental forest land are excluded as timberland. There is no designated forest land or timberland on or near the project site.

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 ML – Light Industrial. 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.[3,4] 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))?

OR

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

OR

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. The project site is zoned for light industrial uses and does not contain forest land or other similar resources. The project site is currently developed with a light industrial building. There is no forest land on the project site and none of the properties adjacent to the project site or in the vicinity contain forest land. Therefore, the project would have no impact on forest land or timberland and would not result in the loss of or conversion of forest land to non-forest use. No impact would occur.

[3] California Department of Conservation, Division of Land Resource Protection. Farmland Mapping & Monitoring Program. Available: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed September 2021.

[4] County of Santa Clara, Department of Planning and Development. Williamson Act and Open Space Easement. Available: https://www.sccgov.org/sites/dpd/programs/wa/pages/wa.aspx. Accessed: October 2021.

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?	☐	☐	☒	☐

Environmental Setting

The following discussion is based in part on an Air Quality and Greenhouse Gas Study prepared for the project in October 2022. A copy of this report is included as **Appendix A** to this Initial Study.

The project site is in Santa Clara County, within the San Francisco Bay Area Air Basin (SFBAAB). Ambient air quality standards have been established at both the State and Federal level for the SFBAAB. The Bay Area currently meets all ambient air quality standards with the exception of ground-level Ozone (O_3), respirable Particulate Matter (PM_{10}) and fine Particulate Matter ($PM_{2.5}$). High O_3 levels are caused by the cumulative emissions of Reactive Organic Gases (ROG) and Nitrogen Oxides (NOx) and can aggravate respiratory and cardiovascular diseases, reduce lung function, and increase coughing and chest discomfort. High particulate matter levels can aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

Toxic Air Contaminants (TAC) are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer) and include, but are not limited to, the criteria air pollutants listed above. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and Federal level.

CARB and the U.S. EPA have adopted and implemented a number of regulations and emission standards for stationary and mobile sources to reduce emissions of diesel particulate matter (DPM). These include

emission standards for off-road diesel engines, including backup generators, and regulatory programs that affect medium and heavy-duty diesel trucks that represent the bulk of DPM emissions from California highways. **Table 2** provides current federal and state ambient air quality standards for criteria pollutants.

Table 2. Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standards	California Standards
Ozone	1-Hour	---	0.09 ppm
	8-Hour	0.070 ppm	0.070 ppm
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.053 ppm	0.030 ppm
	1-Hour	0.100 ppm	0.18 ppm
Sulfur Dioxide	Annual	---	---
	24-Hour	---	0.04 ppm
	1-Hour	0.075 ppm	0.25 ppm
PM_{10}	Annual	---	20 $\mu g/m^3$
	24-Hour	150 $\mu g/m^3$	50 $\mu g/m^3$
PM_{25}	Annual	12 $\mu g/m^3$	12 $\mu g/m^3$
	24-Hour	35 $\mu g/m^3$	---
Lead	30-Day Average	---	1.5 $\mu g/m^3$
	3-Month Average	0.15 $\mu g/m^3$	---

Source: Environmental Protection Agency, 1990

ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter

Sensitive Receptors

CARB has identified the following persons who are most likely to be affected by air pollution: infants, children under 18, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, churches and places of assembly, and parks. The sensitive receptors nearest to the project site are students attending the Granada Islamic School (3003 Scott Boulevard), which is approximately 1,600 feet west of the project site. The nearest residential receptors are located approximately 0.5 mile north of the project site. The project would not include new sensitive receptors.

Impact Discussion

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

Less than Significant. The California Clean Air Act requires that air districts create a Clean Air Plan (2017 CAP or 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 CAP focuses on two paramount goals:

- Protect air quality and health at the regional and local scale by attaining all national and state air quality standards and eliminating disparities among Bay Area communities in cancer health risk from TACs.
- Protect the climate by reducing Bay Area greenhouse gas (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 2017 Plan's goals. As shown under question **2.3 "b",** 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. Therefore, the project would not conflict with or obstruct the implementation of an applicable air quality plan and the project would have a less-than-significant impact. No mitigation measures are required.

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

Less than Significant. Project construction would involve the reinforcement and seismic work activities that have the potential to generate air pollutant emissions. **Table 3** summarizes the estimated maximum daily emissions of ROG, NO_X, CO, PM_{10} exhaust, $PM_{2.5}$ exhaust, and sulfur oxide (SO_x) during project construction. As shown in **Table 3**, project construction emissions for all criteria pollutants would be below the BAAQMD average daily thresholds of significance.

Table 3 Project Construction Emissions

	Average Daily Emissions (lbs/day)					
	ROG	NO_x	CO	SO_x	PM_{10} (exhaust)	$PM_{2.5}$ (exhaust)
Maximum Daily Emissions	1	7	9	<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**

Source: Rincon, 2022

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

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

Standard Permit Condition AQ-1: The following BAAQMD best management practices shall be implemented in addition to compliance with the City's conditions of approval for construction dust management:

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

- Include construction equipment exhaust controls and measures to control dust and exhaust during construction.
- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne

toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.

- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- A publicly visible sign shall be posted at the project site with the telephone number and person to contact at the City regarding dust complaints. This person shall respond and take corrective action within 48 hours of receiving a complaint. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Operation

Less than Significant. Operation of the project would result in mobile source emissions (i.e., vehicle emissions), energy emissions (i.e., emissions associated with electricity production), area source emissions (i.e., a source that is distributed widely such as residential and commercial water heaters, painting operations, or landfills), and point sources (i.e., a stationary source where emissions come from a specific location, often identified by an exhaust vent or stack). New point sources associated with the project would include the five emergency backup generators to be installed on-site.

The project would include five 2000-kW backup diesel generators located on the west side of the data center building to be used in the event pf a power failure. As indicated in **Section 1.3, Project Operation**, the generators would have maintenance testing performed throughout the year to ensure performance when needed during a power failure. Maintenance testing would involve monthly testing/inspection, quarterly oil and fuel sampling, and annual testing to ensure the generators are capable of handling the demanded load. BAAQMD requires that an emergency standby engine cannot be operated for more than 50 hours in a calendar year for testing and maintenance purposes. All generators would be operated strictly in accordance with permitted hours as determined by BAAQMD.

Long-term emissions associated with project operation are shown in **Table 4**. Emissions would not exceed BAAQMD daily or annual thresholds for any criteria pollutant. Since project emissions would not exceed BAAQMD thresholds for 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 4 Project Operational Emissions

	Average Daily Emissions (lbs/day)					
	ROG	NO_x	CO	SO_x	PM_{10} (exhaust)	$PM_{2.5}$ (exhaust)
Existing Emissions						
Area	1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	<1	<1	<1	<1	<1	<1
Total Existing Emissions	1	<1	1	<1	<1	<1

	Average Daily Emissions (lbs/day)					
	ROG	NO_x	CO	SO_x	PM_{10} (exhaust)	$PM_{2.5}$ (exhaust)
Data Center Emissions						
Area	1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	<1	<1	<1	<1	<1	<1
Point	49	26	67	1	<1	1
Total Project Emissions	50	26	68	1	<1	1
Net Project Emissions	49	26	67	1	<1	1
BAAQMD Thresholds (average daily emissions)	54	54	N/A	54	N/A	82
Threshold Exceeded?	No	No	N/A	No	N/A	No

Source: Rincon, 2022

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

c) Expose sensitive receptors to substantial pollutant concentrations?

Carbon Monoxide Hotspots

Less than Significant. As described in the Environmental Setting Section, the sensitive receptors nearest to the project site are Granada Islamic School, approximately 1,600 feet west of the project site. **Appendix A** includes an analysis of the project's potential to expose said sensitive receptors to CO hotpots.

A CO hotspot is a localized concentration of CO that is above a CO 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 CO 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 (**Table 2**).

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 CO 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 CO concentrations if:

- The project is consistent with an applicable congestion management program for designated roads or highways, regional transportation plan, and local congestion management agency plans.
- The project 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 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).

While the project would involve upgrading an existing data center, it would not result in an increase in employees. In fact, the project would require only up to 7 employees compare to the up to 35 employees required for the existing use. Therefore, the trips generated by the project would be less than existing conditions. The project would not increase vehicle traffic at any intersections above the screening thresholds listed above and the impact of localized CO emissions would be less than significant, and no mitigation is required.

Toxic Air Contaminants

Appendix A also includes an analysis of the project's potential to expose sensitive receptors to TACs, described in the Environmental Setting section.

Construction

Less than Significant. Construction-related activities would result in temporary project-generated emissions of DPM exhaust emissions from off-road, heavy-duty diesel equipment for site preparation, grading, building construction, and other construction activities.

CARB's Air Quality and Land Use Handbook: A Community Health Perspective (April 2005) recommends against siting sensitive receptors within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day. While these siting distances are not particular to construction activities, the primary source of TAC emissions from both freeways and construction equipment is DPM. Therefore, for projects within 1,000 feet of sensitive receptors, a refined health risk should be conducted. However, as the nearest receptors to the project site are over 1,600 feet to the west, the on-site construction activity would have a negligible impact on the closest sensitive receptors. This impact would be less than significant, and no mitigation is required.

Operation

Less than Significant. Project operation would not create new receptors. However, it would include five backup diesel generators, which are considered a typical source of TAC emissions. Therefore, a screening analysis was conducted to determine the potential for health risk to nearby sensitive receptor located approximately 1,600 feet to the west.

Table 5 summarizes the results associated with operation of the generators equipped with a diesel particulate filter for 50 hours at the nearest sensitive receptor considered the maximum exposed individual (MEI) in this analysis. As shown in **Table 5**, operation of the diesel generators equipped with a DPF for 50 hours per year would not result in an exceedance of BAAQMD single source significance thresholds for excess cancer risk, chronic risk, and ground level $PM_{2.5}$ concentrations at the nearest sensitive receptor. Therefore, operational impacts would be less than significant, and no mitigation is required.

Table 5 Health Risks from Generator Operation (50 Hours Per Year at 1,600 Feet)

Scenario	Excess Cancer Rick (per million)	Chronic Health Risk[1]	$PM_{2.5}$ µg/m^3 annual average
Maximum Exposed Individual	0.44	0.0006	0.001
BAAQMD Significance Threshold	>10	>1	>0.3
Threshold Exceeded?	**No**	**No**	**No**

Source: Rincon, 2022

PM2.5 = particulate matter less than 2.5 microns in size; µg/m3 = micrograms per cubic meter

1 Noncancer health impacts are determined by dividing the airborne concentration at the receptor by the appropriate Reference Exposure Level (REL) for that substance. A REL is defined as the concentration at which no adverse noncancer health effects are anticipated. Because noncancer health impacts are assessed as the ratio of airborne concentration versus the REL, the resulting hazard index is unitless.

2 There is no acute reference exposure level for diesel exhaust to calculate acute health risk. Furthermore, except for unusual circumstances of high exposure, Office of Environmental Health Hazard Assessment does not recommend acute analysis for DPM.

The cumulative health risk analysis includes the proposed project as well as all existing sources within a 1,000-foot radius of the Maximally Impacted Receptor (MIR). Cumulative impacts from project operation within 1,000 feet of the project site are reported in **Table 6**.

As shown in **Table 6**, cumulative sources of TACs would not result in an exceedance of annual $PM_{2.5}$ concentration, chronic or cancer health risks cumulative significance thresholds with operation of the diesel generators equipped with a diesel particulate filter for 50 hours per year. Therefore, cumulative operational impacts would be less than significant, and no mitigation is required.

Table 6 Cumulative Health Risks within 1,000 Feet of the MIR

Source	Excess Cancer Rick (per million)	Chronic Health Risk[1]	$PM_{2.5}$ µg/m^3 annual average
Project Operation (50 hours)	0.44	0.001	0.001
101 Freeway[2]	5.24	–	0.204
Central Expressway[2]	2.46	–	0.100
Equinix LLC	5.02	0.247	0.006
Verizon Wireless Santa Clara Switch	1.76	0.062	0.002
Pacific Bell Corp dba AT&T CA	17.28	0.182	0.022
Digital Alfred, LLC	3.53	0.007	0.004
Harbor Electronics, Inc	0.49	0.008	0.001
Cyxtera Communications, LLC	1.49	0.093	0.002
Golden Cajun LLC	8.01	0.000	0.010

Source	Excess Cancer Rick (per million)	Chronic Health Risk[1]	$PM_{2.5}$ µg/m^3 annual average
Cumulative Total	**45.71**	**0.60**	**0.35**
BAAQMD Significance Threshold	>100	>10	>0.8
Threshold Exceeded?	**No**	**No**	**No**

Source: Rincon, 2022

$PM_{2.5}$ = particulate matter less than 2.5 microns in size; µg/m^3 = micrograms per cubic meter

1 Noncancer health impacts are determined by dividing the airborne concentration at the receptor by the appropriate Reference Exposure Level (REL) for that substance. A REL is defined as the concentration at which no adverse noncancer health effects are anticipated. Because noncancer health impacts are assessed as the ratio of airborne concentration versus the REL, the resulting hazard index is unitless.

