STACK Data Center Expansion Project

Initial Study – Mitigated Negative Declaration

prepared by

City of San José
Planning, Building and Code Enforcement Department
200 East Santa Clara Street, Third Floor
San José, California 95113

in consultation with

Rincon Consultants, Inc.
449 15th Street, Suite 303
Oakland, California 94612

February 2020

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
rinconconsultants.com

MITIGATED NEGATIVE DECLARATION

The Director of Planning, Building and Code Enforcement has reviewed the proposed project described below to determine whether it could have a significant effect on the environment as a result of project completion. "Significant effect on the environment" means a substantial or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.

PROJECT NAME: STACK Infrastructure Expansion

PROJECT FILE NUMBER: SP19-018

PROJECT DESCRIPTION: Special Use Permit to allow the demolition of two existing buildings for the construction of an approximately 232,724-square foot data center on an approximately 9.26-gross acre site.

PROJECT LOCATION: STACK Infrastructure, 2001 Fortune Drive, San José, CA 95131, north side of Fortune Drive, approximately 500 feet westerly of Lundy Avenue.

ASSESSORS PARCEL NO.: 244-170-03 **COUNCIL DISTRICT:** 4

APPLICANT CONTACT INFORMATION: Rick Waddle, ASB Fortune Data Center, LLC, 2001 Fortune Drive, San Jose, CA, (571) 257-2537

FINDING

The Director of Planning, Building and Code Enforcement finds the project described above would not have a significant effect on the environment if certain mitigation measures are incorporated into the project. The attached Initial Study identifies one or more potentially significant effects on the environment for which the project applicant, before public release of this Mitigated Negative Declaration (MND), has made or agrees to make project revisions that will clearly mitigate the potentially significant effects to a less than significant level.

MITIGATION MEASURES INCLUDED IN THE PROJECT TO REDUCE POTENTIALLY SIGNIFICANT EFFECTS TO A LESS THAN SIGNIFICANT LEVEL

A. **AESTHETICS** – The project would not have a significant impact on this resource, therefore no mitigation is required.

B. **AGRICULTURE AND FORESTRY RESOURCES** – The project would not have a significant impact on this resource, therefore no mitigation is required.

C. **AIR QUALITY.**

Impact AQ-1: The project would have a potential excess cancer risk due to diesel particulate matter (DPM) exposure at nearby residences during construction.

MM AQ-1: Limit the number of hours generators can be operated for maintenance and testing purposes as follows:

- Generator operation for maintenance and testing purposes shall be limited so that the combined operation of the generator engines for testing and maintenance purposes does not exceed 480 hours (24 hours per generator) in any consecutive 12-month period. The operator shall retain records that include date and times of all reliable testing. The maximum number of hours of operation of the generators for maintenance and testing is regulated by the Bay Area Air Quality Management District (BAAQMD), which will issue individual Permits to Operate for each data center building (or groups of generators) as they are constructed. The conditions in each Permit to Operate will be enforceable by BAAQMD.
- Prior to issuance of an occupancy permit (temporary or final) for the data center, the project applicant shall provide a letter to the Director of Planning, Building and Code Enforcement (PBCE) from BAAQMD and/or a qualified consultant that documents that the sum of the hours of operation permitted and regulated by BAAQMD for the data center combined does not exceed 480 hours in any consecutive 12-month period. This letter shall include a copy of the BAAQMD approved Permit to Operate. Any change to the number of generators, the model of generators, or in the number of hours the generators will be tested, additional Air Quality analysis may be necessary. Request for such change shall be made to the City of San José Department of PBCE with documentation that total emissions from maintenance and testing for the data center would not exceed the significance thresholds for NO_X on both an average daily (54 pounds per day) and annual averaging (10 tons/year) period.

MM AQ-2: The project applicant or contractor shall select equipment during construction to minimize emissions. The project applicant shall submit a construction management plan to the Director of Planning, Building and Code Enforcement or the Director's designee for review and approval, prior to issuance of any grading and building permits. The construction management plan shall demonstrate that the off-road equipment used on site to construct the project would achieve a fleet-wide average 85-percent reduction in PM2.5 exhaust emissions or more. Options to achieve this reduction could include, but are not limited to, the following:

- All mobile diesel-powered off-road equipment larger than 25 horsepower and operating on the site for more than two days shall meet USEPA particulate matter emissions standards for Tier 4 engines or equivalent.
- Use of equipment that includes California Air Resources Board (CARB)-certified Level 3 diesel particulate filters or alternatively-fueled equipment (i.e., non-diesel).
- Use of added exhaust muffling and filtering devices.

D. BIOLOGICAL RESOURCES.

Impact BIO-1: The project would remove three landscaping trees that could support nesting birds protected under the Migratory Bird Treaty Act.

MM BIO-1: Nesting Bird Avoidance and Surveys.

- **Avoidance.** The project applicant shall schedule demolition and construction activities to avoid the nesting season. The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February 1st through August 15th (inclusive), as amended.
- **Nesting Bird Surveys.** If demolition and construction activities cannot be scheduled between August 16th and January 31st (inclusive), pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests shall be disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of construction activities during the early part of the breeding season (February 1st through April 30th inclusive) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May 1st through August 15th inclusive). During this survey,

the ornithologist shall inspect all trees and other possible nesting habitats immediately adjacent to the construction areas for nests.

- **Buffer Zones.** If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist, in consultation with the California Department of Fish and Wildlife, shall determine the extent of a construction free buffer zone to be established around the nest, typically 250 feet, to ensure that raptor or migratory bird nests shall not be disturbed during project construction. The no-disturbance buffer shall remain in place until the biologist determines the nest is no longer active or the nesting season ends. If construction ceases for two days or more then resumes again during the nesting season, an additional survey shall be necessary to avoid impacts to active bird nests that may be present.
- **Reporting.** Prior to any tree removal, or approval of any grading permits (whichever occurs first), the project applicant shall submit the ornithologist's report indicating the results of the survey and any designated buffer zones to the satisfaction of the Director of PBCE or the Director's designee, prior to issuance of any grading or building permits.

The project applicant shall submit a report of these preconstruction nesting bird surveys to the City to document compliance within 30 days of its completion.

E. CULTURAL RESOURCES

Impact CR-1: The project has the potential to unearth or adversely impact archaeological resources or human remains.

MM CR-1: Archaeological Monitoring. Prior to the issuance of any grading permit, a project-specific Cultural Resources Treatment Plan shall be prepared by a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for prehistoric archaeology (qualified archaeologist; National Park Service 1983). The Cultural Resources Treatment Plan shall be developed based on available records, including the subsurface archaeological investigation report completed for the adjacent Axis Residential Tower project which details specific artifacts recovered on the adjacent site. The Cultural Resources Treatment Plan shall reflect permit-level detail pertaining to depths and locations of all ground disturbing activities. The Cultural Resources Treatment Plan shall be prepared and submitted to the City's Director of Planning or Designee and the Historic Preservation Officer prior to approval of any grading permit. The Treatment Plan shall contain, at a minimum:

- Identification of the scope of work and range of subsurface effects (including location map and development plan), including requirements for preliminary field investigations.
- Description of the environmental setting (past and present) and the historic/prehistoric background of the parcel (potential range of what might be found).
- Development of research questions and goals to be addressed by the investigation (what is significant vs. what is redundant information).
- Detailed field strategy used to record, recover, or avoid the finds and address research goals.
- Analytical methods to be employed for identified resources.
- Requirements for report structure and outline of document contents.
- Disposition of the artifacts.
- Appendices: all site records, correspondence, and consultation with Native Americans, etc.

MM CR-2: Archaeological Monitoring Plan. Prior to the issuance of any grading permit, a project-specific Cultural Resources Treatment Plan shall be prepared by a qualified

archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for prehistoric archaeology (qualified archaeologist; National Park Service 1983). The Cultural Resources Treatment Plan shall be developed based on available records, including the subsurface archaeological investigation report completed for the adjacent Axis Residential Tower project which details specific artifacts recovered on the adjacent site. The Cultural Resources Treatment Plan shall reflect permit-level detail pertaining to depths and locations of all ground disturbing activities. The Cultural Resources Treatment Plan shall be prepared and submitted to the City's Director of Planning or Designee and the Historic Preservation Officer prior to approval of any grading permit. The Treatment Plan shall contain, at a minimum:

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- Requirements for report structure and outline of document contents.
- Disposition of the artifacts.
- Appendices: all site records, correspondence, and consultation with Native Americans, etc.

F. GEOLOGY AND SOILS – The project would not have a significant impact on this resource, therefore no mitigation is required.

G. GREENHOUSE GAS EMISSIONS

Impact GHG-1: The project would generate operational GHG emissions exceeding BAAQMD thresholds for small quantity stationary sources of GHG emissions.

MM GHG-1: Operational GHG Reductions. Prior to issuance of any grading permits, the project applicant shall submit a GHG reduction plan meeting the requirements outlined below and prior to project operation applicant shall implement the following mitigation measures to reduce GHG emissions associated with energy use at the proposed data center:

- Develop a GHG emissions reduction plan that would (1) reduce emissions from project implementation, and (2) demonstrate to the PBCE Supervising Environmental Planner that GHG emissions resulting from project implementation will be reduced by a sufficient amount for each site to achieve the 2030 standard of 660 of CO_2e/year.
- Since the project will be operational after December 31, 2020, it will be subject to 2030 GHG reduction targets. This target requires that the project has GHG emissions not exceeding 660 MT of CO_2e/year. Elements of this plan may include, but would not be limited to, the following:
    - Installation of solar power systems or other renewable electric generating systems that provide electricity to power on-site equipment and possibly provide excess electric power;
    - Construct onsite or fund off-site carbon sequestration projects (such as a forestry or wetlands projects for which inventory and reporting protocols have been adopted). If

the project develops an off-site project, it must be registered with the Climate Action Reserve or otherwise be approved by the BAAQMD in order to be used to offset Project emissions;

- Purchase of carbon credits to offset project annual emissions. Carbon offset credits must be verified and registered with The Climate Registry, the Climate Action Reserve, or another source approved by the California Air Resources Board or BAAQMD. The preference for offset carbon credit purchases includes those that can be achieved as follows: 1) within the City of San José; 2) within the San Francisco Bay Area Air Basin; 3) within the State of California; then 4) elsewhere in the United States. Provisions of evidence of payments, and funding of an escrow-type account or endowment fund would be overseen by the City.

H. HAZARDS AND HAZARDOUS MATERIALS.

Impact HAZ-1: The project has the potential to expose the public, construction workers and the environment to on-site hazardous materials due to past agricultural and industrial use and potential soil contamination.

MM HAZ-1: Soil Sampling. Prior to issuance of any grading permits, shallow soil samples shall be taken in the near surface soil on the proposed project site and tested for organochlorine pesticides and pesticide-based metals, arsenic and lead to determine if contaminants from previous agricultural operations occur at concentrations above established construction worker safety and commercial/industrial standard environmental screening levels. The result of soil sampling and testing will be provided to the City's Supervising Planner and Municipal Environmental Compliance Officer for review.
If contaminated soils are found in concentrations above regulatory environmental screening levels for construction worker safety and/or commercial/industrial standards, a Site Management Plan (SMP), Removal Action Plan (RAP), or equivalent document as directed by the regulatory agency (i.e., Santa Clara County Department of Environmental Health (SCCDEH) or the Department of Toxic Substance Control (DTSC)) must be prepared by a qualified hazardous materials consultant.

MM HAZ-2: Soil Management Plan. Prior to the issuance of any demolition or grading permit, the applicant shall contact the regulatory agency (i.e., SCCDEH or the DTSC) to discuss the proposed redevelopment project and perform any other necessary investigations and studies to address the residual contamination as deemed necessary by the SCCDEH.
The regulatory agency may require a Site Management Plan or similar document to manage the cleanup of contaminated soils. If applicable, a SMP shall be prepared by a qualified environmental professional prior to construction to reduce or eliminate exposure risk to human health and the Isooctane presence shall be noted in the soil management plan, along with provisions for proper handling and/or disposal of impacted groundwater, though no groundwater is anticipated to be encountered during construction. At a minimum, the SMP shall include the following:

- Stockpile management including dust control, sampling, stormwater pollution prevention and the installation of BMPs
- Mitigation of soil vapors
- Proper disposal procedures of contaminated materials
- Monitoring, reporting, and regulatory oversight notifications
- A health and safety plan for each contractor working at the site that addresses the safety and health hazards of each phase of site operations with the requirements and procedures for employee protection

- The health and safety plan will also outline proper soil handling procedures and health and safety requirements to minimize worker and public exposure to hazardous materials during construction.

The SMP shall detail procedures and protocols for management of soil containing environmental contaminants during site development activities. If applicable, cleanup and remediation activities on the site shall be conducted in accordance with the SMP prior to construction activities. All measures shall be printed on all construction documents, contracts, and project plans. The SMP shall be reviewed and approved by the City's Supervising Environmental Planner and Environmental Services Department Compliance Officer prior to issuance of any grading or building permit.

I. **HYDROLOGY AND WATER QUALITY** – The project would not have a significant impact on this resource, therefore no mitigation is required.

J. **LAND USE AND PLANNING** – The project would not have a significant impact on this resource, therefore no mitigation is required.

K. **MINERAL RESOURCES** – The project would not have a significant impact on this resource, therefore no mitigation is required.

L. **NOISE**

Impact N-1: The project has the potential to expose sensitive receptors to construction noise.

MM N-1: Construction Noise Control Plan. Prior to the issuance of any grading permits or demolition, the project applicant shall submit and implement a construction noise control plan that specifies hours of construction, noise minimization measures, posting and notification of construction schedules, equipment to be used, and designation of a noise disturbance coordinator. The noise disturbance coordinator shall respond to neighborhood complaints and shall be in place prior to the start of construction and implemented during construction to reduce noise impacts on neighboring residents and other uses.

- As part of the noise logistic plan and project, construction activities for the proposed project shall include, but is not limited to, the following best management practices:
    - Construction activities shall be limited to the hours between 7:00 a.m. and 7:00 p.m., Monday through Friday, unless permission is granted with a development permit or other planning approval.
    - No construction activities are permitted on the weekends at sites within 500 feet of a residence.
- Construct temporary noise barriers, where feasible, to screen mobile and stationary construction equipment. The temporary noise barrier fences would provide noise reduction if the noise barrier interrupts the line-of sight between the noise source and receiver and if the barrier is constructed in a manner that eliminates any cracks or gaps. Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Prohibit unnecessary idling of internal combustion engines.
- Locate stationary noise-generating equipment such as air compressors or portable power generators as far as possible from sensitive receivers. Construct temporary noise barriers to screen stationary noise-generating equipment when located near adjoining sensitive land uses. Temporary noise barriers could reduce construction noise levels by 5 dBA.

- Utilize "quiet" air compressors and other stationary noise sources where technology exists.
- Control noise from construction workers' radios to a point where it is not audible at existing residences bordering the project site.
- A temporary noise control blanket barrier could be erected, if necessary, along building facades facing construction sites. This mitigation would only be necessary if conflicts occurred which were irresolvable by proper scheduling. Noise control blanket barriers can be rented and quickly erected.
- Notify all adjacent business, residences, and other noise-sensitive land uses of the construction schedule, in writing, and provide a written schedule of "noisy" construction activities to the adjacent land uses and nearby residences.
- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

The noise control plan shall be submitted to the Director of Planning, Building, and Code Enforcement or Director's designee for review and approval prior to the issuance of any grading permit.

M. POPULATION AND HOUSING – The project would not have a significant impact on this resource, therefore no mitigation is required.

N. PUBLIC SERVICES – The project would not have a significant impact on this resource, therefore no mitigation is required.

O. RECREATION – The project would not have a significant impact on this resource, therefore no mitigation is required.

P. TRANSPORTATION / TRAFFIC

Impact T-1: The project would generate Vehicle Miles Traveled (VMT) above the City's threshold resulting in a significant impact.

MM T-1: Transportation Demand Management Plan. Prior to the issuance of any grading permits or demolition, the project applicant shall submit and implement a Transportation Demand Management Plan that includes the following VMT reduction measures:

- Provide commute trip reduction marketing and education for 100 percent of eligible employees. This would educate and encourage employees to use transit, shared rides, and active modes, therefore lowering the number of single occupancy vehicle trips.
- Provide rideshare program for 100 percent of eligible employees. This would encourage employees to carpool with other employees and/or through ride matching services, which help employees find other commuters traveling in the same direction.
- Provide a TDM plan prior to issuance of the Building permit. Include annual monitoring requirement establishing an average daily trip (ADT) cap of 31 a.m. peak-hour traffic. The annual monitoring report must demonstrate the project is within 10 percent of the ADT trip cap and must be prepared by a traffic engineer.

- If the project is not in conformance with the trip cap, the project may add additional TDM measures to meet the trip cap. A follow up report will be required within six months. If the project is still out of conformance, penalties will be assessed (see Council Policy 5-1).

The combination of mitigation measures would reduce the project VMT to 14.36 per employee, which is below the City's threshold of 14.37 VMT per employee. The Transportation Demand Management Plan will be conditioned as part of the project prior to the approval of the Special Use permit by the Director of Planning, Building, and Code Enforcement.

Q. **TRIBAL CULTURAL RESOURCES** – The project would not have a significant impact on this resource, therefore no mitigation is required.

R. **UTILITIES AND SERVICE SYSTEMS** – The project would not have a significant impact on this resource, therefore no mitigation is required.

S. **WILDFIRE** – The project would not have a significant impact on this resource, therefore no mitigation is required.

T. **MANDATORY FINDINGS OF SIGNIFICANCE**
The project would not substantially reduce the habitat of a fish or wildlife species, be cumulatively considerable, or have a substantial adverse effect on human beings, therefore no mitigation is required.

PUBLIC REVIEW PERIOD

Before 5:00 p.m. on **Wednesday March 4th, 2020** any person may:

1. Review the Draft Mitigated Negative Declaration (MND) as an informational document only; or

2. Submit written comments regarding the information and analysis in the Draft MND. Before the MND is adopted, Planning staff will prepare written responses to any comments, and revise the Draft MND, if necessary, to reflect any concerns raised during the public review period. All written comments will be included as part of the Final MND.

Rosalynn Hughey, Director
Planning, Building and Code Enforcement

2/12/2020
Date

Deputy

Kenneth Rosales
Environmental Project Manager

Circulation period: February 14, 2020 to March 4, 2020

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Tables

Figures

Appendices

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Acronyms and Abbreviations

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACM	asbestos-containing materials
BAAQMD	Bay Area Air Quality Management District
BMP	best management practice
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CalOSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources Recycling and Recovery
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
dB	decibels
dBA	A-weighted sound pressure level
DNL	Day-Night Average Level
DOC	California Department of Conservation
DTSC	Californian Department of Toxic Substances Control
EO	Executive Order
FAR	Floor Area Ratio
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration

GHG	greenhouse gases
HVAC	heating, ventilation, and air conditioning
HWCL	California Hazardous Waste Control Law
IPCC	Intergovernmental Panel on Climate Change
ITE	Institute of Transportation Engineers
LBP	lead-based paint
LID	low impact development
lbs/day	pounds per day
Leq	Equivelent continuous sound level
Lmax	the highest value measured by a sound level meter over a given period of time
Lmin	the lowest value measured by a sound level meter over a given period of time
Lw	Sound power level
MTC	Metropolitan Transportation Commission
NO_2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
PCB	polychlorinated biphenyls
PG&E	Pacific Gas and Electric Company
$PM_{2.5}$	suspended particulate matter (2.5 microns or smaller)
PM_{10}	suspended particulate matter (10 microns or smaller)
PPV [in/sec]	particle velocity in inches per second
ROG	reactive organic gases
RWF	Regional Wastewater Facility
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
VTA	Santa Clara Valley Transportation Authority
SFBAAB	San Francisco Bay Area Air Basin
SJFD	San José Fire District
SJMC	San José Municipal Code
SJPD	San José Police Department
SJWC	San José Water Company
SMP	Soil Management Plan
SP	Service Population

SWPPP	Stormwater Pollution Protection Plan
SWRCB	California State Water Resources Control Board
TAC	toxic air contaminants
TCR	Tribal Cultural Resources
UST	underground storage tank
UWMP	urban water management plan
VdB	vibration decibels
VHFHSV	very high fire hazard severity zone
WTP	water treatment plant

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1 Introduction and Purpose

1.1 Purpose of the Initial Study

The City of San José, as the Lead Agency, has prepared this Initial Study for the STACK Data Center Project in compliance with the California Environmental Quality Act (CEQA), the CEQA guidelines (California Code of Regulations Section 15000 et. Seq.) and the regulations and policies of the City of San José, California.

The project proposes to demolish two existing industrial buildings and construct a new data center on site. The proposed data center and office building would measure three-stories in height and would consist of approximately 239,7243 gross square feet of floor area. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed project.

1.2 Public Review Period

Publication of this Initial Study marks the beginning of a 20-day public review and comment period. During this period, the Initial Study will be available to local, State, and federal agencies and to interested organizations and individuals for review. Written comments concerning the environmental review contained in this Initial Study during the 20-day public review period should be sent to:

Kenneth Rosales, Planner
City of San José
Department of Planning, Building, and Code Enforcement
Environmental Review Section
200 East Santa Clara Street, Third Floor
San José, California 95113
408-794-7386
kenneth.rosales@sanjoseca.gov

1.3 Consideration of the Initial Study and Project

Following the conclusion of the public review period, the Director will consider the adoption of the Initial Study-Mitigated Negative Declaration or the project at a regularly scheduled meeting. The City shall consider the Initial Study-Mitigated Negative Declaration together with any comments received during the public review process. Upon adoption of the Initial Study-Mitigated Negative Declaration, the City could proceed with project approval.

1.4 Notice of Determination

If the project is approved, the City will file a Notice of Determination, which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 30 days. The filing of the Notice of Determination starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15075[g]).

2 Project Information

2.1 Project Title

STACK Data Center Expansion Project (SP19-018)

2.2 Lead Agency Contact

Kenneth Rosales, Planner
City of San José
Department of Planning, Building, and Code Enforcement
Environmental Review Section
200 East Santa Clara Street, Third Floor
San José, California 95113
408-794-7386
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Cassandra van der Zweep, Supervising Environmental Planner
City of San José
Department of Planning, Building, and Code Enforcement
200 East Santa Clara Street, Third Floor
San José, California 95113
(408) 535-7659
Cassandra.vanderZweep@sanjoseca.gov