2 Calculated using the BAAQMD's Roadway Screening Analysis Calculator at a distance of 1,000 feet for the Central Expressway.

3 Calculated using the BAAQMD's Risk and Hazards Emissions Screening Calculator (Beta Version) at the maximum distance available in the distance multiplier tools. For backup diesel generators the maximum distance is 918.6 feet and for generic cases is 984.3 feet.

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

Less than Significant. The project would generate oil and diesel fuel odors during construction from equipment use. The odors would be limited to the construction period and would be temporary. With respect to operation, the BAAQMD's CEQA Air Quality Guidelines 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 are not identified on this list. 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?	☐	☐	☐	☒

Environmental Setting

The project site is developed with a two-story industrial building and parking lot. The site is surrounded by industrial buildings, office development, surface parking lots, and electric substation within the larger urban context of the City. Most of the project site is paved with the exception of a landscaped area along Raymond Street featuring a small lawn, shrubbery, and 14 existing trees, consisting primarily of coast redwoods (*Sequoia sempervirens*).

The project site does not contain watercourses or any bodies of water. Additionally, the project site does not fall within the boundaries of a Habitat Conservation Plan (HCP).

Due to the relatively low amounts of vegetation on-site and the urban context, the possibility of special-status wildlife habitat is considered to be unlikely. Generally, wildlife habitats in developed urban areas such as the project site are low in species diversity. Species that may use the project site would be predominantly of the common bird, mammal and reptile species such as turkey vulture (*Cathartes aura*), European starlings (*Sturnus vulgaris*), western kingbird (*Tyrannus verticalis*), wild turkeys (*Meleagiris gallopavo*), western fence lizards (*Sceloporus occidentalis*), and California ground squirrels (Otospermophilus beechyii). Raptors (birds of prey) and other urban birds could use trees and human-made structures on the project sites for nesting or as a roost. Raptors and other migratory birds are protected by the Federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. Section 703, et seq.).

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

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

Mitigation Measure BIO-1: In order to reduce impacts to biological systems and communities, the following measures shall be implemented:

- Schedule tree removal activities between September 1 and January 31 (inclusive) to avoid the nesting season (including for raptors) and no construction surveys will be required.
- If tree removal will take place between February 1 and August 31, pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests will be disturbed.
- Surveys will be completed no more than seven days prior to the initiation of site clearing or construction activities. During this survey, the ornithologist will inspect all trees and other potential nesting habitats (e.g., shrubs) in and immediately adjacent to the construction area for nests.
- If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist will determine the extent of a disturbance-free buffer zone to be established around the nest (typically 250 feet for raptors and 50-100 feet for other

species). This will ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during project implementation.

- A report indicating the result of the survey and any designated buffer zones shall be submitted to the satisfaction of the Planning Department prior to the start of construction.

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

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

No Impact. As stated in the Environmental Setting Section, there are no watercourses or any bodies of water on or near the project site. The closest natural habitats are the San Tomas Creek (located about 1 mile west) and the Guadalupe River (located about 1 mile east in the City of San José). Improvements to the project site would not directly or indirectly impact any sensitive natural communities. Seismic upgrades and exterior façade improvements would be done to the existing building and only minor excavation will be required for the installation of a new sidewalk along Raymond Street and installation of backup generators, air cooled chillers, and screen walls. Therefore, the project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. No impact would occur.

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 paved and developed with industrial uses. The closest wetlands to the project site are those associated with San Tomas Creek and Guadalupe River, approximately 1 mile west and east of the project site, respectively. There are no watercourses, seasonal wetlands, or other potential waters of the U.S. on the project site, and the project would not result in direct removal, filling, hydrological interruption, or other indirect impacts to jurisdictional wetlands. Therefore, no impact to federally protected wetlands would occur.

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?

Less than Significant with Mitigation. The project site is currently developed and is surrounded by industrial and office development, which preclude major wildlife movement. The project site is located in close proximity to heavily traveled roadways including US-101, San Tomas Expressway, and Central Expressway. Existing opportunities for wildlife movement on-site and within the project vicinity are constrained by heavily traveled roadways and the lack of continuous or connected natural areas.

Migratory birds may nest in trees located on the project site. The project would require the removal of up to five trees to accommodate the new sidewalk along Raymond Street. However, consistent with General Plan Policy 5.3.1-P10, the project would replace removed trees at a minimum 2:1 ratio on-site. Further, implementation of **Mitigation Measure BIO-1** would ensure that nesting birds are protected from disturbance and other direct and indirect impacts from construction activities. Thus, with mitigation, the project would result in a less than significant impact on the migratory movement of wildlife species.

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

Less than Significant. The provision of landscaping and trees in the community is addressed in the City's General Plan. General Plan Policy 5.10.1-P4 states the City will protect all healthy cedars, redwoods, oaks, olives, bay laurel and pepper trees of any size, and all other healthy trees over 36 inches in circumference measured from 48 inches above-grade on private and public property as well as in the public right-of-way. General Plan Policy 5.3.1-P10 calls for new development to provide street trees and a minimum 2:1 on- or off-site replacement of trees removed as part of a development proposal.

Fourteen trees are present on the property. Up to five trees would be removed to accommodate the installation of a new sidewalk along Raymond Street. As required by the General Plan, removed trees would be replaced at a minimum 2:1 ratio on-site. Therefore, the project would not conflict with any local policies or ordinances and the impact would be less than significant.

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 HCP/NCCP encompasses 519,506 acres located in Santa Clara County and was adopted in 2013 by all local participating agencies. The HCP/NCCP expanded boundaries include land just north of the US-101, approximately 1,774 feet east of the project site. 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.[5] 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.

[5] Santa Clara Valley Habitat Agency. Santa Clara Valley Habitat Plan, Chapter 3: Physical and Biological Resources. Available: http://scv-habitatagency.org/DocumentCenter/Home/View/125. Accessed: October 2021.

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?	☐	☒	☐	☐

Environmental Setting

The Santa Clara Historical and Landmarks Commission has designated various properties throughout the City to be of local, state, and national historical significance. Structures such as historical homes, cottages, and churches are present in the City. Additionally, according to the City's Historic Preservation and Resource Inventory, there are no historical resources on or near the project site.

A records search of the California Historical Resources Information System (CHRIS) was completed for the project site, dated October 5, 2021 and is included as **Appendix B** to this Initial Study. No previous cultural resources studies were found for the project area, nor were there previously recorded archaeological resources. Additionally, no previously recorded buildings or structures within or adjacent to the project site were found.

Impact Discussion

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

No Impact. The CEQA Guidelines recognize that a significant historic resource is defined as being:

1. Associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Associated with the lives of persons important in our past;
3. Exemplary of the distinctive characteristics of a type, period, region, or method of construction, or representative of the work of an important creative individual, or possesses high artistic values; or,
4. Likely to yield information important in prehistory or history (State CEQA Guidelines Section 15064.5(a)(3)).

As described in the Environmental Setting section, the CHRIS search completed for the project site concluded that there are no previously documented historic resources on or adjacent to the project site. Per the City's General Plan, the project site is not a historic resource, nor is it located near any historic resources. The nearest architecturally significant and historic site designated by the City is located approximately 1 mile northwest of the project site at Agnew's Village. Because there are no historic resources located near the project site, no impact would occur.

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

Less than Significant with Mitigation. The project site has previously been disturbed for construction of the existing building and parking lot. The project would require minor excavation for the installation of a new sidewalk along Raymond Street. Although archeological resources have not been previously reported at the site, the CHRIS records search concluded that the project site has a moderate potential of identifying historic-period resources, and a moderate to high potential of identifying Native American archaeological resources. Additionally, previous development of the site has disturbed the upper layers of soil, significantly reducing the potential for subsurface cultural resources. However, if archeological resources are uncovered during subsurface disturbance activities, **Mitigation Measure CUL-1** would be implemented to ensure no impacts occur to uncovered archeological features or artifacts.

> **Mitigation Measure CUL-1:** In the event archaeological resources are encountered during construction, work shall be halted within 100 feet of the discovered materials and workers shall avoid altering the materials and their context until a qualified professional archaeologist has evaluated the situation and provided appropriate recommendations.
>
> If an archaeological resource is encountered in any stage of development, a qualified archaeologist will be consulted to determine whether the resources qualify as historical resources or unique archaeological resources. In the event that the encountered resources qualify, the archaeologist will prepare a research design and archaeological data recovery plan to be implemented prior to resuming construction at the affected area. The archaeologist shall also prepare a written report of the finding, file it with the appropriate agency, and arrange for curation of recovered materials.

With implementation of **Mitigation Measure CUL-1**, potential subsurface cultural resources would be protected from disturbance and other direct and indirect impacts from construction. Therefore, project impacts would be less than significant with mitigation.

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

Less than Significant with Mitigation. As discussed in question 2.5 "a", the project site is currently developed and no known cultural resources are located at the project site. Although unlikely, it is possible that unmarked burials may be unearthed during project construction. In the event that human remains are discovered during construction, the project applicant would comply with the California Health and Safety Code Section 7050.5 regarding human remains, and the California PRC Section 5097.98 regarding the treatment of Native American human remains. In addition, **Mitigation Measure CUL-2** would be implemented to reduce potential impacts to a less than significant level.

Mitigation Measure CUL-2: In the event that human remains are discovered during project construction, all activity within a 50-foot radius of the site shall be halted. The Santa Clara County Coroner would be notified and would make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC) immediately. Once NAHC identifies the most likely descendants, the descendants will make recommendations regarding proper burial, which will be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.

With implementation of **Mitigation Measure CUL-2**, potential disturbance of human remains would be protected from direct and indirect impacts from construction. Therefore, project impacts would be less than significant with mitigation.

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?	☐	☒	☐	☐

Environmental Setting

California is one of the lowest per capita energy users in the United States, ranked 50th in the nation, due to its energy efficiency programs and mild climate. California consumed 279,510 gigawatt-hours (GWh) of electricity and approximately 12,322 therms of natural gas in 2020 (California Energy Commission [CEC] 2022). Most of California's electricity is generated in-state with approximately 30 percent imported from the northwest and southwest in 2021. In addition, approximately 34 percent of California's electricity supply comes from renewable energy sources, such as wind, solar photovoltaic, geothermal, and biomass (CEC 2018a).

To reduce statewide vehicle emissions, California requires that all motorists use California Reformulated Gasoline, which is sourced almost exclusively from in-state refineries. Gasoline is the most used transportation fuel in California and is used by light-duty cars, pickup trucks, and sport utility vehicles. Diesel is the second most-used fuel in California and is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles. Both gasoline and diesel are primarily petroleum-based, and their consumption releases greenhouse gas (GHG) emissions, including CO_2 and N_2O.

Data centers are a highly energy-intensive land use that consume approximately two percent of total electricity usage in the U.S. due to the substantial amount of energy required to power computer servers and operate the associated cooling/chilling equipment to prevent servers from overheating. On average, data centers consume approximately 10 to 50 times more energy per square foot than typical commercial office buildings (United States Department of Energy [U.S. DOE] 2022). As a result, energy efficiency is often a key concern in the design and operation of data centers. Information presented below draws from the project-specific Energy Study provided by Rincon Consultants in October 2020 (refer to **Appendix B**).

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. Project construction would require energy resources primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. Temporary power may also be provided for construction trailers and electric construction equipment. **Table 7** summarizes the anticipated energy consumption from construction equipment and vehicles, including construction worker trips to and from the project site.

Table 7 Proposed Project Construction Energy Usage

Source	Fuel Consumption (Gallons)[1]	
	Gasoline	Diesel
Construction Equipment and Hauling Trips	-	9,581
Construction Worker Vehicle Trips	1,386	-

Source: Rincon, 2022

[1] Construction schedule and equipment parameters were based on CalEEMod output files provided in the Air Quality and Greenhouse Gas Study

As shown in **Table 7**, project construction would require approximately 1,382 gallons of gasoline and 9,581 gallons of diesel fuel. Energy use during construction would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the U.S. EPA Construction Equipment Fuel Efficiency Standard (i.e., Tier 4 efficiency requirements, detailed in **Appendix C**), which would also minimize inefficient, wasteful, or unnecessary fuel consumption.