2.3 Project Applicant

Rick Waddle
STACK Infrastructure
2001 Fortune Drive
San José, California 95131

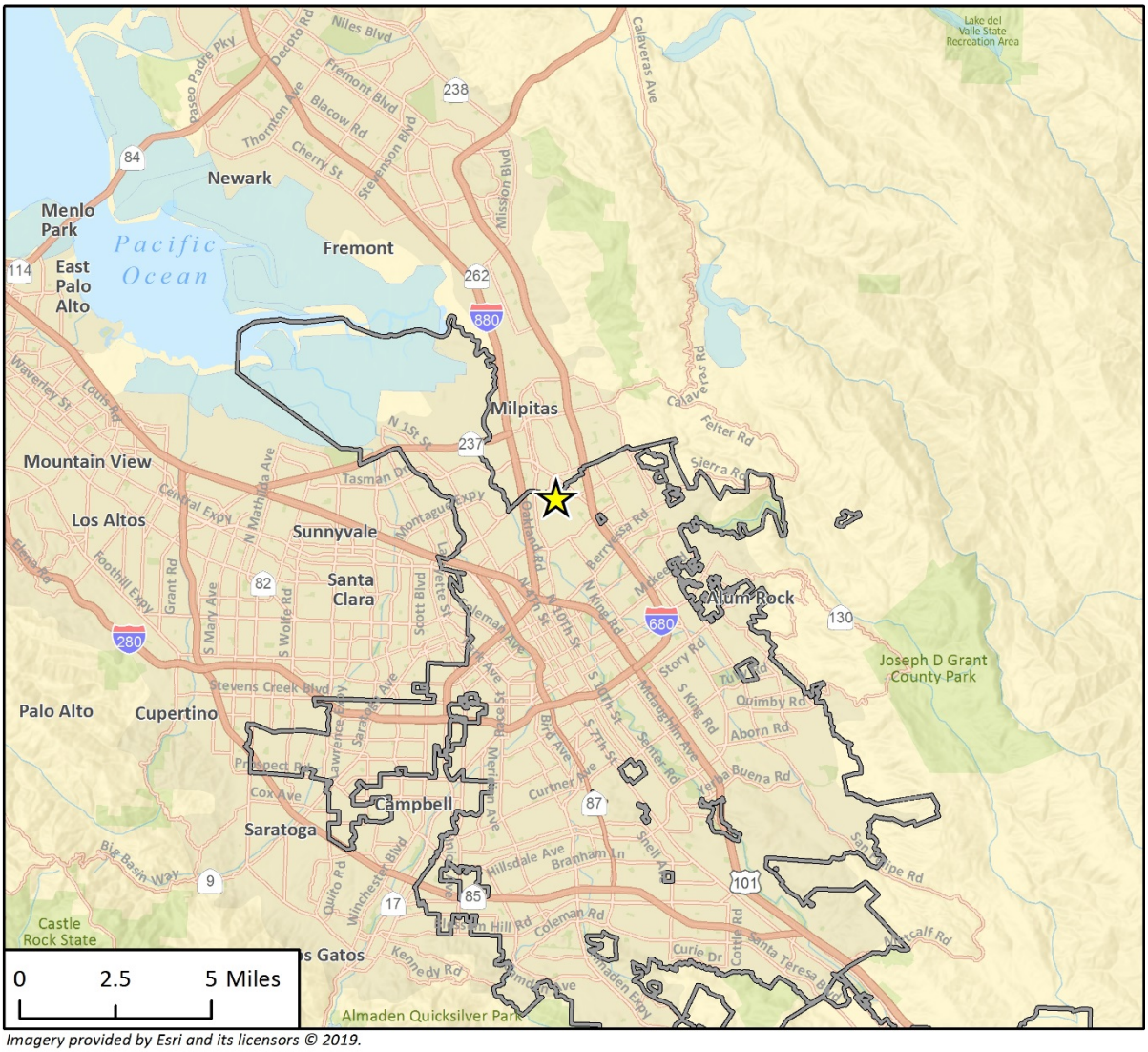
2.4 Project Location

The 9.26-acre project site is located at 2001 Fortune Drive in north-east San José. Regional access to the site is available from Montague Expressway, Interstate 880 (I-880), and Interstate 680 (I-680). Figure 1 shows the location of the site in the region and Figure 2 shows the project site in its neighborhood context.

2.5 Assessor's Parcel Number

244-17-003

Figure 1 Regional Location



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Project Location

San Jose City Limits

N

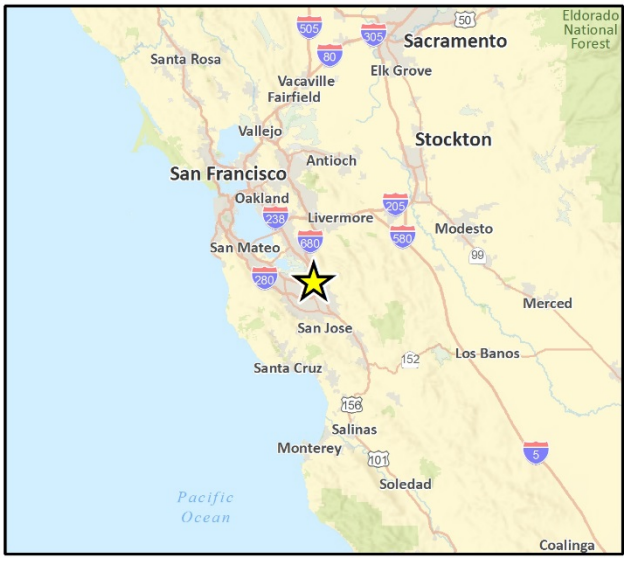

Figure 2 Project Site

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Fig 2 Project Location

2.6 General Plan Designation and Zoning District

Transit Employment Center

The General Plan designates the site as Transit Employment Center (TEC) on the Land Use Transportation Diagram. The City of San José's General Plan establishes the TEC designation to allow for development of employment centers in proximity to BART and light rail facilities in Berryessa/Milpitas. Properties within this designation are intended for commercial, office, industrial, and some limited residential developments or a compatible mix of these uses. The TEC areas are intended to be similar to the City's Industrial Park designation however, with more intense, transit-oriented land use patterns. There is a maximum Floor Area Ratio (FAR) of 12 (4 to 25 stories) in this General Plan designation.

The project site is within the TEC Zoning District. Chapter 20.50 of the City's Municipal Code defines the TEC district as one intended for intensive industrial park and supportive commercial uses with development generally at least four stories in height, consistent with General Plan height policies, and in proximity to existing or planned transit in employment districts designated as growth areas in the General Plan. The TEC designation is suitable for development with retail and service commercial uses on the first two floors; with office, research and development or industrial use on upper floors; as well as wholly office, research and development, or other industrial park uses on all floors. Site design for development in the TEC district should support more intensive, transit-oriented uses than those typically found in the Industrial Park District. Development of large hotels of at least two hundred rooms and four or more stories in height is also supported in the TEC zoning designation. New development should orient buildings towards public streets and transit facilities and include features to provide an enhanced pedestrian environment.

2.7 Habitat Plan Designation

Land Cover Designation: Urban-Suburban

Fee Zone: Urban Areas (Nitrogen Deposition Fee)

2.8 Project-Related Approvals, Agreements, and Permits

The City of San José is the lead agency with responsibility for approving the project. Discretionary approval from other public agencies is not necessary. The project would require the following discretionary approvals from the City of San José:

- Special Use Permit
- Public Works Clearance: Grading Permits and Street Improvement Permit, etc.
- Building Clearance: Demolition, Building, and Occupancy Permits

3 Project Description

3.1 Project Description

Data Center

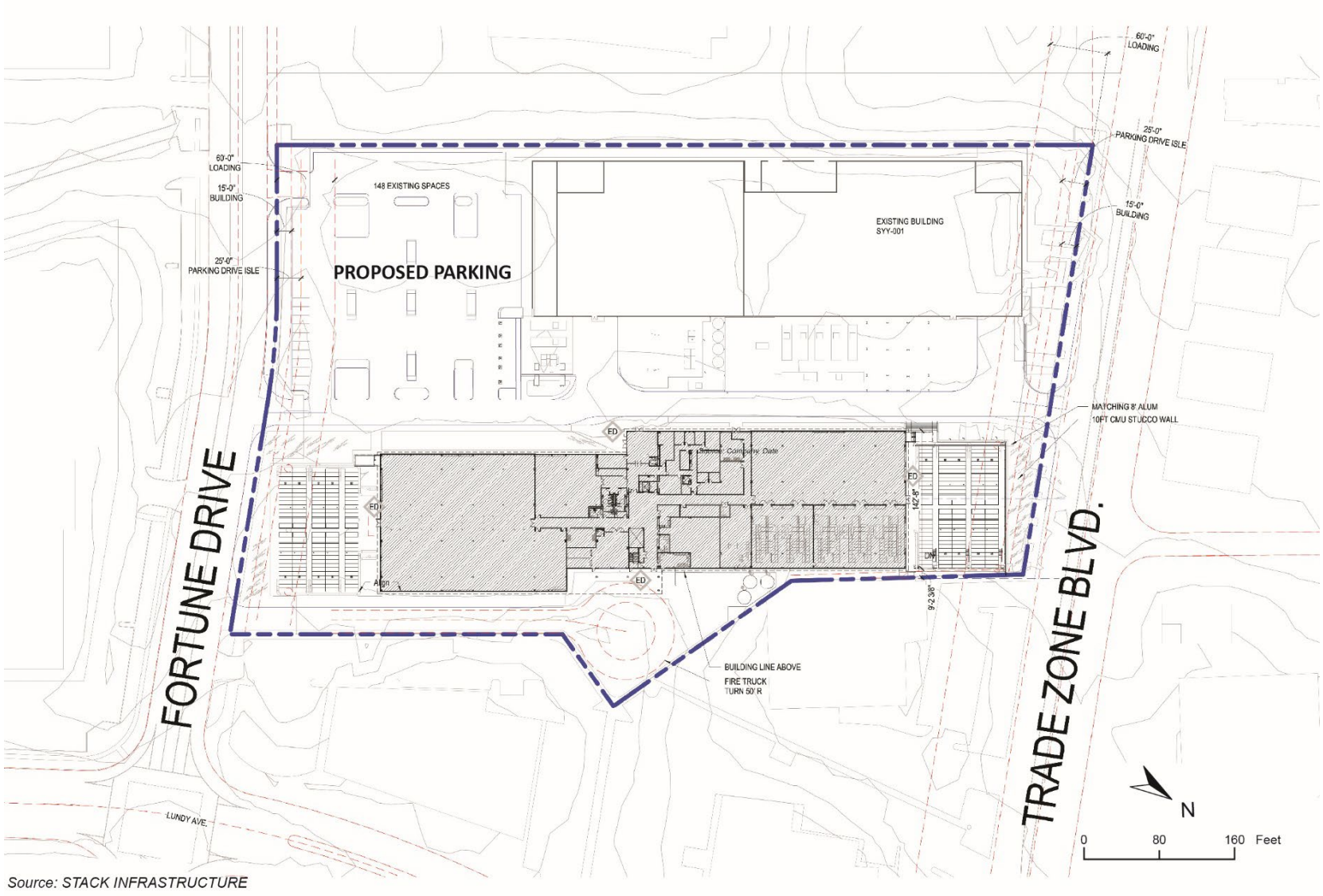
The approximately 9.26-acre project site is developed with two industrial buildings, surface parking, and minimal landscaping. The project would entail the demolition of an existing one-story industrial building currently used for offices, storage, and maintenance purposes and construction of a new data center building on the site. The remaining building on-site is already used as a data center and would not be demolished. The new data center building would measure three stories in height (60.8 feet to top of building, 106.3 feet to top of rooftop mechanical equipment) and would consist of approximately 239,724 gross square feet, including, but not limited to an approximately 112,600 square foot data center, 20,941 square feet of office space,7,448 square feet used for lobby, conference rooms, breakrooms, and building maintenance supply storage on the first floor, 51,278 square feet of electrical rooms and storage, and approximately 46,000 square feet of mechanical space and circulation. The project would include 117 on-site parking spaces. The building and parking area would cover 85 percent of the site. The remaining 15 percent would be landscaped, with a stormwater retention area the southeastern corner of the site. Vehicle access to the project site would be primarily provided via one middle two-way gated driveway along Fortune Drive. There are three additional driveways (one along Trade Zone Boulevard and two along Fortune Drive) that have limited use for delivery and emergency vehicle access. Table 1 contains a project summary, Figure 3 shows the proposed site plans and Figure 4 and Figure 5 show the proposed project elevations. Figure 6 shows the proposed project landscaping plan.