Electrical power would be consumed to construct the project, and the demand, to the extent required, would be supplied from existing electrical infrastructure in the area. However, construction activities would require minimal electricity consumption and would not be expected to have any adverse impact on available electricity supplies or infrastructure. In addition, per applicable regulatory requirements such as 2022 CALGreen, the project would comply with construction waste management practices to divert a minimum of 65 percent of construction and demolition debris. These practices would result in efficient use of energy necessary to construct the project. Furthermore, in the interest of cost-efficiency, construction contractors would not utilize fuel in a manner that is wasteful or unnecessary, such as scheduling unnecessary deliveries of materials or operating diesel-fueled equipment while not in use. Therefore, project construction would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy, and construction impacts would be less than significant, and no mitigation would be required.

Operation

Less than Significant. Energy demand from project operation would include electricity consumed by computer servers, chillers, and building operations as well as gasoline fuel consumed by employee vehicle trips and diesel fuel intermittently consumed by backup generators and diesel delivery tank trucks.

Electricity Consumption

The electricity consumption of the proposed project is assumed to be similar to the data center at 1115 Space Park Drive, south of the project site. The project is estimated to consume 13,976 MW hours (MWh) of electricity annually.[6] This estimate of electricity usage includes electricity to power the computer servers; air cooled chillers; exhaust ventilators; air handling units; other associated heating, ventilation, and air conditioning equipment; exterior and interior lighting; and indoor appliances. According to the CalEEMod outputs for the existing site conditions included in the Air Quality and Greenhouse Gas Study, the existing light industrial building and parking lot consume approximately 420,401 kWh of electricity per year, or approximately 420 MWh of electricity per year. Consequently, the project would result in a net increase in electricity demand of approximately 13,555 MWh annually. **Table 8** summarizes estimated annual operational electricity consumption for the proposed project and existing building.

Table 8 Estimated Project Annual Operational Electrical Consumption

Electricity	Energy Consumption[1]	
	GWh	MMBtu
Existing	0.42	1,430
Proposed	13.56	46,252
Total[2]	**13.98**	**47,689**

Source: Rincon 2022

[1] Energy consumption is converted to MMBtu

[2] Numbers may not add up due to rounding.

MMBtu = million metric British thermal units; GWh = gigawatt-hours

Electricity would be provided by SVP and has a renewable energy procurement portfolio of 32 percent for non-residential land uses, which would reduce the amount of nonrenewable fuels consumed to supply electricity to the project site. At peak operating capacity, the power usage effectiveness (PUE) for the proposed project would be 1.03 (42U 2022),[7] where a PUE between 1.2 and 1.5 is considered "very efficient." Therefore, under peak conditions, the project would operate at a "very efficient" level. As such, project operations would not result in the wasteful, inefficient, or unnecessary consumption of electricity.

[6] One MWh is defined as one MW of electricity used continuously for one hour.

[7] PUE is determined based on the assumptions that the difference between the proposed and existing energy consumption is the IT use for the building.

Day-to-day project operation would consume electricity to treat and transport water and wastewater to and from the project site. The primary source of water consumption associated with the project are cooler/chiller systems used to keep servers and other electrical equipment at the data center cool. According to the Air Quality and Greenhouse Gas Study, the project would require approximately 571 thousand gallons of water per year, which would consume approximately 1.3 MWh per year for treatment and transport to and from the project site. The proposed project would incorporate higher-efficiency plumbing fixtures in accordance with the latest Title 24 requirements, which would reduce the potential for the inefficient or wasteful consumption of energy related to water and wastewater. Furthermore, cooling equipment would include air cooled chillers that only require a one-time fill of water for operation, which would further reduce wasteful and unnecessary water consumption as compared to traditional evaporative cooling systems. Therefore, operation-related energy impacts from electricity consumption of the project would be less than significant, and no mitigation measures are required.

Natural Gas Consumption

The project is estimated to consume 1,278 MMBtu of natural gas annually, similar to existing conditions. The proposed project would not increase natural gas usage. As such, project operations would not result in the wasteful, inefficient, or unnecessary consumption of natural gas. Newly constructed buildings are prohibited from utilizing natural gas in most instances under the City's "Reach Code," adopted in 2021 (Ord No. 2034) and updated in 2022 (Ord. No. 2056), which applies to "newly constructed buildings". The project would not qualify as a "newly constructed building," however, unless more than 50 percent of the exterior walls were removed from the existing building or 50 percent of the wall plate height was raised. As such, the Reach Code prohibition would not apply to the Project.

Nevertheless, the Project is subject to the City's 2022 Climate Action Plan, and Action B-1-7 requires that all new data centers must operate on 100% carbon neutral energy, with offsets as needed. As natural gas is not a carbon-neutral power source, the data center will be required to provide offsets to reduce the net impact of any natural gas use to zero.

Operation-related energy impacts from natural gas consumption of the data servers and building itself would be less than significant

Gasoline and Diesel Fuel Consumption

The project would include five 2,922- kW emergency diesel generators each with 4,000-gallon diesel tanks. In the event of a power outage, the project would rely on these backup generators to provide electricity. Testing and maintenance of the generators would occur no more than 50 hours annually, per the BAAQMD's Authority to Construct. Generators would not be expected to operate at full load for all maintenance and testing activities. Maintenance and emergency use of the backup generators would not result in the wasteful, inefficient, or unnecessary consumption of energy because routine maintenance would be conducted periodically based on the minimum requirements to ensure reliability and operation would only occur during infrequent extended power outage events.

Project operation would result in the consumption of gasoline and diesel fuels by employee vehicle trips and diesel delivery trucks. The project would employ up to 7 full-time employees per day who would

travel to and from the project site on a daily basis. In addition, project operation would also require periodic trips by service technicians and suppliers. Because the existing use requires up to 35 full time employees, the number of vehicle trips to and from the project site is expected to decrease with implementation of the project. Therefore, fuel consumption by employee and delivery vehicle trips would not be wasteful, inefficient, or unnecessary.

With the support of project design features that would maximize energy efficiency and conservation, overall project operation would not result in the wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, the projects impact on energy consumption would be less than significant, and no mitigation is required.

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

Less than Significant with Mitigation. SB 100 mandates 100 percent clean electricity for California by 2045. Because the proposed project would be powered by the existing electricity grid, the project would eventually be powered by renewable energy mandated by SB 100 and would not conflict with this statewide plan. Furthermore, the project would comply with all applicable Title 24 requirements pertaining to energy efficiency and renewable energy. As such, the project would not conflict with or obstruct implementation of state plans for renewable energy or energy efficiency.

The City's General Plan and 2022 Climate Action Plan 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 9.**

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

Energy Efficiency Goal or Policy	Project Consistency
Santa Clara General Plan	
Goal 5.10.3-G1. Energy supply and distribution maximizes the use of renewable resources. ▪ **Policy 5.10.3-P1.** Promote the use of renewable energy resources, conservation and recycling programs.	**Consistent.** The proposed project would source its electricity from SVP, which has a renewable energy procurement portfolio of 34 percent renewable resources from non-residential land uses. SVP 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. Therefore, the project would be consistent with Goal 5.10.3-G1.
Goal 5.10.3-G2. Implementation of energy conservation measures to reduce consumption. ▪ **Policy 5.10.3-P4.** Encourage new development to incorporate sustainable building design, site planning and construction, including encouraging solar opportunities. ▪ **Policy 5.10.3-P5.** Reduce energy consumption through sustainable construction practices, materials and recycling.	**Consistent.** The proposed building would be required to meet Title 24 standards, thereby increasing the energy conservation achieved by building design. The project would also be required to comply with the requirements of CALGreen, which mandate a minimum diversion rate of 65 percent for construction and demolition waste. Therefore, the project would be consistent with Goal 5.10.3-G3, Policy 5.10.3-P4, Policy 5.10.3-P5, and Policy 5.10.3-P6.

Energy Efficiency Goal or Policy	Project Consistency
▪ **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.	
Santa Clara Climate Action Plan	
Strategy B1: Shift to Electric Fuels in new and existing buildings to achieve net-zero carbon buildings. ▪ **Action B-1-6:** Burn out ordinance: Prepare a "burn out" ordinance requiring that when natural gas furnaces or water heaters expire, they must be replaced with available electric alternatives	**Consistent.** The proposed project is an upgrade of an existing facility to provide seismic retrofit, building façade improvements and install backup generators and air cooled chillers to facilitate the use of the site as a data center. The project will not replace any expired natural gas appliances. However, consistent with the provisions of the CAP, should natural gas appliances need to be replaced, the project applicant would replace the appliances with an applicable electric alternative.
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).	**Potentially Inconsistent.** The proposed project, as designed, would not operate on 100% carbon neutral energy; therefore, the project would potentially be inconsistent with this measure. However, implementation of **Mitigation Measure GHG-1** would require the project to comply with the 2022 Climate Action Plan by either procuring 100 percent of electricity consumed by the project from renewable and zero-carbon sources, or purchasing offsets. For the full text of **Mitigation Measure GHG-1**, refer to **Section 2.8, Greenhous Gas Emissions**.
Strategy B3: Maximize renewable energy generation and storage capacity. ▪ **Action B-3-6:** Alternative backup generators: Provide information and technical assistance to data centers and other large commercial users to transition from diesel to lower-carbon backup generators (e.g., renewable diesel).	**Not Applicable.** This action is to be taken at the City level. While the proposed project anticipates the implementation of 5 new diesel backup generators, the project is also implementing EPA Tier 4 rated engines with diesel particulate filters which reduces the emissions of GHGs over a less efficient engine.
Strategy T1: Transition vehicles to electric alternatives. ▪ **Action T-1-2:** EV charging for all new construction: Implement EV charging requirements as specified in the adopted 2021 Reach Codes.	**Not Applicable.** The project is not new construction but the upgrade to an existing building.

As shown in **Table 9**, the project would be consistent with the General Plan Policies but potentially inconsistent with one measure in the CAP. Therefore, the project could result in a potentially significant impact from conflicts with energy reduction plans. **Mitigation Measure GHG-1**, discussed in **Section 2.8**, would be implemented to ensure the proposed project would be compliant with the City's 2022 CAP. The incorporation of **Mitigation Measure GHG-1** would result in 100 percent carbon neutral emissions,

consistent with the City of Santa Clara CAP. Therefore, with incorporation of **Mitigation Measure GHG-1**, the impact would be less than significant.

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?	☐	☒	☐	☐

Environmental Setting

The City is located in the Santa Clara Valley, a relatively flat alluvial basin, bounded by the Santa Cruz Mountains to the southwest and west, the Diablo Mountain Range to the east, and San Francisco Bay to the north. The topography of the Santa Clara Valley rises from sea level at the south end of San Francisco Bay to elevations of more than 2,000 feet to the east. The average grade of the valley floor

ranges from nearly horizontal to about two percent generally down to the northwest. Grades are steeper on the surrounding hillsides. The City is situated on alluvial fan deposits of the Santa Clara Valley, consisting of gravel, sand and finer sediments; as well as clay. Along the City's major streams are natural levee deposits consisting of silt and clay over which man-made engineered levees have been constructed for flood control.

Soils and geologic conditions which can affect development and other activities within the City include landslides, weak and expansive soils, artificial fill, naturally-occurring asbestos, and erosion. The City is almost entirely within a liquefaction hazard zone.

No active faults run through the City, nor is the City within an Earthquake Fault Zone as delineated by the Alquist-Priolo Earthquake Fault Zoning Act. However, several faults are present in the surrounding region. Faults closest to the project site include the San José Fault (located approximately 1.8 miles west), Silver Creek Fault (1.7 miles east), Stanford Fault (2.9 miles east), and the Hayward Fault (7.81 miles northeast). Although the risk of surface fault rupture is considered low, the City could experience ground shaking in the event of an earthquake.

Impact Discussion

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

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

Less than Significant. The closest faults to the project site are the San José Fault (located approximately 1.8 miles west), Silver Creek Fault (1.7 miles east), Stanford Fault (2.9 miles east), and the Hayward Fault (7.81 miles northeast). The project 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 due to faulting occurring beneath the site during the design life of the 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. Given this, the impact would be less than significant with implementation of the project. No mitigation is required.

ii. Strong seismic ground shaking?