Table 1 Project Summary

Project Site Size (square feet)	
Project Site Area	9.26 acres
Building Area (square feet)	
Data Center	~112,600
Office	20,941
Lobby, conference rooms, breakrooms, and building maintenance supply storage	7,448
Mechanical and Circulation	~46,000
Electrical rooms and storage	51,278
Landscaping (square feet)	
Landscape	60,504 (15% site coverage)
Floor Area Ratio (FAR)	
FAR	0.79

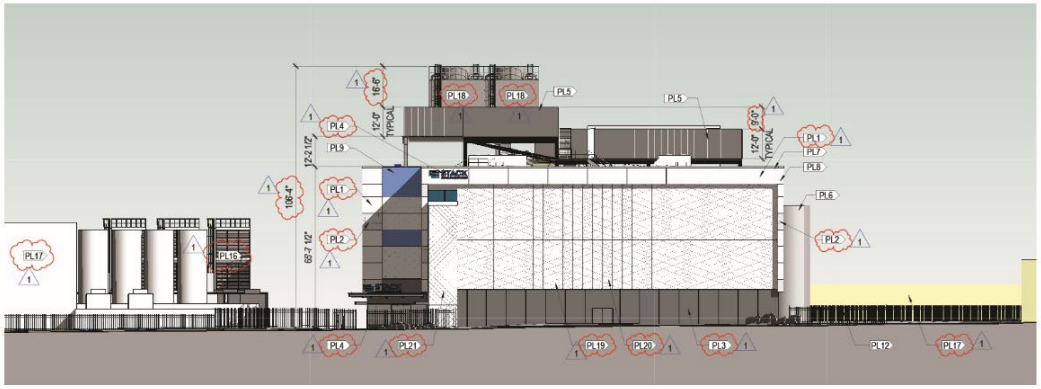
Building Height (feet)	
Data Center Building	60.8 feet to top of structure, 65.8 feet to top of parapet, 106.3 feet to top of mechanical
Parking Stalls	
Standard	117 (including 103 standard, 7 accessible, 7 clean air spaces)
Bicycle	8 racks

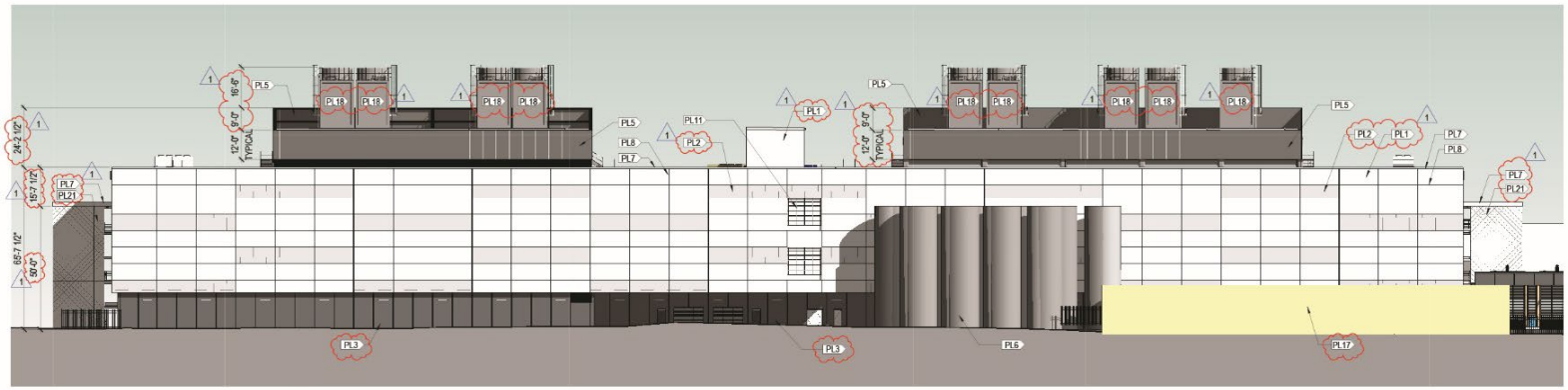
Figure 3 Proposed Site Plan



Source: STACK INFRASTRUCTURE

Figure 4 Proposed Project Elevation – East and South

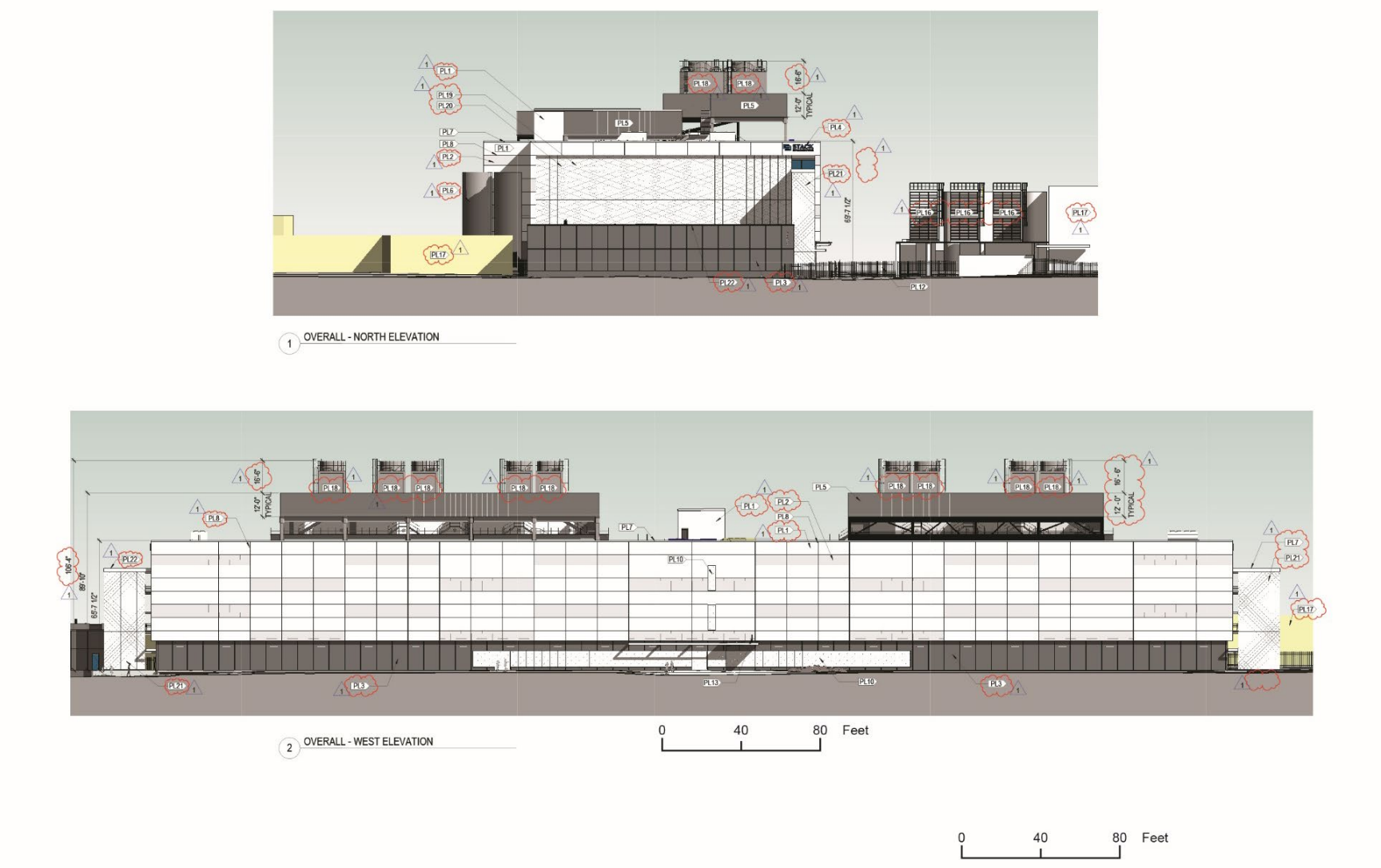




0 40 80 Feet

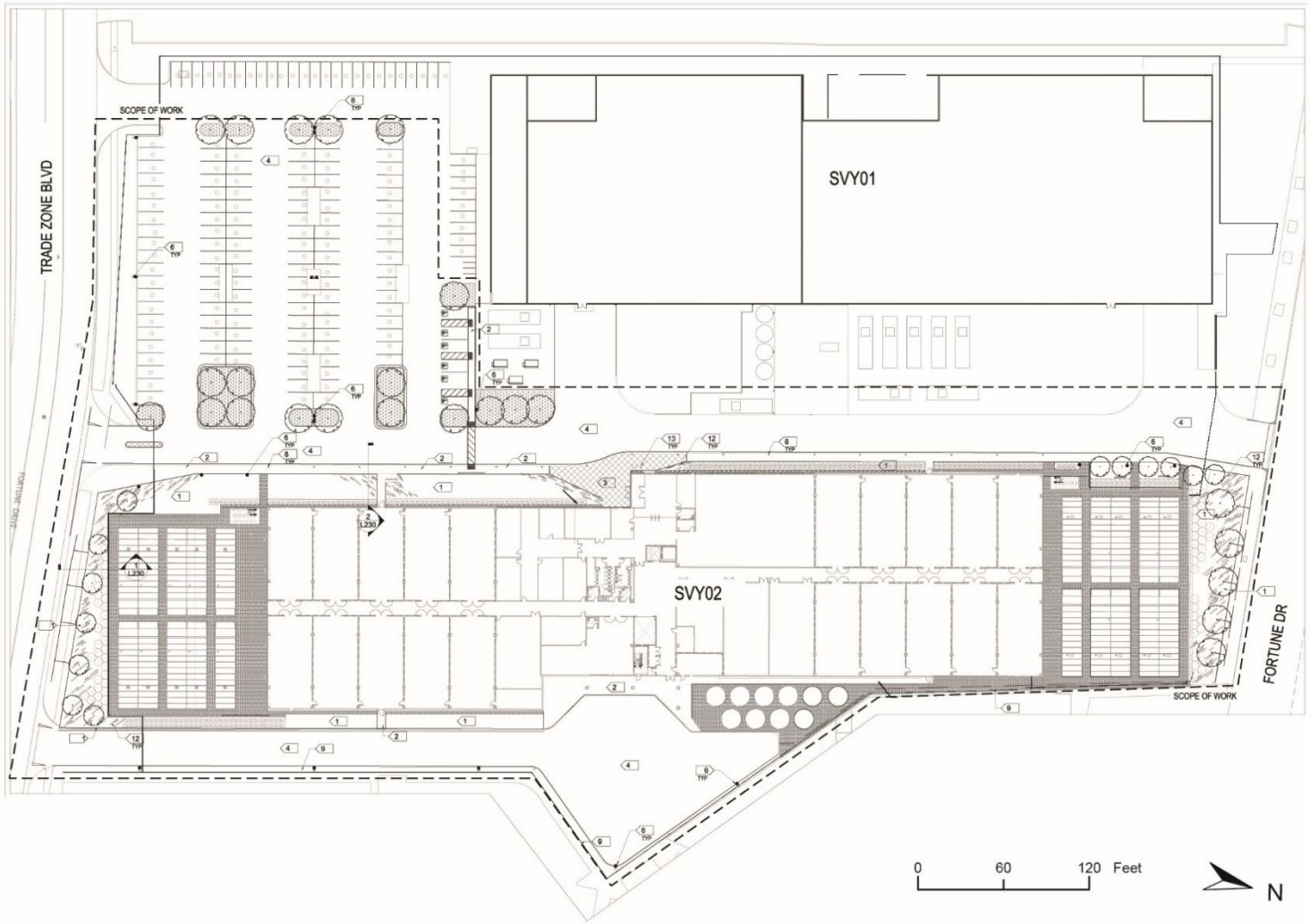
Source: HGA

Figure 5 Proposed Project Elevations – North and West



Source: HGA

Figure 6 Preliminary Landscape Plan



Source: HGA

Mechanical Equipment

Mechanical equipment includes heating, ventilation, and air condition (HVAC) equipment which is typically located on the roof of a building or within an interior mechanical room. The project's mechanical equipment would include nine rooftop HVAC systems and 20 stand-by generators. The generators would be located in acoustical enclosures on the north and south sides of the building. Each of the 20 diesel-powered stand-by generators would have the capacity to produce three megawatts (MW) of electric power, or 60 MW in total when all generators are operating at the same time.

According to the California Energy Commission (CEC), sites producing more than 50 MW are considered power plants and subject to power plant licensing regulation through the CEC. However, due to standard redundancy practices, 4 generators would remain inactive during power outage events as a back-up in case of failure of the operable generators. Thus, the maximum number of generators in operation at the project site would be 16, producing a maximum of 48 MW of electric power. Therefore, the project would not be subject to power plant licensing through the CEC. Additionally, two new fuel tanks would be installed to provide fuel for the generators. Fuel tanks would be located beneath the generators.

Construction

Project construction is estimated to occur over an 18-month period and would include typical construction phases such as demolition, site preparation and grading, building construction, paving, and architectural coating.

During project construction, equipment anticipated to be used includes backhoes, dozers, pavers, concrete mixers, trucks, air compressors, saws, and hammers. Trucks providing deliveries and hauling to and from the project site would access the site from Fortune Drive. The project would require minimal grading due to previous grading for the existing buildings and parking lots. It is estimated that there would be no net import/export of soil at the project site.

Site Access, Circulation, and Parking

The main vehicular access to the project site for employees and visitors would be provided from the middle driveway along Fortune Drive. The eastern driveway on Fortune Drive would be used for deliveries and emergency access. The western driveway along Fortune Drive and the driveway on Trade Zone Boulevard would be for emergency access only. All driveways would be secured with gates. Pedestrian and bicycle access to the project site would be provided on the two driveways on Fortune Drive.

The parking lot would provide 117 parking spaces including eight Americans with Disabilities Act (ADA) accessible parking spaces. Additionally, 8 bike parking spaces would be provided in the southwest and northeast corners of the parking lot.

Landscape and Trees

Site landscaping is currently limited to the building perimeter, in surface parking lots and along the Fortune Drive and Trade Zone Boulevard frontages and side property lines. According to an arborist report prepared for the project site by Anderson Tree Care on October 18, 2019 (Appendix ARB), the site currently features 116 trees and 32 trees located on adjacent properties, but that overhang the project site. Most of the tree species at the project site include shamel ash (*Fraxinus uhdei*), coast

redwood (*Sequoia sempervirens*), Chinese tallow (*Triadica sebifera*), Callery pear. Of the trees on-site, coast redwood and northern red oak trees are native; shamel ash, Mexican fan palm, Lombardy poplar, Canary Island pine, Liquidambar, and Chinese tallow trees are non-native, and Callery pear and purple-leaf plum trees are orchards.

Proposed landscaping would consist of ornamental trees shrubs and grasses with a decorative landscaping feature including salvaged concrete slabs along the western building perimeter leading to the entrance. With project implementation, 44 trees would be removed (of those, 34 are ordinance sized) and 72 would be retained and protected during project construction. A total of 18 new ornamental trees would be planted along Fortune Drive, Trade Zone Boulevard and along the vehicle access road at the center of the project site. Figure 6 shows the location of proposed trees and shrubs at the project site. The landscaped area would cover 15 percent of the project site.

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is "Potentially Significant" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

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

Determination

Based on this initial evaluation:

☐ 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 to 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 "less than significant with mitigation incorporated" 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 potential 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.

Signature

2/12/2020
Date

Kenneth Rosales
Printed Name

Planner II
Title

4 Environmental Checklist

4.1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
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 non-urbanized 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 that would adversely affect daytime or nighttime views in the area?	☐	☐	■	☐

Setting

The project site is an irregular rectangular-shaped property, bounded by Fortune Drive, a two-lane roadway, on the south, one-story commercial buildings to the east and west; and Trade Zone Boulevard to the north. The site is occupied by STACK Infrastructure and the two buildings on-site are used for a data center and office. The street frontage features sidewalks and a landscaped strip between buildings and the sidewalk that contains trees, shrubs, and grass. The site also includes an 8-foot wrought iron fence along the perimeter of the project site with automated gates on driveways with access to Trade Zone Boulevard and Fortune Drive.

The project site is located in a fully urbanized area of San José that supports a mix of industrial, commercial, and residential land uses in buildings that are generally one to three stories in height. The surrounding structures are utilitarian in design, with mostly white and light-colored facades.

Views of the Diablo Range can be seen from the westerly portion of the site, facing east (Figure 7).

Figure 7 View of Diablo Range Looking through Project Site

Photo 1: View of Diablo Range looking east from the west side of the project site.

Regulatory Setting

Envision San José 2040 General Plan

The General Plan includes Community Design Goals, Policies, and Implementation Actions that guide the form of future development in San José and help tie individual projects to the vision for the surrounding area and the city as a whole. According to Chapter 4 of the City's General Plan, Quality of Life, scenic resources in San José include vistas of the broad sweep of the Santa Clara Valley, the hills and mountains that frame the valley floor, the bay lands, and the urban skyline, particularly high-rise development. Scenic corridors that afford aesthetic views have been designated to help preserve thoroughfares that provide vistas of city's scenic resources.

The City's General Plan also identifies gateways and urban corridors as important scenic resources. Gateways announce to visitors or residents that they are entering the city or a unique neighborhood. Urban corridors designated in the General Plan are all state and interstate highways in the City's Sphere of Influence. Together, gateways and urban corridors contribute greatly to the overall image of the city and of its individual communities. The following policies are specific to aesthetic resources and apply to the proposed project (City of San José 2011a):

Policy CD-1.7 Require developers to provide pedestrian amenities, such as trees, lighting, recycling and refuse containers, seating, awnings, art, or other amenities, in pedestrian areas along project frontages. When funding is available, install pedestrian amenities in public rights-of-ways.

Policy CD-1.8 Create an attractive street presence with pedestrian-scaled building and landscape elements that provide an engaging, safe, and diverse walking environment. Encourage compact, urban design, including use of smaller building footprints, to promote pedestrian activity throughout the City.

Policy CD-1.9 Give the greatest priority to developing high-quality pedestrian facilities in areas that will most promote transit use and bicycle and pedestrian activity. In pedestrian-oriented areas such as Downtown, Urban Villages, or along Main Streets, place commercial and mixed-use building frontages at or near the street facing property line with entrances directly to the public sidewalk, provide high quality pedestrian facilities that promote pedestrian activity, including adequate sidewalk dimensions for both circulation and outdoor activities related to adjacent land uses, a continuous tree canopy, and other pedestrian amenities. In these areas, strongly discourage parking areas located between the front of buildings and the street to promote a safe and attractive street facade and pedestrian access to buildings.

Policy CD-1.11 To create a more pleasing pedestrian-oriented environment, for new building frontages, include design elements with a human scale, varied and articulated facades using a variety of materials, and entries oriented to public sidewalks or pedestrian pathways. Provide windows or entries along sidewalks and pathways; avoid blank walls that do not enhance the pedestrian experience. Encourage inviting, transparent facades for ground-floor commercial spaces that attract customers by revealing active uses and merchandise displays.

Policy CD-1.12 Use building design to reflect both the unique character of a specific site and the context of surrounding development and to support pedestrian movement throughout the building site by providing convenient means of entry from public streets and transit facilities where applicable, and by designing ground level building frontages to create an attractive pedestrian environment along building frontages. Unless it is appropriate to the site and context, franchise-style architecture is strongly discouraged.

Policy CD-1.13 Use design review to encourage creative, high-quality, innovative, and distinctive architecture that helps to create unique, vibrant places that are both desirable urban places to live, work, and play and that lead to competitive advantages over other regions.

Policy CD-1.16 Strongly discourage gates and fences at the frontage of commercial properties to maintain an open and inviting commercial character and avoid the inhospitable appearance of security barriers.

Policy CD-1.17 Minimize the footprint and visibility of parking areas. Where parking areas are necessary, provide aesthetically pleasing and visually interesting parking garages with clearly identified pedestrian entrances and walkways. Encourage designs that encapsulate parking facilities behind active building space or screen parked vehicles from view from the public realm. Ensure that garage lighting does not impact adjacent uses, and to the extent feasible, avoid impacts of headlights on adjacent land uses.

Policy CD-1.18 Encourage the placement of loading docks and other utility uses within parking structures or at other locations that minimize their visibility and reduce their potential to detract from pedestrian activity.

Policy CD-1.22 Include adequate, drought-tolerant landscaped areas in development and require provisions for ongoing landscape maintenance.

Policy CD-1.23 Further the Community Forest Goals and Policies in this Plan by requiring new development to plant and maintain trees at appropriate locations on private property and along public street frontages. Use trees to help soften the appearance of the built environment, help provide transitions between land uses, and shade pedestrian and bicycle areas.

Policy CD-1.24 Within new development projects, include preservation of ordinance-sized and other significant trees, particularly natives. Avoid any adverse effect on the health and longevity of such trees through design measures, construction, and best maintenance practices. When tree preservation is not feasible, include replacements or alternative mitigation measures in the project to maintain and enhance our Community Forest.

Policy CD-1.27 When approving new construction, require the undergrounding of distribution utility lines serving the development. Encourage programs for undergrounding existing overhead distribution lines. Overhead lines providing electrical power to light rail transit vehicles and high tension electrical transmission lines are exempt from this policy.

San José Industrial Design Guidelines

Industrial Design Guidelines were developed by the City's Planning Division and adopted by the Planning Commission in August 1992. The guidelines include "common elements" and "specific development types" chapters to address design issues of neighborhood compatibility, project function, and aesthetics.

Outdoor Lighting Policy

The City of San José's Outdoor Lighting Policy (City Council Policy 4-3) promotes energy-efficient outdoor lighting on private development to provide adequate light for nighttime activities while benefiting the continued enjoyment of the night sky and continuing operation of the Lick Observatory by reducing light pollution and sky glow.

Impact Analysis

a. Would the project have a substantial adverse effect on a scenic vista?

b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The project site is located on Fortune Drive, between Ringwood Avenue and Lundy Avenue. These roadways are not designated as scenic corridors in the General Plan (City of San José 2011a). Neither is the project site located at a designated city gateway. The nearest gateway is Montague Boulevard between Oakland Road and McCarthy Boulevard, 0.5 mile west of the project site. The nearest designated urban corridors are I-880 and I-680, approximately 0.8 mile to the east and west.

Due to intervening structures, the project site would not be visible from I-880 and I-680. However, as shown in Figure 7, scenic vistas of the Diablo Range are afforded at and through the project site from Fortune Drive. The project involves the construction of a new three-story, 106.3-foot tall (including rooftop mechanical equipment) data center building as well as access and loading roads and landscaping. The project would increase the massing and intensity of development on the

project site compared to existing one-story buildings on-site. As such, the project would reduce scenic vistas at the project site.

Scenic vistas of the hills from Fortune Drive are most commonly experienced by viewers traveling along the sidewalk and roadway. Therefore, the project would only obstruct views for a short time as viewers pass the project site. Breaks between buildings and at roadway inspections would continue to provide scenic vistas of the hills. Furthermore, as noted under *Project Description* above, the project site is situated in an area of the city characterized by residential, commercial, and industrial development and is not considered a scenic destination. Therefore, although the project would increase massing and height at the project site, impacts would be less than significant. Furthermore, the project would involve the removal and replacement of 44 existing trees on the site, none of which are included on the City's adopted Heritage Tree list (City of San José 2019c). Neither rock outcroppings nor historic buildings are located on the project site. The project sponsor would be required to comply with the City's Tree Replacement Ratios policy. Therefore, the project would not damage scenic resources along a scenic highway. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. *Would the project, in non-urbanized 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?*

The project site occurs along Fortune Drive in a portion of San José characterized by a mixture of commercial, industrial, and residential uses. The project would increase the height and mass of the existing data center. However, the project would be consistent with applicable General Plan and Zoning Ordinance regulations.

The proposed project would increase the massing and intensity of development on the site compared to existing conditions. As such, the proposed project would represent a change in the scenic character of the site. However, the proposed structures would be similar in scale to the residences across Trade Zone Boulevard and would not degrade the visual character or quality of the area. As noted in Section 4.11, *Land Use*, the project would be consistent with building height and FAR standards for the TEC General Plan land use designation. Per City Industrial District Design Guidelines, building entrances would be oriented to the street and the proposed loading dock would be located on the eastern side of the building to minimize visibility from the street.

The TEC Zoning District allows a maximum height of 120 feet and requires setbacks to be 15 feet in the front, 0 feet in the side, and 25 feet in the rear. The project would provide the minimum setback requirements on all sides (refer to Figure 3). As shown in the Landscaping Plan (Figure 6), 18 ornamental trees would be retained along the project frontage with Fortune Drive and 31 additional ornamental trees would be retained along the project frontage with Trade Zone Boulevard during project operations. Furthermore, 18 new ornamental trees, smaller shrubs, and grasses would be planted along Fortune Drive and Trade Zone Boulevard and along the vehicle access road at the center of the project site. These landscaping features would soften views of the new structures on the site and would be like the landscaping of both developments to the east and west of the site along Fortune Drive. Therefore, the proposed project would not substantially degrade the existing visual character or quality of the project site or its surroundings, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

The project site is in an urban area with high levels of existing lighting. On the project site, these include lights from vehicles entering and exiting the project site, wall-mounted security lights, street lights along Fortune Avenue and Trade Zone Boulevard. Lighting sources at the surrounding properties include parking lot and exterior structure lighting at the adjacent commercial uses and streetlights and vehicle lights along Fortune Avenue. The primary glare source in the area is sunlight reflection off light-colored and reflective building materials and finishes, and metallic and glass surfaces of vehicles parked in the commercial lots on all sides of the project site.