Less than Significant. Earthquakes along several nearby active faults in the region could cause moderate to strong ground shaking at the project site. The intensity of the earthquake ground motions and the damage done by shaking would depend on the characteristics of the generating fault, distance to the fault and rupture zone, earthquake magnitude, earthquake duration, and site-specific geologic conditions. Given that the entire Bay Area region is subject to strong seismic ground shaking during a large earthquake event, the project would not expose people or structures to any greater risks involving seismic ground shaking than would other development located in the region. As described in **Section**

1.4, Construction, the project would include seismic upgrades (i.e., interior steel braced frames, interior shotcrete shear walls, and roof diaphragm strengthening). While the potential for seismic ground shaking cannot be eliminated, construction activities would comply with the 2022 California Building Code (CBC) and other applicable standards and practices for earthquake resistant construction. Compliance with these standards and practices reduce the risks associated with strong seismic ground shaking at the project site. Therefore, impacts related to seismic ground shaking would be less than significant. No mitigation is required.

iii. Seismic-related ground failure, including liquefaction?

Less than Significant. Soil liquefaction is a condition where saturated granular soils near the ground surface undergo a significant loss of strength during seismic events. Loose, water-saturated soils are transformed from a solid to a liquid state during ground shaking. Liquefaction can result in significant deformations and ground rupture. Soils most susceptible to liquefaction are loose, uniformly graded, saturated, fine-grained sands that lie close to the ground surface.

The project site is located within a State-designated Liquefaction Hazard Zone as well as a Santa Clara County Liquefaction Hazard Zone.[8] The likely consequence of potential liquefaction at the site would be settlement. The project would be constructed in compliance with the 2022 CBC, including all applicable seismic standards for structures. Compliance with the 2022 CBC would reduce potential risks associated with settlement from seismically-induced liquefaction to a less than significant level. No mitigation is required.

iv. Landslides?

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

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

Less than Significant. Minor excavation would be required for the installation of the new sidewalk along Raymond Street. This would temporarily expose soils and increase the potential for soil erosion from wind or stormwater runoff. The project would be subject to the requirements of Provision C.3 of the City's National Pollutant Discharge Elimination System (NPDES) permit and would be required to comply with the City's BMPs for erosion and sedimentation control during the construction period, as outlined in the NPDES permit. Additionally, the project would be subject to a post-construction NPDES Permit and Provision C.3 requirements, ensuring that the project would not include areas of exposed topsoil.[9] This is described in detail in Section 2.9, Hazards and Hazardous Materials. As a result, impacts related to erosion and loss of topsoil would be less than significant, and no mitigation is required.

[8] 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: September 2021.

[9] Provision C.3 of the NPDES Permit requires permittees to use their planning authorities to include appropriate source control, site design, and stormwater treatment measures in new development and redevelopment projects to address stormwater runoff pollutant discharges and prevent increases in runoff flows from new development and redevelopment projects.

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. Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal displacement of flat-lying alluvial material toward an open face, such as the steep bank of a stream channel. There are no watercourses or any bodies of water on or near the project site that would be subject to lateral spreading.

Construction at the project site would be conducted in accordance with standard engineering safety techniques and in conformance with the requirements of applicable, current Building and Fire Codes, including the 2022 CBC and CFC, as adopted by the City. As described above, the project site is not at risk of lateral spreading, landslides, or significant liquefaction. Therefore, impacts related to soil stability would be less than significant, and no mitigation is required.

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

Less than Significant. Moderate to highly expansive soils are present on-site. However, no substantial risk to life or property would result from the project. The project would involve seismic upgrades to an existing building but would not involve the construction of new buildings. The only new structures would be backup generators, air cooled chillers, and screen walls. Therefore, no impact would occur.

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

f) Directly or indirectly destroy a unique paleontological resource or site or unique palaeontologic feature?

Less than Significant with Mitigation. The project site is currently developed with an existing tilt-up building and parking lot. Ground disturbance from project construction activities would be limited to previously disturbed areas. Minor excavation would be required for the installation of a new sidewalk along Raymond Street and installation of new backup generators, air cooled chillers, and screen walls.

The project site is underlain by geologic units of Holocene age, which are generally not considered sensitive for paleontological resources because biological remains younger than 10,000 years are not usually considered fossils. These sediments, therefore, have low potential to yield fossil resources or to contain significant nonrenewable paleontological resources. More recent sediments may overlie older Pleistocene sediments with high potential to contain paleontological resources. These older sediments, often found at depths of greater than 10 feet below ground surface, have yielded the fossil remains of plants and extinct terrestrial Pleistocene vertebrates. Excavation required for the project would be less than 10 feet in depth; therefore, it is not anticipated that project construction would encounter paleontological resources.

In the unlikely event that paleontological resources are encountered during construction, they may be inadvertently damaged or destroyed. This is a potentially significant impact. **Mitigation Measure GEO-1** would require the implementation of discovery procedures if paleontological resources are encountered and require a qualified paleontologist to recommend measures specific to the discovered resource. Implementation of **Mitigation Measure GEO-1** would reduce potential impacts to paleontological resources.

> **Mitigation Measure GEO-1**: Discovery of a paleontological specimen during any phase of the project shall result in a work stoppage within 50 feet of the find until it can be evaluated by a professional paleontologist. Should loss or damage be detected, additional protective measures or further action (e.g., resource removal), as determined by a professional paleontologist, shall be implemented to mitigate the impact.

With implementation of **Mitigation Measure GEO-1**, potential impacts to paleontological resources would be reduced to a less-than-significant level.

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?	☐	☒	☐	☐

Environmental Setting

Information in this section was drawn from a site-specific Air Quality and Greenhouse Gas Study prepared in October 2022. The report is included in its entirety as **Appendix A** to this Initial Study.

Unlike emissions of criteria and toxic air pollutants, GHGs have a broader, global impact. GHGs such as carbon dioxide (CO_2), methane, water vapor and nitrous oxide (NOx) occur naturally in the earth's atmosphere and are responsible for maintaining the earth's surface temperature. Compounds such as chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride are byproducts of human economic activities like fossil fuel combustion and act as GHGs. While natural levels of GHGs keep the earth comfortable, these human-generated compounds pose various adverse effects and result in global warming. The continued release of GHGs at or above current rates would continue to increase average global surface temperatures and would alter the planet's climate, creating significant long-term local, regional, and global impacts.

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.

In the alternative, a project will have a less than significant impact if it is consistent with a local GHG reduction strategy. As this project will initially continue the use of natural gas appliances, the alternative threshold is used here, and 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.

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 with Mitigation. 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 of Santa Clara 2022 Climate Action Plan meets the criteria for a qualified GHG reduction strategy. The 2022 Climate Action Plan includes numerous measures to reduce GHG emissions associated with the projects operations and therefore demonstrate if new developments is consistent with reduction strategies. The project's consistency with applicable 2022 Climate Action Plan measures is shown in **Table 10.**

Table 10 Consistency with Santa Clara Emissions Reductions Strategies

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-1-6:** Burn out ordinance: Prepare a "burn out" ordinance requiring that when natural gas furnaces or water heaters expire, they must be replaced with available electric alternatives	**Consistent.** The proposed project is an upgrade of an existing facility to provide seismic retrofits and install backup generators and air cooled chillers to facilitate the use of the site as a data center. The project will not replace any expired natural gas appliances. However, consistent with the provisions of the CAP, should natural gas appliances need to be replaced, the project applicant would replace the appliances with an applicable electric alternative. In addition, the project is required to be carbon-neutral, so any use of natural gas would require offsets.
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	**Potentially Inconsistent.** The proposed project, as designed, would not operate on 100% carbon neutral energy; therefore, the project would potentially be inconsistent with this measure. However, implementation of **Mitigation Measure GHG-1** would require the project to comply with the 2022 Climate Action Plan by either procuring 100

Energy Efficiency Goal or Policy	Project Consistency
planning application approval within six months of the CAP adoption date (June 7, 2022).	percent of electricity consumed by the project from renewable and zero-carbon sources, or purchasing offsets. For the full text of **Mitigation Measure GHG-1**, refer to **Section 2.8, Greenhous Gas Emissions**.
Strategy B3: Maximize renewable energy generation and storage capacity. ▪ **Action B-3-6:** Alternative backup generators: Provide information and technical assistance to data centers and other large commercial users to transition from diesel to lower-carbon backup generators (e.g., renewable diesel).	**Not Applicable.** This action is to be taken at the City level. While the proposed project anticipates the implementation of 5 new diesel backup generators, the project is also implementing EPA Tier 4 rated engines with diesel particulate filters which reduces the emissions of GHGs over a less efficient engine.
Strategy T1: Transition vehicles to electric alternatives. ▪ **Action T-1-2:** EV charging for all new construction: Implement EV charging requirements as specified in the adopted 2021 Reach Codes.	**Not Applicable.** The project is not new construction but the upgrade to an existing building.

As shown in **Table 10**, the project would be potentially inconsistent with one measure in the CAP. This is a potentially significant impact. **Mitigation Measure GHG-1** would require the implementation of GHG reduction measures to operate on 100 percent carbon neutral energy if the project receives application approval after December 7, 2022. Implementation of **Mitigation Measure GHG-1** would reduce potential impacts from GHG emissions.

Mitigation Measure GHG-1: GHG reduction measures shall be incorporated into the project to require that the project operate on 100 percent carbon neutral energy. These may include, but are not limited to, the following:

- Procure 100 percent of the electricity consumed by the project from eligible renewable and zero-carbon energy sources.
- Incorporate solar photovoltaic systems at the project site.
- Directly undertake or fund activities that reduce or sequester GHG emissions ("Direct Reduction Activities") and retire the associated "GHG Mitigation Reduction Credits." A "GHG Mitigation Reduction Credit" shall mean an instrument issued by an Approved Registry and shall represent the estimated reduction or sequestration of 1 MT of CO_2e that shall be achieved by a Direct Reduction Activity that is not otherwise required (CEQA Guidelines Section 15126.4[c][3]). A "GHG Mitigation Reduction Credit" must achieve GHG emission reductions that are real, permanent, quantifiable, verifiable, enforceable, and in addition to any GHG emission reduction required by law or regulation or any other GHG emission reduction that otherwise would occur in accordance with the criteria set forth in the CARB's most recent Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation (2013). An "Approved Registry" is an accredited carbon registry that follows

approved CARB Compliance Offset Protocols. At this time, Approved Registries include American Carbon Registry, Climate Action Reserve, and Verra (CARB 2018). Credits from other sources will not be allowed unless they are shown to be validated by protocols and methods equivalent to or more stringent than the CARB standards. In the event that a project or program providing GHG Mitigation Reduction Credits to the project applicant loses its accreditation, the project applicant shall comply with the rules and procedures of retiring GHG Mitigation Reduction Credits specific to the registry involved and shall undertake additional direct investments to recoup the loss.

- Obtain and retire "Carbon Offsets." "Carbon Offset" shall mean an instrument issued by an Approved Registry and shall represent the past reduction or sequestration of 1 MT of CO2e achieved by a Direct Reduction Activity or any other GHG emission reduction project or activity that is not otherwise required (CEQA Guidelines Section 15126.4[c][3]). A "Carbon Offset" must achieve GHG emission reductions that are real, permanent, quantifiable, verifiable, enforceable, and in addition to any GHG emission reduction required by law or regulation or any other GHG emission reduction that otherwise would occur in accordance with the criteria set forth in the CARB's most recent Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation (2013). If the project applicant chooses to meet some of the GHG reduction requirements by purchasing offsets on an annual and permanent basis, the offsets shall be purchased according to the City's preference, which is, in order of the City's preference: (1) within Santa Clara; (2) within the BAAQMD jurisdictional area; (3) within the State of California; then (4) elsewhere in the United States. In the event that a project or program providing offsets to the project applicant loses its accreditation, the project applicant shall comply with the rules and procedures of retiring offsets specific to the registry involved and shall purchase an equivalent number of credits to recoup the loss.

With implementation of **Mitigation Measure GHG-1**, potential impacts from GHG emissions would be reduced to a less-than-significant level. The following construction and operations discussions are included for informational purposes.

Construction

Project-related construction emissions are confined to a relatively short period in relation to the overall life of the project. Construction-related GHG emissions were quantified for informational purposes as the short construction period would not result in long-term emissions of GHGs. The project would generate approximately 96 MT of CO2e during construction. With amortization over the lifetime of the project (approximately 30 years), amortized emissions would be approximately 3 MT of CO_2e annually.