The project's exterior windows could generate glare from reflected sunlight during certain times of the day, but the level of glare would be comparable to that already occurring at the surrounding commercial areas and residences.

The project design would comply with exterior lighting policies outlined in the City of San José's Industrial Design Guidelines including policies prohibiting spillover of exterior lighting onto adjacent properties and limitations on the height of new light fixtures adjacent to residential uses. Compliance with the City's Industrial Design Guidelines and Outdoor Lighting Policy, including use of low-pressure sodium lighting, would ensure that project light sources would not have a significant impact on the night sky, as they would add only incrementally to the existing background light levels already present at surrounding urban development. Headlights of vehicles entering and exiting the project site at night would produce light and glare comparable to existing conditions and would not affect nearby light-sensitive receptors.

The building's commercial signage will be reviewed and conditionally approved through the entitlement process. Prior to installation, a sign permit will be required. Signage must adhere to the regulations of the City's Sign Ordinance (San José Municipal Code [SJMC] Chapter 23.04). Additionally, the project signage would be required to adhere to the lighting regulations that state light from any signs shall be concealed from view from vehicular traffic in the public right-of-way, and the light shall not travel from the light source directly to vehicular traffic in the public right-of-way but instead shall be visible only from a reflecting or diffusing surface (SJMC Chapter 23.02.970). Compliance with these regulations would ensure that proposed project signage would not cause a significant source of light or glare.

The project site is in an urban environment with, existing sources of light and glare. The project would not substantially alter this condition and would be required to adhere to the City of San José requirements regarding nighttime lighting. Additionally, project signage would be required to adhere to the requirements set forth in the SJMC Chapter 13.02.970. Therefore, impacts related to project light and glare would be less than significant.

LESS THAN SIGNIFICANT IMPACT

Conclusion

The project would not result in significant aesthetic impacts.

4.2 Agriculture and Forestry Resources

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

Setting

The project site is developed currently with industrial uses, and is located in a developed, urban area of San José, surrounded by development including roadways and commercial, industrial and residential uses. The project site is zoned Light Industrial and the General Plan land use designation for the site is Combined Industrial/Commercial.

The California Department of Conservation (DOC) manages the Farmland Mapping and Monitoring Program to assess and record how suitable a particular tract of land is for agricultural purposes. In each county, the land is analyzed for soil and irrigation quality and the highest quality land is designated as Prime Farmland. The project site and vicinity lack identified agricultural or forest land (DOC 2016).

Regulatory Setting

In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the DOC as an optional model for assessing impacts on agriculture and farmland. In determining whether impacts on forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection (CAL FIRE) regarding the state's inventory of forest land. This includes the Forest and Range Assessment Project and the Forest Legacy Assessment Project, along with the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB). There are no General Plan policies that are relevant to the project.

Impact Analysis

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

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

The project site is located in a highly urbanized area of San José. There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on or near the project site (DOC 2016). Furthermore, no Williamson Act contract lands exist on or adjacent to the project area. Therefore, the project would not result in the conversion of farmland to non-agricultural uses. There would be no impact.

NO IMPACT

c. *Would the project 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?*

The project site is currently in the TEC Zoning District and developed with industrial buildings and pavement from property line to property line. Accordingly, there are no identified timberland production zones or forest land on the project site. Therefore, the project would have no impact on zoning for forest land or timberland production and would not convert any forest land to non-forest use. There would be no impact.

NO IMPACT

e. Would the project 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?

The project would continue the current urban setting of the project area. Therefore, the location or nature of the project would not result in the conversion of any farmland to non-agricultural use. There would be no impact.

NO IMPACT

Conclusion

The project would not result in an impact on agricultural or forestry resources.

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4.3 Air Quality

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

Setting

The project site is located in the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). As the local air quality management agency, the BAAQMD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards. Air quality studies generally focus on four pollutants, referred to as criteria pollutants, which are most commonly measured and regulated: carbon monoxide (CO), ground level ozone (O_3), nitrogen dioxide (NO_2), and suspended particulate matter (PM).

Regional Climate and Air Pollution in the SFBAAB

The City of San José is located in the southern portion of the SFBAAB and the proximity to the Pacific Ocean and San Francisco Bay influence the climate in the city and surrounding region. The Santa Cruz Mountains and Diablo Mountain Range on either side of the South Bay restrict horizontal dilution, and this alignment of the terrain also channels winds from the north to south, carrying pollution from the northern Peninsula toward San José. The annual high temperature is approximately 73°F, while the annual low temperature is approximately 51°F (United States Climate Data 2020). The average temperature is 62°F and the average annual precipitation is 15 inches. Winds play a large role in controlling climate in the area, and annual average winds range between five and ten miles per hour in this region (BAAQMD 2017a).

Air pollutant emissions in the SFBAAB are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples

include boilers or combustion equipment that produce electricity or generate heat. Area sources are distributed widely and include those such as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be operated legally on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment such as when high winds suspend fine dust particles (BAAQMD 2017a).

Air Pollutants of Primary Concern

The federal and state Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under the CAAs, the United States Environmental Protection Agency (USEPA), and the CARB have established ambient air quality standards for certain criteria pollutants. The rates and distributions of corresponding air pollutant emissions, as well as by the climatic and topographic influences discussed above, affect ambient air pollutant concentrations. Proximity to major sources is the primary determinant of concentrations of non-reactive pollutants (such as carbon monoxide [CO] and suspended particulate matter). Usually, ambient CO levels closely follow when and where vehicular traffic is distributed. A discussion of the primary criteria pollutants follows.

Ozone

Ozone is a colorless gas with a pungent odor. Most ozone in the atmosphere forms because of the interaction of ultraviolet light, reactive organic gases (ROG), and oxides of nitrogen (NO_X) (USEPA 2016). ROG (defined as any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, etc. [CARB 2004])) is primarily composed of non-methane hydrocarbons. NO_X is made of different chemical combinations of nitrogen and oxygen, mainly nitric oxide and nitrogen dioxide. Ozone is a highly reactive molecule that readily combines with many different components of the atmosphere. Consequently, high levels of ozone tend to exist only while high ROG and NO_X levels are present to create the ozone formation process (USEPA 2018). Once ROG, NO_X and other the precursors have been depleted, ozone levels rapidly decline. Because these reactions occur on a regional rather than local scale, ozone is considered a regional pollutant.

Carbon Monoxide

CO is an odorless, colorless gas. CO causes a number of health problems including fatigue, headache, confusion, and dizziness (University of Rochester Medical Center 2020). The incomplete combustion of petroleum fuels in on-road vehicles and at power plants is a major cause of CO. Wood stoves and fireplaces produce CO during the winter (CARB 2020). CO tends to dissipate rapidly into the atmosphere; consequently, violations of the state CO standard are generally associated with major roadway intersections during peak-hour traffic conditions. Localized CO "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 National Ambient Air Quality Standards of 35.0 parts per million (ppm) or the State Ambient Air Quality Standards of 20.0 ppm.

Nitrogen Dioxide

Nitrogen dioxide (NO_2) is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts rapidly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X (USEPA 1999). NO_2 is an acute irritant. A relationship between NO_2 and chronic pulmonary fibrosis may exist (Conti, et al. 2018), and an increase in bronchitis in young children may occur at concentrations below 0.3 ppm. NO_2 absorbs blue light and causes a reddish-brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of fine particulate matter and acid rain.

Suspended Particulates

Particulate matter (PM_{10}) is small particulate matter measuring no more than 10 microns in diameter, while particulate matter ($PM_{2.5}$) is fine particulate matter measuring no more than 2.5 microns in diameter (USEPA 2018). Suspended particulates are mostly dust particles, nitrates, and sulfates. They are a by-product of fuel combustion, wind erosion of soil and unpaved roads, and are emitted directly into the atmosphere through these processes. Chemical reactions create suspended particulates in the atmosphere. The characteristics, sources, and potential health effects associated with the small particulates (those between 2.5 and 10 microns in diameter) and fine particulates ($PM_{2.5}$) can be very different. The small particulates generally come from windblown dust and dust kicked up from mobile sources. The fine particulates are associated generally with combustion processes, and form in the atmosphere as a secondary pollutant through chemical reactions. Fine particulate matter is more likely to penetrate deeply into the lungs and poses a serious health threat to all groups, but particularly to the elderly, children, and those with respiratory problems (USEPA 2018). More than half of the small and fine particulate matter inhaled into the lungs remains there and can cause permanent lung damage (American Lung Association 2020). These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance (USEPA 2018).

Lead

Lead is a metal found naturally in the environment, as well as in manufacturing products. The major sources of lead emissions historically have been mobile and industrial sources. Because of the phase-out of leaded gasoline, as discussed below, metal processing currently is the primary source of lead emissions. The highest level of lead in the air is found near lead smelters. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers.

In the early 1970s, the USEPA set national regulations to reduce the lead content in gasoline gradually. In 1975, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. The USEPA completed the ban prohibiting the use of leaded gasoline in highway vehicles in December 1995. As a result of the USEPA's regulatory efforts to remove lead from gasoline, lead concentrations have declined substantially over the past several decades. The most dramatic reductions in lead emissions occurred prior to 1990 due to the removal of lead from gasoline sold for most highway vehicles. Lead emissions were further reduced substantially between 1990 and 2008, with reductions occurring in the metals industries at least in part because of national emissions standards for hazardous air pollutants (USEPA 2013).

Current Ambient Air Quality

Depending on whether the standards are met or exceeded, the SFBAAB is classified as being in "attainment" or "non-attainment." Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-attainment. The BAAQMD is in non-attainment for the federal and state ozone standards, the federal and state $PM_{2.5}$ (particulate matter up to 2.5 microns[1] in size) standards, and the state PM_{10} (particulate matter up to 10 microns in size) standards. Additionally, the BAAQMD is required to prepare a plan for improvement for these pollutants in non-attainment (BAAQMD 2017a) and describe the health effects associated with criteria pollutants for which the SFBAAB is in non-attainment. Table 2 shows the health effects associated with non-attainment criteria pollutants.

The nearest sensitive receptors to the project site are the residences across Trade Zone Boulevard, 80 feet north of the project site on Trade Zone Boulevard.

Table 2 Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Suspended particulate matter (PM_{10})	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma).[1]
Suspended particulate matter ($PM_{2.5}$)	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma.[1]

[1]More detailed discussions on the health effects associated with exposure to suspended particulate matter can be found in USEPA's Air Quality Criteria for Particulate Matter, October 2004.

Source: USEPA 2018

The BAAQMD operates a network of air quality monitoring stations throughout the SFBAAB. The purpose of the monitoring stations is to measure ambient concentrations of pollutants and to determine whether ambient air quality meets the California and federal standards. The monitoring station closest to the project is the San José-Jackson Street station located at 156B Jackson Street, approximately four miles north of the project site. Table 3 indicates the number of days that each of the federal and state standards has been exceeded at this station in each of the last three years. However, neither this station, nor any others in the San José vicinity have sufficient data to determine the CO emissions for the years 2016 to 2018. Therefore, CO emissions are excluded from Table 3. The data indicate the federal and state eight-hour ozone standards and the state worst-hour ozone standard were exceeded in 2017. In addition, the state PM_{10} standard was exceeded in 2017 and 2018, while the federal PM_{10} standard was only exceeded in 2018 and the federal $PM_{2.5}$

[1] One micron equals one-millionth of a meter, i.e., 10^{-6}.

standard was exceeded in 2017 and 2018. No other state or federal standards were exceeded at this monitoring station.

Table 3 Ambient Air Quality at the San José-Jackson Street Monitoring Station

Pollutant	2016	2017	2018
Ozone (ppm), Eight-Hour Average	0.066	0.098	0.061
Number of days of federal/state exceedances (>0.070 ppm)	0	4	0
Ozone (ppm), Worst Hour	0.087	0.121	0.078
Number of days of state exceedances (>0.09 ppm)	0	3	0
Nitrogen Dioxide (ppm), Worst Hour	0.0511	0.0675	0.0861
Number of days of state exceedances (>0.18 ppm)	0	0	0
Particulate Matter <10 microns ($\mu g/m^3$), Worst 24 Hours	40.0	69.4	155.8
Number of days of state exceedances (>50 $\mu g/m^3$)	0	6	4
Number of days of federal exceedances (>150 $\mu g/m^3$)	0	0	1
Particulate Matter <2.5 microns ($\mu g/m^3$), Worst 24 Hours	22.6	49.7	133.9
Number of days of federal exceedances (>35 $\mu g/m^3$)	0	6	15

Carbon monoxide is not shown because there was insufficient data available to determine the value.

Source: CARB 2020.

Regulatory Setting

The federal CAA governs air quality in the United States. In addition to federal requirements, the California CAA governs air quality in California more stringently. CARB administers these laws at the state level and the Air Pollution Control Districts (APCD) do so at the regional and local levels. The BAAQMD regulates air quality at the regional level, including the nine-county Bay Area.

Federal

The USEPA is responsible for enforcing the federal CAA. The USEPA is also responsible for establishing the National Ambient Air Quality Standards, which are required under the 1977 CAA and subsequent amendments. The USEPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. The agency has jurisdiction over emission sources outside state waters (e.g. beyond the outer continental shelf) and establishes various emission standards, including those for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission standards established by the CARB as described below.

State

CARB became part of the California Environmental Protection Agency (CalEPA) in 1991 and is responsible for meeting the state requirements of the federal CAA, administering the California CAA, and establishing the California Ambient Air Quality Standards (CAAQS). The California CAA, as amended in 1992, requires all air districts in the state to endeavor to achieve and maintain the CAAQS. The CAAQS are generally more stringent than the corresponding federal standards and incorporate added standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. The CARB regulates mobile air pollution sources, such as motor vehicles. The agency sets

emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB established passenger vehicle fuel specifications that became effective on March 1996. CARB oversees the functions of local air pollution control districts and air quality management districts that in turn administer air quality activities at the regional and county level.

Regional

The BAAQMD is responsible primarily for assuring that the national and state ambient air quality standards are attained and maintained in the Bay Area. It is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, and many other functions. The BAAQMD has jurisdiction over much of the nine-county Bay Area that includes Santa Clara County.

The BAAQMD adopted the 2017 Clean Air Plan (2017 Plan) as an update to the 2010 Clean Air Plan. The 2017 Plan provides a regional strategy to protect public health and protect the climate. Consistent with the greenhouse gas (GHG) reduction targets adopted by the state, the 2017 Plan lays the groundwork for long-term efforts to reduce Bay Area GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050 (BAAQMD 2017b). To fulfill state ozone planning requirements, the 2017 control strategy includes all feasible measures to reduce emissions of ozone precursors—reactive organic gases (ROG) and nitrogen oxides (NO_X)—and reduce transport of ozone and its precursors to neighboring air basins. In addition, the 2017 Plan builds upon and enhances the BAAQMD's efforts to reduce emissions of fine particulate matter and toxic air contaminants (BAAQMD 2017b).

Local

ENVISION SAN JOSÉ 2040 GENERAL PLAN

Chapter 3, Environmental Leadership, of the General Plan sets forth sustainability goals for the City of San José through 2040. The Goals and Policies of this chapter relate to green building design, construction, location, and operation. The following are applicable goals and policies that relate to the proposed project (City of San José 2011a):

Goal MS-10: Air Pollutant Emission Reduction: Minimize air pollutant emissions from new and existing development.

Policy MS-10.1	Assess projected air emissions from new development in conformance with the BAAQMD CEQA Guidelines and relative to state and federal standards. Identify and implement feasible air emission reduction measures.
Policy MS-10.2	Consider the cumulative air quality impacts from proposed developments for proposed land use designation changes and new development, consistent with the region's Clean Air Plan and state law.
Policy MS-10.7	Encourage regional and statewide air pollutant emission reduction through energy conservation to improve air quality.

Goal MS-11: Toxic Air Contaminants: Minimize exposure of people to air pollution and toxic air contaminants such as ozone, carbon monoxide, lead, and particulate matter.

Policy MS-11.1 Require completion of air quality modeling for sensitive land uses such as new residential developments that are located near sources of pollution such as freeways and industrial uses. Require new residential development projects and projects categorized as sensitive receptors to incorporate effective mitigation into project designs or be located an adequate distance from sources of toxic air contaminants (TACs) to avoid significant risks to health and safety.

Policy MS-11.2 For projects that emit TACs, require project proponents to prepare health risk assessments in accordance with BAAQMD-recommended procedures as part of environmental review and employ effective mitigation to reduce possible health risks to a less than significant level. Alternatively, require new projects (such as, but not limited to, industrial, manufacturing, and processing facilities) that are sources of TACs to be located an adequate distance from residential areas and other sensitive receptors.

Goal MS-13: Construction Air Emissions: Minimize air pollutant emissions during demolition and construction activities.

Policy MS-13.1 Include dust, particulate matter, and construction equipment exhaust control measures as conditions of approval for subdivision maps, site development and planned development permits, grading permits, and demolition permits. At minimum, conditions shall conform to construction mitigation measures recommended in the current BAAQMD CEQA Guidelines for the relevant project size and type.

Toxic Air Contaminants

The Air Toxic "Hot Spots" Information and Assessment Act of 1987 (Assembly Bill [AB] 2588) seeks to identify and evaluate risk from air toxics sources but does not directly regulate air toxics emissions. A toxic air contaminant (TAC) is a substance CARB has determined to have the potential to cause serious health effects. TACs tend to be localized and are found in relatively low concentrations in ambient air; however, exposure to low concentrations over long periods can result in increased risk of cancer and/or adverse health effects. Under the Act, TAC emissions from individual facilities are quantified and prioritized. Owners/operators of "high priority" facilities are required to perform health risk assessments and, if specific thresholds are violated, are required to communicate the results to the public in the form of notices and public meetings. Because some communities in the Bay Area experience relatively high exposure to TACs compared with other communities, the BAAQMD established the Community Air Risk Evaluation program in 2004 to identify impacted communities. The City of San José is considered an impacted community based on the Bay Area TAC inventory developed in 2005, demographic, and health data. The City's Envision San José 2040 General Plan includes Policy MS-11.2 (detailed below), which requires projects that emit TACs to prepare a health risk assessment in accordance with BAAQMD-recommended procedures as part of environmental review and to employ effective mitigation to reduce possible health risks to a less than significant level.

While CO is not defined as a TAC, it can cause acute health effects such as impairment of the central nervous system and cardiovascular system (California Office of Environmental Health Hazard

Assessment 2015). The SFBAAB is an attainment area for CO, although CO "hotspots" can form if there is a high level of congested traffic, poor atmospheric ventilation, and many vehicles are cold-starting. In 2017 the average maximum one-hour concentration of CO in San José was reported as 2.1 ppm, approximately 18 ppm below the state standard and 33 ppm below the national standard. The average maximum eight-hour concentration of CO in San José was 1.8 ppm in 2017, which is approximately 7.1 ppm below the national and state standard of 9 ppm. The CO national and state standards for CO have not been exceeded in the last 10 years (BAAQMD 2017c).

TAC THRESHOLDS

Depending on the risk levels, emitting facilities are required to implement varying levels of risk reduction measures. Risk analyses should follow guidance developed by BAAQMD for risk screening of operation and construction activities at the project-level described in *Recommended Methodology for Screening and Modeling Local Risks and Hazards* version 3.0 (2012). BAAQMD strongly recommends that impacted communities develop and adopt Community Risk Reduction Plan. In the absence of a qualified Community Risk Reduction Plan, BAAQMD has established the following *Thresholds of Significance* for local community risks and hazards associated with TACs and $PM_{2.5}$ for assessing individual project-level impacts at a local level (BAAQMD 2017c):

- Not to exceed an increased cancer risk of >10 in one million
- Not to exceed increased non-cancer (i.e., Chronic or Acute) risk of >1.0 Hazard Index
- Not to exceed ambient $PM_{2.5}$ concentration increase >0.3 $\mu g/m^3$ annual average

A project would have a cumulatively considerable impact if the aggregate total of current and proposed TAC sources within a 1,000 feet radius of the project fence line in addition to the proposed project would exceed the following *Thresholds of Significance*:

- Not to exceed an increased cancer risk of >100 in one million
- Not to exceed increased non-cancer (i.e., Chronic or Acute) risk of >10 Hazard Index
- Not to exceed ambient $PM_{2.5}$ concentration increase >0.8 $\mu g/m^3$ annual average

TAC HEALTH RISK

Excess cancer risks are defined as those occurring in excess of or above and beyond those risks that would normally be associated with a location or activity if toxic pollutants were not present. Non-carcinogenic health effects are expressed as a hazard index, which is the ratio of expected exposure levels to an acceptable reference exposure level.

TAC SENSITIVE RECEPTORS

BAAQMD defines sensitive receptors as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and the chronically ill. These facilities include residences, school playgrounds, child-care centers, retirement homes, and convalescent homes. The nearest sensitive receptors are residential units located approximately 100 feet north and west of the project site across Trade Zone Boulevard.

Air Emission Thresholds

The BAAQMD's May 2017 CEQA Air Quality Guidelines are used in this analysis to evaluate air quality. This update includes revisions made to the 2010 CEQA Air Quality Guidelines, addressing the

California Supreme Court's 2015 opinion in the *Cal. Bldg. Indus. Association vs. Bay Area Air Quality Mgmt. Dist., 62 Cal. 4th 369* confirming that CEQA, with several specific exceptions, is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project (BAAQMD 2017c).

Table 4 shows BAAQMD's significance thresholds for construction and operational-related criteria air pollutant and precursor emissions being used for the purposes of this analysis. These thresholds represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the basin's existing air quality conditions. For the purposes of this analysis, the project would result in a significant impact if construction or operational emissions would exceed thresholds shown below.

Table 4 BAAQMD Air Quality Significance Thresholds

Pollutant/Precursor	Construction Emissions (lbs/day)[1]	Operational Emissions (lbs/day)
ROG	54	54
NO_X	54	54
PM_{10}	82	82
$PM_{2.5}$	54	54

Notes: lbs/day = pounds per day; NO_X = oxides of nitrogen; $PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM_{10} = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ROG = reactive organic gases

[1]Note the thresholds for PM_{10} and $PM_{2.5}$ apply to construction exhaust emissions only.

Source: BAAQMD 2017b

A significant air quality impact would also occur if the project design or construction does not incorporate control measures recommended by the BAAQMD to control emissions during construction (as listed in Table 8-1 of the BAAQMD CEQA Guidelines).

Impact Analysis

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

The California CAA requires air districts to create a Clean Air Plan that describes how the jurisdiction will meet air quality standards. These plans must be updated every three years. The most recently adopted air quality plan is the BAAQMD 2017 Plan. As described in the Air Quality Management section above, the 2017 Plan updates the most recent Bay Area ozone plan, the 2010 Clean Air Plan, pursuant to air quality planning requirements defined in the California Health and Safety Code. To fulfill State ozone planning requirements, the 2017 control strategy includes all feasible measures to reduce emissions of ozone precursors— ROGs and NO_X —and reduce transport of ozone and its precursors to neighboring air basins. In addition, the Clean Air Plan builds upon and enhances the air district's efforts to reduce emissions of fine particulate matter and toxic air contaminants. The 2017 Clean Air Plan does not include control measures that apply directly to individual development projects. Instead, the control strategy includes measures related to stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-GHG pollutants.

The 2017 Clean Air Plan focuses on two paramount goals:

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

Under BAAQMD's methodology, a determination of consistency with the most recently adopted clean air plan (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

Any project that would not support the 2017 Plan's goals would not be considered consistent with the 2017 Plan. On an individual project basis, consistency with BAAQMD quantitative thresholds is interpreted as demonstrating support for the clean air plan's goals. As shown in the response to checklist items b and c (see below), the project would not result in exceedances of BAAQMD 2017 thresholds for criteria air pollutants and thus would not conflict with the 2017 Clean Air Plan's goal to attain air quality standards. Therefore, consistent with the City's CEQA thresholds, the proposed project would result in a less than significant impact with implementation of the 2017 Clean Air Plan.