Operation

Table 11 shows GHG emissions associated with operation of the proposed project. The project would generate 2,225 MT of CO_2e at buildout.

Table 11 Estimated Annual Operational GHG Emissions

Source	MT CO2e
Existing Emissions	
Area	<1
Energy	128
Mobile	10
Waste	30
Water	<1
Total	169
Project Emissions	
Area	<1
Energy	2,066
Mobile	10
Stationary	279
Waste	30
Water	<1
Total	2,386
Net Project Emissions	**2,217**
Amortized Construction Emissions	**3**
Total Net Project Emissions	**2,220**

Source: Rincon 2022

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?	☐	☐	☐	☒

Environmental Setting

The project site is located in an industrial and commercial area. Surrounding land uses consist of office, commercial and light industrial operations, including an indoor shooting range and wholesale carpet business to the north, data warehouses to the east and south, and an electric sub-station to the west. A Phase I environmental site assessment (ESA) was completed for the project site in September 2021.

Based on the information collected during the Phase I ESA, the project site was historically used for agricultural, and industrial operations. The existing building was constructed on-site in approximately 1973. The initial use of the building as an industrial storage facility is noted in Building Department files. Industrial uses subsequently have occupied the building from approximately 1960 to present. During the early 2000s, the building was occupied by Volt Telecommunications for unknown use, and Spraytronics

for powder coating, painting, sanding. Since 2014, the building has been occupied by UNIXSurplus for computer equipment disassembly and component sales.

Hazardous Materials Use and Storage Regulation

Within the City, a number of local, state, and federal regulations govern the use, transport, and storage of hazardous materials. A Hazardous Materials Business Plan is generally required of any facility which generates any quantity of hazardous waste or which handles hazardous materials in amounts greater than 55 gallons for liquids, 500 pounds for solids, and 200 cubic feet for compressed gases. The implementation and enforcement of these local, and state and federal regulations regarding the use, storage and transport of hazardous materials (including setbacks for flammable storage from property lines) reduce the potential for impacts to off-site land uses, in the event of an accidental release.

Potential Sources of Contamination

The Phase I ESA included a search of federal, state, and local environmental databases for potential contamination sources on properties within 1 mile of the project site. Several database listings were identified for the project site, associated with CW Manufacturing, Citel, HCL Safety Specialists, ENSCO West/ENSCO Environmental Systems Co., Volt Telecommunications, Spraytronics, and UNIXSurplus. Specific operational details are not fully understood, but appear to have been, at various times, associated with numerous, diverse hazardous substances. There also appears to have been in-ground equipment potentially associated with hazardous substances. There are no known releases except for some paint water wash that was reportedly cleaned up and no violations were documented.

Groundwater quality was evaluated at the project site. Based on the information reviewed in the Phase I ESA, groundwater sampling detected no significant volatile organic compounds (VOCs), but previous samples indicated some metal detections exceeding hazardous waste screening levels.

The surrounding area has been industrially developed beginning in the 1960s. Previous groundwater sampling at a former manufacturing facility at 975 Comstock Street (approximately 600 feet south-southeast of the project) detected elevated levels of VOCs which are not known to have been addressed with regulatory agency oversight.

Asbestos and Lead-Based Paint

Since construction of the existing building occurred prior to 1980, building materials containing asbestos may be present. The building was constructed prior to 1978, at which time lead was banned as an additive in paint, therefore lead-based paint may be present.

Impact Discussion

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

Less than Significant. The project would involve the use of potentially hazardous materials such as cleaners, pesticides for landscaping, treatment chemicals for the cooling system, and diesel fuel for backup generators. Diesel fuel would be stored under each generator in a 4,000 gallon storage tank. Truck trips to deliver diesel fuel and other hazardous materials are expected to reach the project site via

US-101, San Tomas Expressway, Scott Boulevard, and Central Expressway in addition to Coronado Drive and Stender Way. Under non-emergency circumstances, the delivery of fuel would be limited to refilling the smaller fuel storage tanks by each generator; fuel in underground storage tanks would only be used in an emergency. Cooling system water treatment chemicals would be stored in 300 gallon bulk containers.

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.[10] Additionally, the project applicant would be required to prepare an Emergency Response and Evacuation Plan, conduct hazardous materials training (including remediation of accidental releases, including diesel fuel), 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. For transport and handling of fuel, Cal OSHA requirements include establishment of an Injury and Illness Prevention Program (CCR Title 8 § 6760) and also specify design requirements for underground fuel storage tanks (CCR Title 8 § 6807).

The City is a Certified Unified Program Agency, meaning it administers its own state-mandated hazardous materials program for underground and aboveground storage tanks. The program is overseen by the Santa Clara Fire Department Community Risk Reduction Division, and all new aboveground and USTs are required to meet current state regulations. A permit would be required from the City for the installation of underground and/or aboveground fuel storage tanks on the project site.

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

Therefore, impacts related to the routine use, transport, or disposal of hazardous materials would be less than significant, and no mitigation is required.

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

Less than Significant with Mitigation. Construction activities would require building foundation work, including grading and excavation. Construction workers would disturb soils potentially contaminated with hazardous materials from previous agricultural uses, releasing them locally as dust in the air where

[10] The general reporting thresholds in State law are over 55 gallons for liquids, 500 pounds for solids, and 200 cubic feet for gases.

they could be absorbed through respiration, and/or absorption through physical contact with contaminated soils.

Because elevated concentrations of agricultural chemicals such as organochlorine pesticides are present in the soil on the project site, soil management measures shall be required during construction/earthwork activities. Construction worker exposure would be managed by exercising appropriate dust control measures during construction activities. Because the majority of the project site would be capped by the data center, and parking lot, agricultural chemicals present in the soil are not likely to present a significant health concern with respect to future users of the building.

Given the possibility of direct exposure to contaminated soils through ground-disturbing activities during construction, **Mitigation Measure HAZ-1** would be required to ensure hazardous materials do not present a threat to human health or the environment:

> **Mitigation Measure HAZ-1**: The following actions shall be taken to reduce hazardous materials impacts:
>
> - A Site Management Plan (SMP) and Health and Safety Plan (HSP) shall be prepared for the proposed development activities. The purpose of these documents will be to establish appropriate management practices for handling impacted materials that may be encountered during construction activities. The SMP and HSP should be forwarded to an appropriate regulatory agency, such as the Department of Toxic Substances Control or the Santa Clara County Department of Environmental Health, for review and approval.
> - Excavated soil will be exported from the project site, and sampling of the soil will be required prior to disposal to identify and deliver to appropriate disposal facilities for disposal.

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

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

No Impact. The project site is not located within a 0.25-mile radius of a school and therefore would not emit any hazardous emissions to educational establishments. No impact would occur.

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?

Less than Significant with Mitigation. A search of the Department of Toxic Substances Control (DTSC) EnviroStor database along with a search of the San Francisco Bay Regional Water Quality Control Board (RWQCB) GeoTracker database show there are no known hazardous materials or spills on the project site. As described above, water sampling from the site indicates off-site contamination has historically impacted groundwater on-site.

Laboratory analyses of groundwater samples detected no significant VOCs in groundwater but did find two VOCs above screening levels in soil vapor samples collected at multiple locations of the project site.

Construction of the project would require ground disturbing activities. As previously discussed under **question 2.8 "b"**, ground-disturbing activities may expose construction workers to contaminated soils. **Mitigation Measure HAZ-1** would reduce potential impacts related to hazardous soil exposure to a less than significant level.

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. The project site is located approximately 0.6 mile east of the Mineta San Jose International Airport (SJIA). According to the SJIA's Comprehensive Land Use Plan (CLUP), the project site is within the Airport Influence Area and the Turning Safety Zone. Implementation of the project would not result in changes to the height of the building or expose workers to noise levels higher than existing conditions. See **Section 2.13, Noise and Vibration,** for more details on noise levels associated with the project. The project would serve as a data center, and thus would not be used for residential purposes, consistent with the Turning Safety Zone compatibility policies. Therefore, the project would not result in a safety hazard or excessive noise for workers associated with the SJIA. The 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. Santa Clara Fire Department (SCFD) currently serves the project site. Please refer to Section 2.15, Public Services, for more detailed information regarding fire and emergency services. The project does not include any changes to the existing public roadways that provide emergency access to the site or surrounding area. Operation of the project would not place a greater number of workers on-site or include new uses resulting in increased demand for emergency access. Therefore, the project would not impair the implementation of, or physically interfere with, any adopted emergency response plan or emergency evacuation plan. 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 that does not contain any wildland areas. Neighboring cities such as Sunnyvale, San Jose, and Cupertino adjacent to the Santa Clara City limits are also fully developed. The project site is not located adjacent to natural areas that would be subject to wildland fires. Therefore, the project would not result in any significant exposure of people or structures to wildland fires. No mitigation is required.

2.10 Hydrology and Water Quality

	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?	☐	☐	☒	☐

Environmental Setting

The City is situated on an alluvial plain within the Santa Clara Valley, which extends southward from the southern end of San Francisco Bay. Ground surface elevations within City limits range from near sea level in the north, to 175 feet above mean sea level at the southern boundary of the City. The climate is semi-arid, with warm, dry weather from late spring to early fall. Yearly precipitation averages 14.8

inches per year, most of which falls between November and April. Average monthly rainfall from May to October is less than 1 inch per month, and drops to essentially zero in July and August.

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.[11]

Valley Water approved and adopted an updated Urban Water Management Plan (UWMP) in 2015. The City adopted its 2020 UWMP in June 2021. The City's 2020 UWMP did not specifically include this project; however, the UWMP did include projected increases in water demand due to densification and intensification of both residential and non-residential land uses.

Stormwater

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

The RWQCB has issued a Municipal Regional Stormwater NPDES Permit (Permit Number CAS612008) (MRP). The regional permit applies to 77 Bay Area municipalities, including the City. Under provisions of the NPDES Municipal Permit, redevelopment projects that disturb more than 10,000 square feet are required to design and construct stormwater treatment controls to treat post-construction stormwater runoff. Post-construction runoff must be treated by using Low Impact Development (LID) treatment controls, such as biotreatment facilities.

In addition to water quality controls, the Municipal Regional Stormwater NPDES permit 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. The overall project would not generate more than 1 acre of impervious surface, therefore a NPDES permit would not be required.

Groundwater

[11] City of Santa Clara Water & Sewer Utility. Available: https://www.santaclaraca.gov/our-city/departments-g-z/water-sewer-utilities/recycled-water-utility. Accessed: October 2021.

Fluctuations in groundwater levels are common due to seasonal fluctuation, underground drainage patterns, regional fluctuations, and otherfactors. The project is located within the Santa Clara subbasin of the Fan Francisco Bay Hydrologic Region.[12] The subbasin has an estimated storage capacity of 350,000 acre-feet. On average, the City draws approximately 23,000 acre-feet of groundwater from the subbasin per year.

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 landsliding. Seiches are possible at reservoir, lake or pond sites. There are no large bodies of water near the project site.

Flood Zones

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the NFIP, FEMA publishes Flood Insurance Rate Maps (FIRMs) that identify flood hazard zones within a community. FIRM Maps designate 100-year floodplain zones and delineate other flood hazard areas. A 100-year floodplain zone is the area that has a 1 in 100 (1 percent) chance of being flooded in any one year based on historical data. Areas subject to the 1 percent flood are designated as Zone AE, A, AH, or AO on the FEMA flood maps. The project site is in Flood Zone X, areas determined to be outside the 0.2% annual chance floodplain.[13]

Impact Discussion

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

Less than Significant. Under existing conditions, the project site consists of mostly impervious surfaces (60,680 square feet; 83 percent of the project site area) and some landscaped perimeter areas (12,500 square feet; 17 percent). With implementation of the project, the total impervious area on the project site would be reduced to 59,880 square feet (82 percent) and the impervious area increased to 13,300 square feet (18 percent). As less than one-acre of land would be disturbed, the project would not be subject to a State NPDES Permit. The project would be required to comply with Santa Clara County Stormwater Quality BMPs and Santa Clara County Stormwater Control guidelines outlined in the Conditions of Approval below.

[12] City of Santa Clara. 2011. City of Santa Clara Draft 2010-2035 General Plan. Available: https://www.santaclaraca.gov/home/showpublisheddocument/12900/635713044859030000. Accessed October 2021.

[13] FEMA. 2014. *FEMA Flood Map Service Center*. Available: https://msc.fema.gov/portal/search?AddressQuery=101%20South%20Jackson%20Avenue%20San%20Jose%20CA%20#searchresultsanchor. Accessed September 2021.

Conditions of Approval

- Burlap bags filled with drain rock shall be installed around storm drains to route sediment and other debris away from the drains;
- Earthmoving or other dust-producing activities would be suspended during period of high winds;
- All exposed or disturbed soil surfaces would be watered at least twice daily to control dust as necessary;
- Stockpiles of soil or other materials that can be blown by the wind would be watered or covered;
- All trucks hauling soil, sand, and other loose materials shall be covered;
- All paved access roads, parking areas, staging areas and residential streets adjacent to the construction sites would be swept daily (with water sweepers); and
- Vegetation in disturbed areas would be replanted as quickly as possible.

With adherence to these BMPs and guidelines, the impact would be 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. Groundwater would not be extracted from the site via wells; the City would provide potable water services to the project through existing infrastructure. The UWMP identifies groundwater as a source of water supply for the project area and includes projected increases in water demand due to densification and intensification of non-residential land uses. The City's municipal water system currently has the capacity to provide up to 28.8 million gallons of water per day.[14] In total, the project is anticipated to require approximately 384 hundred cubic feet (HCF) or approximately 0.88-acre feet per year. For context, the City estimates that a 500-unit residential building uses approximately 68-acre feet of water per year. This is also the City's threshold for determining whether a Water Supply Assessment (WSA) is required for a residential development. The City's threshold for determining whether an industrial or commercial use would require a WSA is if the proposed use would employ more than 1,000 persons or have more than 250,00 square feet of floor space. Because the project would employ up to 7 people and would have less than 250,000 square feet of floor space, no WSA was performed.

Valley Water tracks water supply, demand, and groundwater recharge on a monthly basis. As of December 2019, total groundwater storage was predicted to rise within normal levels established in the Santa Clara County Water District's Water Shortage Contingency Plan.[15] The Water District's projections

[14] City of Santa Clara. 2020. 2020 Urban Water Management Plan. Available: https://www.santaclaraca.gov/home/showpublisheddocument/74073/637606452907100000. Accessed: October 2021.

[15] Valley Water. 2019. Groundwater Condition Report, Santa Clara County. Available: https://www.valleywater.org/sites/default/files/2019-12/Final_Dec_2019_Report.pdf. Accessed: October 2021.

are based on estimates generated from land use designations across the service area. The project would make changes to an existing industrial use that is permitted under the project site's existing zoning and land use designation. Thus, the demand that would be placed on groundwater supplies by operation of the data center was reasonably anticipated in the broader demand calculations developed by Valley Water, and the City would have sufficient water supply to service the project. The project would not directly interfere with groundwater recharge, such as through the addition of significant amounts of new impervious surface or through the use of wells. Therefore, impacts to groundwater recharge or depletion from water use would be less than significant. 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;

OR

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. The project would disturb less than an acre of land as there would be minimal excavation and grading. The project would add a sidewalk along Raymond Street, install backup generators, air cooled chillers, and screen walls, and improve landscaping in front of the existing building. As such, discharge and stormwater runoff from the project would be minimal. Therefore, the impact would be less than significant, and no mitigation is required.

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

Less than significant. As described above, the project is located within FEMA Flood Zone X, determined to be outside the 0.2% annual chance floodplain. The project site is not located in a tsunami or seiche zone. The project is located approximately 24 miles from the Pacific Ocean and approximately 4 miles from San Francisco Bay. Due to this distance, potential impacts related to a tsunami are minimal. Additionally, the project site is not susceptible to impacts resulting from seiche because of its distance from any large bodies of water. This impact would be less than significant. No mitigation measures are required.

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

Less than Significant. Construction of the project would be in compliance 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?	☐	☐	☐	☒

Environmental Setting

The project site is in the central part of the City, south of US-101 and west of Lafayette Street. Land use designations surrounding the project site consist of light industrial and low-intensity office/research and development uses. The project site is zoned ML-Light Industrial. There are no residential uses in the immediate vicinity of the project site. Surrounding development consists of one- to three-story buildings with large surface parking lots. Nearby uses include data centers, research and development buildings, biotech companies and other digital technology-oriented uses.

The project site is bounded to the north and east by Raymond Street. Immediately south of the project site is Colovore LLC, which serves as another data center, and to the west of the project site is an electric substation..

Impact Discussion

a) Physically divide an established community?

No Impact. The project would not physically divide an established community. The project would make improvements to an existing industrial building, but would not involve construction or demolition of any buildings. Therefore, no impact would occur. No mitigation is required.

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/research and development. The project site is zoned as ML – Light Industrial. No changes to the General Plan land use designation or zoning are proposed.

Employment density at the project site would be relatively low (up to 7 full-time employees), which is consistent with the intent of the low-intensity office/research and development General Plan land use designation. The General Plan provides a maximum floor area ratio (FAR) of 1.0 for low-intensity office/research and development and no maximum for building lot coverage of properties zoned ML. The project proposes no new additional floor area, so the existing FAR of 0.33 would remain the same.

As such, the project would be consistent with the land use and zoning of the project site and would not result in any environmental impact related to land use or zoning. There would be no impact.

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?	☐	☐	☐	☒

Environmental Setting

The City is located in an area zoned MRZ-1 for aggregate materials by the State of California. MRZ-1 zones are areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence. The area is not known to support significant resources of any other type. No mineral resources are currently being extracted in the City. The State Office of Mine Reclamation's list of mines (the AB 3098 List) regulated under the Surface Mining and Reclamation Act (SMARA) does not include any mines within the City.

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. There are no significant mineral resources located within the City. Therefore, the project would not result in the loss of availability of known mineral resources or a locally important mineral resource recovery site. 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?	☐	☐	☐	☒

Environmental Setting

Information in this section was drawn from a site-specific Noise and Vibration Study prepared in October 2022. The report is included in its entirety as **Appendix D** to this Initial Study.

Noise is typically described as any unwanted or objectionable sound and is technically described in terms of the loudness of the sound (amplitude) and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the decibel (dB). However, because the human ear is not equally sensitive to sound at all frequencies, the A-weighted decibel scale (dBA), which gives greater weight to the frequencies of sound to which the human ear is most sensitive, was devised to relate noise to human sensitivity.

The dBA measurement system is not an effective way to measure noise levels within a community, since community noise is always fluctuating and changing. Therefore, other methods of describing noise levels have been developed, the most common of which are the Community Noise Equivalent Level (CNEL) and the Day-Night Noise Level (Ldn). Ldn is an average of all noise levels recorded over a 24-hour period, with a 10-dB penalty for nighttime noise that occurs between 10:00 p.m. and 7:00 a.m. CNEL is also an average sound level over a 24-hour period, with a 10 dB penalty added for noise between 10:00 p.m. and 7:00 a.m. and an additional 5 dB penalty added for the evening hours of 7:00 p.m. to 10:00 p.m.

Applicable Noise Standards

The City's General Plan identifies noise and land use compatibility standards for various land uses in the City. The noise standard is 70 CNEL for industrial land uses and 55 dBA CNEL for residential land uses.

Noise levels exceeding 70 dBA CNEL are considered incompatible with residential land uses. Compatibility levels are shown in **Table 12**.

Table 12 Noise and Land Use Compatibility Standards

Land Use	Compatible (dBA, CNEL)	Require Design Standard (dBA, CNEL)[1]	Incompatible (dBA, CNEL)[2]
Residential	55	55-70	70
Educational	55	55-70	70
Recreational	65	65-75	75
Commercial	65	65-75	75
Industrial	70	70-80	80

Source: City of Santa Clara 2010

Chapter 9.10 of the Santa Clara City Code established the following regulations on construction work and fixed sources (Section 9.10.040) of noise:

- Construction activities are not permitted within 300 feet of residentially zone property except within the hours of 7:00 a.m. and 6:00 p.m. on weekdays and 9:00 a.m. and 6:00 p.m. on Saturdays. No Construction is permitted on Sundays or holidays, if there are residential properties within 300 feet.

Once construction is completed, the project would be subject to the following operational noise limitations:

- Noise levels from fixed sources are limited at residential uses and public space land uses (e.g., Mission College) to 55 dBA during the daytime (7:00 a.m. to 10:00 p.m.) and 50 dBA during the nighttime (10:00 p.m. to 7:00 a.m.).
- Noise levels at commercial and office land uses are limited to 65 dBA during the daytime (7:00 a.m. to 10:00 p.m.) and 60 dBA during the nighttime (10:00 p.m. to 7:00 a.m.).
- Noise levels at light industrial land uses are limited to 70 dBA day or night. The noise limits are not applicable to emergency work, including the operation of backup generators, pumps, or other equipment necessary to provide services during an emergency.

Given that there are no residentially zoned properties or other sensitive land uses within 300 feet of the site (the closest residential area is approximately 2,400 feet north of the project boundary), the project would not be subject to the Santa Clara City Code regulation on construction hours. For operational impacts, the project would be subject to noise level performance standards for fixed noise sources, commercial and office uses, and light industrial uses. Section 9.10.070(a) of the City Code exempts "emergency generators and pumps or other equipment necessary to provide services during an emergency."

Santa Clara County Airport Land Use Commission Land Use Plan

The Comprehensive Land Use Plan (CLUP) for SJIA 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.

Project Site Noise

The most prominent source of noise in the project site vicinity is traffic noise from U.S. Highway 101, San Jose International aircraft flyovers, and existing stationary sources associated with Donald Von Raesfeld Power Plant. According to the CLUP for SJIA the project site is within the 65 dBA CNEL airport noise contour.

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. The Santa Clara General Plan identifies noise-sensitive land uses as residences, motels and hotels, schools, libraries, churches, hospitals, nursing homes, auditoriums, natural areas, parks and outdoor recreation areas. There are no noise-sensitive residential uses within 1,000 feet of the proposed project. The closest sensitive is the Granada Islamic School, located approximately 1,600 feet wet of the project site.

To characterize ambient sound levels at and near the project site, two 15-minute noise level measurements were conducted on Friday, September 17, 2021. Measurement (NM) 1 was conducted within the existing project site to measure ambient noise levels adjacent to the northern property boundary. NM2 was conducted at the southeast portion of the project site to document noise levels attributable to existing nearby stationary sources. The measurements ranged between 63 to 84 dBA Leq between the hours of 5:00pm to 6:00pm, respectively.

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. Construction activity would result in temporary noise in the project area, exposing surrounding receivers to increased noise levels. The project would involve interior tenant improvements and exterior façade changes to the building, installation of new equipment, and new landscaping features surrounding the existing building. The existing building would be reinforced to exceed current code standards. No demolition would occur.

A potential construction scenario includes mobile construction equipment such as excavators, gradalls[16] and concrete pump trucks. Therefore, an excavator, a gradall, and a concrete pump truck were analyzed together for construction noise impacts due to their likelihood of being used in conjunction at the same time and therefore a reasonable scenario for the greatest noise generation during construction. At a distance of 50 feet, an excavator, a gradall, and a concrete pump truck would generate a noise level of 82 dBA Leq. The nearest residential receptors are located approximately 2,400 feet north of the project site. At this distance, construction noise would attenuate to 48 dBA Leq or less.[17] This does not take into account acoustical shielding from buildings, terrain, or other features which would reduce construction noise levels further. In addition, construction would occur within the allowed hours of the City's Municipal Code. Therefore, the impact would be less than significant, and no mitigation is required.

Operation

Less than Significant. The project would introduce sources of operational noise to the site, including mechanical equipment (chillers and emergency standby generators). The results of SoundPLAN modeling indicate that project operational noise could reach up to 61 dBA at the 3045 Raymond Street property line, located across Raymond Street approximately 50 feet to the east. Project operational noise levels would be less at the other nearby industrial uses. Therefore, project operational would not exceed the significance threshold of 70 dBA for the neighboring light industrial uses. At the nearest noise-sensitive use, project operational noise is estimated to attenuate to 48 dBA or less, which would not exceed the significance threshold of 60 dBA for commercial/office receptors. Additionally, it should be noted that this receptor is located across U.S. Highway 101, which would likely overshadow any project operational noise. Therefore, the impact would be less than significant, and no mitigation is required.

Off-site Traffic Noise

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. Because operation of the site would remain consistent with existing conditions, the number of vehicle trips to and from are expected to remain effectively the same. Therefore, the impact would be less than significant, and no mitigation is required.

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

Construction

Less than Significant. 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 a gradall, which may be used within 45 feet

[16] Gradall: Motorized machine with a hydraulic backhoe equipped with an extensible boom that performs the three separate functions of excavation, backfill, and grading.

[17] Construction noise levels were estimated using FHWA's Roadway Construction Noise Model (RCNM). While the model considers a variety of factors, it generally assumes that construction noise from a given source will attenuate at 6 dBA per doubling of distance for stationary equipment. RCNM calculations are included in Appendix A of the Noise and Vibration Technical Report (Appendix D to this IS/MND).

of the nearest off-site industrial use to the south of the project site. Reference vibration levels for a gradall are not available and for this analysis reference vibration levels for a dozer are applied by proxy. A dozer/gradall would create approximately 0.089 in/sec Peak Particle Velocity (PPV) at 25 feet. The vibration level created by a dozer at 45 feet would be less.

Groundborne vibration below 0.1 PPV are typically unnoticeable by the average person and groundborne vibrations at 0.2 PPV and above can cause architectural damage. For significance purposes, the City generally utilizes Caltrans recommended vibration limits for structural damage, which are 0.5 in/sec PPV for buildings structurally sound and designed to modern engineering standards, 0.3 in/sec PPV for buildings that are found to be structurally sound but where structural damage is a major concern, and 0.08 in/sec PPV for ancient buildings or buildings that are documented to be structurally weakened (which are not present adjacent to the project site). Since groundborne vibration caused by project construction would be much lower than the applicable thresholds, the impact would be less than significant, and no mitigation is required.

Operation

No Impact. Operation of the project would not result in any substantial vibration sources. Therefore, no impact would occur.

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

No Impact. The San José International Airport is located 0.6 miles to the southeast of the project site and Moffett Federal Airfield is located 5.3 miles to the northwest of the project site. According to the San José International Airport Land Use Compatibility Plan, the project is located within the 65 dBA CNEL noise contour. Industrial uses are considered compatible when located within the 65 to 70 dBA CNEL airport noise contour. Therefore, the proposed project would not expose people working in the project area to excessive aircraft overflight noise levels and no impact would occur.

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?	☐	☐	☐	☒

Environmental Setting

A jobs-to-housing ratio is generated by dividing the number of jobs in a city by the number of housing units in the same city. A balance between jobs and housing can help to alleviate issues such as congestion and transportation-related environmental impacts by allowing people to work closer to their homes. Given the high cost of housing in California and in the Bay Area in particular, most households require more than one wage-earner to afford housing in the region. The jobs-to-housing ratio in the City was estimated at 2.50 in 2010 and is projected to slightly decrease to 2.48 by 2040.[18]

Construction of large employment centers can induce population growth by enticing new employees to move from other locales. Population growth can also be induced through the creation of large housing development. In either case, rapid growth can disturb the jobs-housing balance of a city to create an imbalance and produce environmental impacts by increasing demand for services and infrastructure.

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 is an industrial use that does not include the construction of residential units. The project is expected to require up to 7 employees, whereas the existing use requires up to 35 employees. Therefore, the project would not result in a substantial increase in employment such that population growth could be induced indirectly. No impact would occur.

[18] City of Santa Clara, General Plan, 2014.

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, necessitating 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?	☐	☐	☐	☒

Environmental Setting

The information below was compiled through research of publicly available emergency service data.

Fire Protection

Fire protection services for the project site are provided by the Santa Clara Fire Department (SCFD) which comprises of 167 paid employees and a robust volunteer reserve. The SCFD has 10 fire stations and responds to over 9,000 calls annually.[19] Of these stations, Station 10 is temporarily closed and is in the process of being relocated. The closest fire station to the project site is Fire Station 2 located at 1900 Walsh Avenue, approximately 0.65 mile south of the project site.[20]

[19] Santa Clara Fire Department. History of the Fire Department. Available: https://www.joinscfd.org/about-scfd. Accessed: September 16, 2021.

[20] Santa Clara, Public Safety, Fire Stations and Police Stations within Santa Clara. Available: http://missioncity.maps.arcgis.com/apps/MapTour/index.html?appid=15779cefd9bc463d8bc6229b61d921d5. Accessed: September 16, 2021.

The Fire Department responds with highly trained and equipped personnel to emergency scenes, maintaining a City-wide response time of less than 5:30 minutes to 90 percent of all high-level emergency calls. Response time is measured from time of dispatch to the time of arrival at the call.

Police Protection

Police service to the project site is provided by Santa Clara Police Department (SCPD) which operates from its headquarters at 601 El Camino Real, approximately 2.5 miles southeast from the project site, and the Northside Police Station at 3992 Rivermark Parkway, approximately 2 miles northeast of the project site. The SCPD has 159 sworn officers, 80 support personnel and a varying number of part-time or per diem employees, volunteers and Police Reserves.[21]

Schools and Parks

The Santa Clara Parks and Recreation Department (Department) provides parks and recreational services in the City. The Department is responsible for maintaining and programming the various parks and recreation facilities and works cooperatively with public agencies in coordinating all recreational activities within the City. Overall, as of December 2022, the Department maintains and operates Central Park, a 45.04-acre community park (45.04 acres improved and Central Park North 34.93 acres unimproved, resulting in 79.97 acres), 30 neighborhood parks (121.261 acres improved and 9.389 acres unimproved resulting in 130.65 acres), 13 mini parks (2.687 acres improved and 3.189 acres unimproved resulting in 5.876 acres), public open space (16.323 acres improved and 40.08 acres unimproved resulting in 56.403 acres), recreational facilities (23.898 acres improved and excluding the BMX track), recreational trails (7.59 acres improved and 0.20 acres unimproved resulting in 7.79 acres), and joint use facilities (48.588 acres) throughout the City totaling approximately 265.387 improved acres and 87.788 unimproved acres. Community parks are over fifteen acres, neighborhood parks are one to fifteen acres and mini parks are typically less than one acre in size. The closest neighborhood park to the project site is Montague Park, which is approximately 0.75 mile northeast 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 school to the project site is Don Callejon School, located approximately 1.5 mile north of the project site.[22]

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

[21] Santa Clara Police Department. About Us. Available: https://www.santaclaraca.gov/our-city/departments-g-z/police-department/about-us/fact-sheet. Accessed: September 16, 2021.

[22] Santa Clara Unified School District. School Directory. Available: https://www.santaclarausd.org/site/Default.aspx?PageType=1&SiteID=8&ChannelID=44&DirectoryType=6. Accessed: September 19, 2021.

maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i. Fire Protection?

OR

ii. Police Protection?

No Impact. Fire and police protection services are currently provided to the project site by the SCFD and SCPD. The project would adhere with current fire codes to reduce potential fire hazards and would be consistent with appropriate safety standards to minimize criminal activity. Because the proposed data center use of the property would result in a decrease in employees on the site, the project would not create a substantial increase demand for police or fire services. Because the project would not include housing or other uses that would induce substantial population growth in the area, the project would not increase demand on fire or police protection providers such that new facilities would be required. Therefore, no impact would occur.

iii. Schools?

OR

iv. Parks?

No Impact. The project would not include any residential uses. The project would support fewer jobs (up to 7) than under existing conditions (up to 35). As such, there is not expected to be an increased use on parks and recreational facilities. Likewise, the project would not create a substantial increase in school-aged children. Therefore, there would be no impact on school or park facilities.

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 create a substantial increase in 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?	☐	☐	☐	☒

Environmental Setting

As discussed in **Section 2.15, Public Services**, the 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. According to the City's map of parks and pool facilities around the City, the nearest general use public park to the project site is Montague Park, located approximately 0.75 mile northeast of the project site. Effects to park and recreation resources are typically correlated to increases in population from the addition of residential uses.

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 would require fewer employees compared to existing conditions. Therefore, there would be 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?	☐	☐	☐	☒

Environmental Setting

The following discussion qualitatively analyzes potential impacts on the local transportation network.

Regional Access

Regional access to the project site is provided by US-101, located north of the project site. US-101 is a north-south freeway which extends northward through San Francisco and southward through San José. Primary access to and from US-101 is provided via San Tomas Expressway and Central Expressway.

Local Access

Roadways that provide primary vehicular circulation to the project site include Central Expressway, San Tomas Expressway, Space Park Drive, Duane Avenue, and Raymond Street. Access provided by each roadway is discussed below:

- **Space Park Drive** is a two-lane side street that becomes Raymond Street south of the project site and connects Scott Boulevard to Raymond Street.
- **Duane Avenue** is a two-lane side street that connects to Raymond Street. Duane Avenue becomes Jay Street, west of the project site.
- **San Tomas Expressway** is a generally north-south expressway with a full cloverleaf interchange at US-101. San Tomas Expressway becomes Montague Expressway north of US-101.
- **Central Expressway** is generally a six-lane east-west expressway that connects to both Scott Boulevard and Lafayette Street.

- **Raymond Street** is a two-lane side street that connects Duane Avenue to Space Park Drive and provides direct access to the project site.

The Santa Clara Valley Transportation Authority (VTA) provides bus services within Santa Clara County. One local bus route operates in the project vicinity, route 59. Route 59 operates between Saratoga Avenue/Stevens Creek intersection and Baypointe Parkway with a stop 0.40 mile west of the project site on Scott Boulevard and Space Park Drive.

Impact Discussion

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

No Impact. As described in **Section 1.3, Project Operation**, the project would require up to 7 full-time employees and the project site would experience approximately 15 total visitors in a 24-hour period, including employees. Therefore, the total amount of trips to and from the site on a given day is expected to be approximately 30. Because the existing use requires up to 35 employees, trip generation associated with the project is expected to be less than existing conditions. Furthermore, per the Santa Clara Valley Transportation Authority (VTA) Congestion Management Plan (CMP) Transportation Impact Analysis (TIA) guidelines, a TIA is not required because the project falls under the threshold of 100 peak hour trips (VTA 2014). Therefore, the project would not conflict with VTA's CMP.

Under existing conditions, there are no existing bicycle lanes on Raymond Street. Implementation of the project would therefore not interfere with existing bicycle facilities. The project would also not preclude the implementation of bicycle lanes along Raymond Street in the future.

As described in **Section 1.2, Project Description**, the project would add sidewalks along Raymond Street to the north and east, thereby facilitating pedestrian access to the site and improving pedestrian facilities in the area.

The project site is not located along a VTA transit route and the closest bus stop is located approximately 0.5 mile to the west on Scott Boulevard. Therefore, the project would not impede or hinder any existing or planned transit routes

The City's 2022 Climate Action Plan requires a Transportation Demand Management (TDM) Plan for selected land uses in the City. For nonresidential uses, Action T-3-1 requires a TDM plan for large employers with more than 500 employees. There is no 2022 Climate Action Plan requirement for a TDM Plan for smaller employers. Given that the project would not alter existing trip generation or circulation, no TDM Plan is required. Therefore, the project would not conflict with applicable City plans. No impact would occur.

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

Less than Significant.

On June 23, 2020, the Santa Clara City Council adopted a resolution establishing a new Transportation Analysis Policy to address Senate Bill 743, transitioning CEQA significance thresholds away from level of service to vehicle miles travelled (VMT). As stated in the City's Transportation Analysis Policy, projects

that would generate 110 daily trips or less are presumed to have a less than significant impact. The project is projected to generate a maximum of 30 daily total trips from up to 15 visitors a day (including 7 full time employees), which is less than the 110 daily small project threshold. Therefore, the project's impact on transportation is considered to be less than significant. No mitigation is required.

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

No Impact. The project does not include any changes to local streets, intersections, or involve incompatible land uses. Access to the project site would continue to be provided via Raymond Street. The project would upgrade the existing parking lot to meet ADA standards and add a sidewalk to the north and east of the project site, along Raymond Street. In addition, the southwest curb radius of the intersection of Raymond Street and Raymond Street would be reduced for safety purposes. There would be no reconfiguring of nearby by streets such as Duane Avenue or Space Park Drive. As such, the project would not introduce or increase hazards to design features. No impact would occur.

d) Result in inadequate emergency access?

No Impact. Emergency access to the project site would continue to be provided by existing roadways. Emergency access would be provided via the two existing driveways on Raymond Street. As a condition of approval, the project would be required to comply with all emergency access standards of the SCFD and SCPD. 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.	☐	☒	☐	☐

Environmental Setting

Information in this section was incorporated from a Sacred Lands File search completed for the project site in November 2021.

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)?

No Impact. As stated above in **Section 2.5, Cultural Resources,** according to a CHRIS records search completed in September 2021, there are no historic resources present on the project site. Therefore, no impact would occur.

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

Less than Significant with Mitigation. A Sacred Lands File search was requested on September 24, 2021. The Sacred Lands File, operated by the NAHC, is a confidential set of records containing places of religious or social significance to Native Americans. A response from the NAHC was received on November 7, 2021 and indicated that no Native American cultural sites have previously been identified on the project site. The NAHC provided a list of tribes associated with the region and recommended that the City consult with those tribes regarding the potential for Native American Resources at the project site. On December 8, 2022 the City sent letters to the following six Native American tribes: Amah Mutsun Tribal Band Bautista, Amah Mutsun Tribal Band, Indian Canyon Mutsun Band of Costanoan, Muwekma Ohlone Indian Tribe of the SF Bay Area, North Valley Yokuts Tribe, and Ohlone Indian Tribe, Tamien Nation, The Confederated Villages of Lisjan, and Wuksache Indian Tribe/Eshom Valley Band. The 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 the project. To date, no responses have been received. The tribes that were identified and contacted by the City will be given a copy of the Notice of Availability of the draft IS/MND to ensure that they have the opportunity to comment on the project during the public circulation period.

In addition to tribal consultation, implementation of **Mitigation Measures CUL-1 and CUL-3** 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 cultural 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?	☐	☐	☒	☐

Environmental Setting

Potable Water

The City provides water service through their Department of Water and Sewer Utilities and would serve the project site. The City's water and utilities system consists of approximately 335 miles of water mains, 7 storage tanks, and 26 wells that tap the underground aquifers and make up 62 percent of the City's water supply.[23] The City's water system produces an average of 16.3 million gallons per day, and has 28.8 million gallons of water storage capacity.[24] 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. Sixteen 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. The existing water consumption on the project site ranges from 0 – 32 hundred cubic feet (HCF) per month.

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.[25] 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, air cooled chillers, or for flushing toilets in dual plumbed buildings.[26] The closest existing recycled water line is located within Raymond Street to the east of the project site.

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 actual treatment of 110 million gallons per day.[27]

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.

[23] City of Santa Clara Water & Sewer Utility. Available: https://www.santaclaraca.gov/our-city/departments-g-z/water-sewer-utilities/water-utility. Accessed: October 2021.

[24] City of Santa Clara Water & Sewer Utility. Fact Sheet. Available: https://www.santaclaraca.gov/our-city/departments-g-z/water-sewer-utilities/fact-sheet. Accessed: October 2021.

[25] City of Santa Clara Water & Sewer Utilities. Recycled Water Utility. https://www.santaclaraca.gov/our-city/departments-g-z/water-sewer-utilities/recycled-water-utility. Accessed: October 2021.

[26] City of Santa Clara Water and Sewer Utilities. 2015. *Urban Water Management Plan*. http://santaclaraca.gov/home/showdocument?id=48088. Accessed: October 2021.

[27] City of San José. *San José-Santa Clara Regional Wastewater Facility Fact Sheet*. https://www.sanjoseca.gov/home/showdocument?id=32061. Accessed: October 2021.

Solid Waste

According to the City of Santa Clara 2010-2035 General Plan Integrated Environmental Impact Report (General Plan Integrated EIR), solid waste collection services are provided by Mission Trail Waste Systems through a contract with the City. Mission Trail Waste Systems also has a contract to implement the Clean Green portion of the City's recycling plan by collecting yard waste. The City has an arrangement with the owners of the Newby Island Landfill, located in San José, to provide disposal capacity for the City. The Newby Island Landfill is currently permitted to operate until 2041. Recycling services are provided through Stevens Creek Disposal and Recycling.

Natural Gas and Electricity Services

Electric and gas services within the City are provided by SVP and Pacific Gas and Electric (PG&E), respectively. SVP owns more than 510-MW of electric-generating resources supplemented by purchase agreement for 261-MW of additional capacity for a total capacity of 771-MW. This capacity far exceeds the City's current peak electricity demand of approximately 526-MW. No new generation peak capacity is necessary to meet the capacity requirements of new construction.

Impact Discussion

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant. For most utilities, the project would utilize existing connections and would not require new on-site or off-site water, wastewater, stormwater, natural gas, or telecommunications facilities. As part of the project site, a new connection to the existing recycled water line in Raymond Street, east of the project site would be added along the south side of the existing building.

The project would be served by SVP, which has adequate capacity for the project. Therefore, the project does not include construction of a new substation on-site. The project would require an upsizing in power supply from 1.6 MW to 9 MW, which would be provided by two new 4.5 MW feeds from SVP. These improvements would take place on-site and would require minimal ground disturbance, the impacts of which are analyzed in this initial study. Based on the above, this impact would be less than significant, and no mitigation is required, other than the cultural resources mitigation measures described in Section 2.5, Cultural Resources and paleontological resources mitigation measure described in Section 2.7, Geology and Soils.

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. The City's water and sewer utilities system currently serves the project site. The project would require potable water for restrooms and the break area. Aside from a one-time fill during construction, the closed-loop cooling system would require little-to-no additional water during operation. Therefore, operational water use would be similar to existing conditions (i.e., up to 32 HCF per month). In total, the project is anticipated to require approximately 384 HCF or approximately 0.88 acre feet per year. For context, the City estimates that a 500-unit residential building uses approximately

68 acre feet of water per year. The City's threshold for determining whether an industrial or commercial use would require a WSA is if the proposed use would employ more than 1,000 persons or have more than 250,00 square feet of floor space. Because the project would employ up to 7 people and would have less than 250,000 square feet of floor space, no WSA was performed.

As documented in **Section 1.2, Project Description**, the project would be consistent with both the existing General Plan land use designation and existing zoning. Thus, the water demand generated by the project was reasonably anticipated in the City's General Plan Integrated EIR, which found that under a conservative analysis scenario the City's water supplies would be sufficient to meet demands during a multiple dry year event through 2035. The City will continue to evaluate Citywide water supply through the General Plan updating process to ensure that adequate water supplies are available past 2035. Therefore, the City would have sufficient water supply to service the project and the impact would be less than significant. 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. As stated in the Environmental Setting section, the RWF has available capacity to serve the project (see discussion for questions 2.19 "a" and "b"). The project would generate approximately 6,000 gallons of wastewater per day, which would represent less than 0.001 percent of the City's existing wastewater generation. Therefore, the project would not require the construction of new water or wastewater treatment facilities, and the impact would be less than significant. 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?

No Impact. Construction activities such as installation of new equipment and new landscaping features 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 feasibly be used on-site or recycled would be off-hauled 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.

During operation, solid waste generation is anticipated to be less than under existing conditions, given that the project would require fewer employees (up to 7 rather than up to 35). Furthermore, the project would adhere to the City's recycling and waste reduction programs. Given this, the project would not impair the attainment of solid waste reduction goals and there would be no impact. No mitigation is required.

e) Comply with federal, state, and local statutes and regulations related to solid waste?

Less than Significant. Assembly Bill 939 (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 landfill. 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 2010, the City reported an annual per capita disposal rate of 7 pounds per day (PPD) per employee, surpassing the Per Employee Disposal Target Rate of 9 PPD set for the City by the California Department of Resources Recycling and Recovery (CalRecycle). It is assumed that the amount of solid waste generated by the 7 daily employees would be minimal and would be similar to existing conditions. Therefore, the project would not result in a net increase of solid waste in the City that would jeopardize the City's consistency with AB 939 and SB 1016. Given this, the project would have a less than significant impact. 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?	☐	☐	☒	☐

Environmental Setting

The project site is located in a developed urbanized area just south of Highway 101 and east of San Tomas Expressway. The project site is developed with a two-story industrial building and parking lot, and landscaping along Raymond Street. The California Department of Forestry and Fire Protection identifies fire hazards based on relevant factors such as fuels, terrain, and weather. There are no Fire Hazard Severity Zones (FHSZ) within the urbanized portion of Santa Clara County that are ranked with moderate to high fire susceptibility. The project site along with the majority of the City is not located within a Very High Fire Hazard Severity Zone (VHFHSZ).

Impact Discussion

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

OR

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

OR

c) **Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

OR

d) **Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage change?**

Less than Significant. There are no formal evacuation routes or emergency response plans for the project site that would be impacted by the project. The project site and surrounding area are relatively flat and developed with urban uses, that preclude factors such as slopes or strong winds from exacerbating wildlife 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 flat and do not have any steep slopes or hillsides that would be susceptible to landslides or flooding. The project site is located on an existing developed site and would not require the installation or maintenance of infrastructure that may exacerbate fire risk. Further, the project site is not located within a FHSZ. This impact would be less than significant.

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,** and **Section 2.17, Tribal Cultural Resources**, the project includes mitigation measures to reduce potential impacts to wildlife and cultural resources. Implementation of **Mitigation Measure BIO-1, Mitigation Measure CUL-1**, and **Mitigation Measure CUL-2** would reduce potentially significant impacts 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. The General Plan Integrated EIR evaluated future development, as identified in the current General Plan, and concluded that the following significant environmental effects 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 solid waste generations beyond available capacity after 2024;
- Contribution to greenhouse gas emission exceeding the City's emission reduction target for 2035; and
- Increase in localized traffic noise level on roadway segments throughout the City.

Given the above, the project's contribution to these impacts must be evaluated.

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 development. 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 2.13, Population and Housing**, the project would not result in a substantial increase in employment. Therefore, the project's contribution to this significant impact would not be considerable.

Transportation and Traffic

As previously discussed in **Section 2.16, Transportation and Traffic**, the project is exempt from the City's VMT analysis requirements because it is within .05 mile of a transit stop along a high-quality transit corridor. However, VMT would be less than existing conditions, as the number of employees would be reduced from up to 35 to up to 7. Therefore, the project would not contribute to a cumulative traffic operation impact within the City.

Utilities and Service Systems

As previously discussed in **Section 2.18, 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, as data centers typically require very little equipment turnover, and employment would be similar to existing conditions. Therefore, the project's contribution to this significant cumulative impact would not be considerable.

Greenhouse Gas Emissions

As previously discussed in **Section 2.8, Greenhouse Gas Emission**, the project's GHG emissions would be consistent with applicable plans, policies or regulations. Therefore, the project's contribution to this significant cumulative impact would not be considerable.

Noise and Vibration

As previously discussed in **Section 2.13, Noise and Vibration**, the project would not exceed applicable noise level standards for the project site. Although the General Plan Integrated EIR identified a significant impact related to the localized noise increase in traffic noise level on roadway segments, the project would not result in a net increase in traffic on surrounding roadways and highways and would not contribute to an increase in traffic noise levels. Therefore, the project would not contribute to this significant cumulative impact.

Air Quality

By their nature, air quality impacts are cumulative. As discussed in **Section 2.3, Air Quality**, the project would make improvements to an existing industrial building and not require any major construction. Operational emissions would not exceed BAAQMD daily or annual thresholds for any criteria pollutant or violate an air quality standard. Therefore, it is anticipated that the project would not result in a cumulatively considerable net increase in criteria pollutants.

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 impacts, hazards, and noise which could otherwise effect

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.

3 References

City of Santa Clara.2010. *City of Santa Clara 2010-2035 General Plan.* Available: https://www.santaclaraca.gov/our-city/departments-a-f/community-development/planning-division/general-plan. Accessed September 2022.

City of Santa Clara.2011. *City of Santa Clara 2010-2035 General Plan Integrated Final EIR.* Available: https://www.santaclaraca.gov/our-city/departments-a-f/community-development/planning-division/general-plan. Accessed September 2022.

City of Santa Clara.2010. *City of Santa Clara 2010-2035 General Plan. Appendix 8.9. Historic Preservation and Resource Inventory.* Available: https://www.santaclaraca.gov/our-city/departments-a-f/community-development/planning-division/general-plan. Accessed September 2022.

City of Santa Clara City Code. 2021. *Chapter 9.10 Regulation of Noise and Vibration.* Available: https://www.codepublishing.com/CA/SantaClara/#!/html/SantaClara09/SantaClara0910.html. Accessed September 2022.

City of Santa Clara.2013. *City of Santa Clara Climate Action Plan*. Available: https://www.santaclaraca.gov/home/showpublisheddocument/10170/635713044859030000. Accessed September 2022.

City of Santa Clara.2010. *City of Santa Clara 2010-2035 General Plan. Appendix 8.13 Sustainability Goals and Policies Matrix.* https://www.santaclaraca.gov/our-city/departments-a-f/community-development/planning-division/general-plan. Accessed September 2022.

Santa Clara Valley Water District.2021. *Watersheds of Santa Clara Valley.* Available: https://www.valleywater.org/learning-center/watersheds-santa-clara-valley. Accessed September 2022.