LESS THAN SIGNIFICANT IMPACT

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

The following analysis evaluates air pollutant emissions generated by project construction and operation in light of the regional significance thresholds established by BAAQMD in the CEQA Air Quality Guidelines.

Construction Emissions

Project construction would involve site preparation, grading, excavation, building construction, and other construction-related activities that have the potential to generate air pollutant emissions. Temporary construction emissions from these activities were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2, based on parameters that include the duration of construction activity, area of disturbance, and equipment anticipated to be used during construction. Based on the applicant's proposed schedule, demolition and construction would be completed in approximately 18 months beginning in January 2020. In addition, twice daily watering of exposed surfaces was included in construction modeling, as recommended by BAAQMD (BAAQMD 2017c). The temporary construction emissions and long-term operational emissions for the proposed project are discussed below.

Project construction would generate temporary criteria pollutant emissions primarily due to the operation of construction equipment and truck trips. Estimated emissions associated with demolition of the existing industrial building are included in the demolition phase of the project. Site preparation and grading typically generate the greatest amount of emissions, due to the use of

grading equipment and estimated soil hauling. However, due to earlier grading activities associated with the existing development, it is assumed that the project would result in no net export or import of soil to the site.

As shown in Table 5, average daily construction emissions would not exceed the BAAQMD thresholds of 54 pounds per day of NO_X and $PM_{2.5}$, 82 pounds per day of PM_{10} or 54 pounds per day of ROG. Complete results from CalEEMod and assumptions are included in Appendix AQ.

Table 5 Construction Emissions (pounds/day)

Pollutant	Maximum Daily Emissions (lbs/day)[1]	BAAQMD Significance Threshold[2]	Significant Impact?
ROG	11.6	54	No
NO_x	42.5	54	No
PM_{10}	2.2	82	No
$PM_{2.5}$	2.0	54	No

[1]The BAAQMD air quality construction threshold is measured as the average daily emissions. Therefore, reporting the maximum daily emissions, as shown in the CalEEMod output (Appendix AQ), provides a conservative estimate of emissions.

[2]The thresholds for PM_{10} and $PM_{2.5}$ apply to construction exhaust emissions only.

Even for projects that would not generate construction emissions exceeding these thresholds, BAAQMD requires implementation of its Basic Construction Mitigation Measures, which will be included as a standard permit condition in the project, as outlined below. Therefore, impacts associated with construction emissions would be less than significant.

Standard Permit Conditions

Consistent with the BAAQMD CEQA Air Quality Guidelines, the project shall implement the following measures during all phases of construction on the project site, to reduce dust fall-out emissions:

- Water active construction areas at least twice daily or as often as needed to control dust emissions.
- Cover trucks hauling soil, sand, and other loose materials and/or ensure that all trucks hauling such materials maintain at least two feet of freeboard.
- Remove visible mud or dirt track-out onto adjacent public roads by using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).
- Pave new or improved roadways, driveways, and sidewalks as soon as possible.
- Lay building pads as soon as possible after grading unless seeding or soil binders are used.
- Replant vegetation in disturbed areas as quickly as possible.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Minimize idling times either by shutting off equipment when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Provide clear signage for construction workers at all access points.

- Maintain and properly tune construction equipment in accordance with manufacturer's specifications. Check all equipment by a certified mechanic and record a determination of "running in proper condition" prior to operation.
- Post a publicly visible sign with the telephone number and person at the lead agency to contact regarding dust complaints.

Operational Emissions

The BAAQMD does not have screening criteria for data centers; therefore, project emissions were calculated using CalEEMod. Stationary source emissions associated with the operation of the 20 standby diesel generators were calculated based on manufacturer specifications, exhaust emission data for USEPA Tier 2 emissions standards, and the estimated frequency and duration of operation of the generators. Per the 2017 BAAQMD CEQA Guidelines emissions from newly constructed stationary sources subject to Air District permitting should be added to the indirect and area sources emissions estimates after the application of Best Available Control Technology (BACT). As discussed in the following section, the generators would be required to apply BACT, such as a diesel particulate filter (DPF) achieving 85 percent reduction in diesel particulate matter pursuant to Regulation 2 Rule 5 Section 2-5-301. Consistent with the health risk assessment (HRA) prepared by ProActive for operational emissions associated with the diesel generators, stationary source criteria pollutant emissions were calculated assuming 50 hours of operation per year after implementation of BACT and have been added to the operational emissions shown in Table 6. Long-term emissions associated with project operation, as shown in Table 6, would include emissions from vehicle trips (mobile sources) and electricity use (energy sources), landscape maintenance equipment, consumer products, and architectural coating associated with on-site development (area sources), and the 20 emergency generators on site (stationary sources).

Table 6 Operational Emissions

Pollutant	Annual Emissions (tpy)	BAAQMD Annual Significance Threshold (tpy)	Average Daily Emissions (lbs/day)[1]	BAAQMD Daily Significance Threshold (lbs/day)	Significant Impact?
ROG	2.7	10	13.8	54	No
NO_x	20.0	10	107.1	54	Yes
PM_{10}	0.3	15	1.3	82	No
$PM_{2.5}$	0.1	10	0.6	54	No

See Appendix AQ for CalEEMod worksheets and stationary source emission calculations.

[1]Average daily emissions are reported as the sum of the highest maximum daily emissions determined for winter and summer time period as lbs/day in CalEEMod as well as the average daily emissions calculated for the diesel generators as part of the operational HRA. For the purposes of this analysis, hydrocarbon (HC) emissions calculated for the HRA and ROG emissions calculated in CalEEMod are combined and reported collectively as ROG (Foobot 2020).

Table 6 shows that emissions from project operation would exceed BAAQMD operation emissions thresholds for NO_X, no other criteria pollutant threshold would be exceeded. The exceedance of the NO_X annual and daily thresholds is associated with the operation of the diesel generators on site which will require an issuance of a permit to operate. Mitigation Measure AQ-1 would be required to reduce annual and average daily NO_X emissions from the stationary sources on-site during operation to a less than significant level.

Mitigation Measure

Project operation would generate NO_X emissions exceeding the BAAQMD criteria pollutant emission thresholds due to the operation of the diesel generators on site. Because BAAQMD serves as the Lead Agency in the issuance of permits for stationary sources, including the diesel generators, as part of this project, the following mitigation measure focuses on the reduction of NO_x emissions through permit conditions that would be required pursuant to Regulation 2 Rule 2.

Mitigation Measure AQ-1

Limit the number of hours generators can be operated for maintenance and testing purposes as follows:

- Generator operation for maintenance and testing purposes shall be limited so that the combined operation of the generator engines for testing and maintenance purposes does not exceed 480 hours (24 hours per generator) in any consecutive 12-month period. The operator shall retain records that include date and times of all reliable testing. The maximum number of hours of operation of the generators for maintenance and testing is regulated by the Bay Area Air Quality Management District (BAAQMD), which will issue individual Permits to Operate for each data center building (or groups of generators) as they are constructed. The conditions in each Permit to Operate will be enforceable by BAAQMD. Prior to issuance of an occupancy permit for the data center, the applicant shall provide a letter to the Director of Building, Planning and Code Enforcement from BAAQMD and/or a qualified consultant that documents that the sum of the hours of operation permitted and regulated by BAAQMD for the data center combined does not exceed 480 hours in any consecutive 12-month period. This letter shall include a copy of the BAAQMD approved Permit to Operate. Any change to the number of generators, the model of generators, or in the number of hours the generators will be tested, additional Air Quality analysis may be necessary. Request for such change shall be made to the City of San José Department of Building, Planning and Code Enforcement with documentation that total emissions from maintenance and testing for the data center would not exceed the significance thresholds for NO_X on both an average daily (54 pounds per day) and annual averaging (10 tons/year) period. This documentation shall be reviewed and approved by a Supervising Planner of the Environmental Review Division of the Department of Planning, Building, and Code Enforcement prior to the issuance of any Planning Permits approving changes to the generators.

Significance After Mitigation

Operational emissions after implementation of Mitigation Measure AQ-1, where operational hours for each generator does not exceed 24 hours in a year, were calculated based on manufacturer specifications and exhaust emission data for USEPA Tier 2 emissions standards after the implementation of BACT. The stationary source emissions were added to operational emissions estimated by CalEEMod to estimate total project operational emissions shown in Table 7.

Table 7 Operational Emissions after Mitigation

Pollutant	Annual Emissions (tpy)	BAAQMD Annual Significance Threshold (tpy)	Average Daily Emissions (lbs/day)[1]	BAAQMD Daily Significance Threshold (lbs/day)	Significant Impact?
ROG	1.8	10	8.8	54	No
NO_x	9.9	10	51.9	54	No
PM_{10}	0.2	15	1.0	82	No
$PM_{2.5}$	0.1	10	0.4	54	No

See Appendix AQ for CalEEMod worksheets and stationary source emission calculations.

[1]This BAAQMD air quality operational threshold is measured as the average daily emissions. Therefore, reporting the maximum daily emissions, as shown in the CalEEMod output (Appendix AQ), provides a conservative estimate of emissions.

Table 7 shows that emissions from project operation would not exceed BAAQMD operation emissions threshold for all criteria pollutants when non-emergency operational hours of each generator is limited to no more than 24 hours per year. Therefore, implementation of Mitigation Measure AQ-1 that demonstrates either a reduction in non-emergency operational hours of the diesel generators would be required as a permit condition to reduce the potentially significant impact to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

The sensitive receptors nearest to the project site are residences approximately 100 feet to the north and west of the project site across Trade Zone Boulevard.

Carbon Monoxide Hotspots

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

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

The traffic study prepared for the project by Hexagon Transportation Consultants, Inc. (Appendix TRA) indicates that the project would generate 158 new daily vehicle trips to the site. This is consistent with the City of San José's Congestion Management Agency plans, would not cause traffic volume at any intersection to exceed 44,000 per hour, or to exceed 24,000 at intersections where vertical and horizontal mixing is limited. Furthermore, no vehicle queuing is associated with the

project's land use type thus, the concentration of CO emissions would be low and would rapidly disperse. Therefore, the impact of localized CO emissions would be less than significant.

Health Risk Assessment

The following construction Health Risk Assessment (HRA), prepared by Rincon Consultants, evaluates the potential health risk to off-site receptors[2] due to construction of the proposed project, while the results of the operational HRA prepared by ProActive Consulting Group (ProActive) evaluate potential health risk to existing residents and workers nearby due to project operation, and specifically, the diesel generators associated with project's operation. The results of both the construction HRA and operational HRA are summarized below. Results of each analysis compare estimated cancer risk, $PM_{2.5}$, and hazard values as single sources and cumulatively to applicable BAAQMD thresholds.

Health Impacts of TACs from Construction Activity

The BAAQMD identifies construction activities as a common source of TAC and $PM_{2.5}$ emissions due to the operation of diesel-powered equipment and heavy-duty trucks that emit diesel particulate matter (DPM) (BAAQMD 2017b). Although construction activity is short-lived, it may increase TAC concentrations in the short term at nearby sensitive receptors. DPM is the primary contaminant of concern for the project and would be the TAC emitted in the largest quantity, thus health risks were assessed as they relate to DPM exposure. A health risk assessment (HRA) was conducted to evaluate construction emissions, including DPM and $PM_{2.5}$, and their potential impacts on the sensitive receptors located approximately 100 feet north and west of the project site.

The construction HRA conducted the following methodology outlined in BAAQMD's *Recommended Methods for Screening and Modeling Local Risks and Hazards* (2012). Potential cancer and non-cancer health impacts were estimated using exposure periods appropriate to evaluate short-term emission increases. DPM and $PM_{2.5}$ dispersion was modeled using the USEPA air dispersion model, the AMS/EPA Regulatory Model (AERMOD), version 19121 utilizing local meteorological data from the Norman Y. Mineta San José International Airport, approximately 3.2 miles southwest of the project site. The specific meteorological data was pre-processed with AERMET, version 14134, and is identified by BAAQMD as appropriate meteorological data to use with AERMOD while conducting an HRA for the City of San José.

Average annual and maximum daily on-site PM_{10} and $PM_{2.5}$ emissions estimated by CalEEMod were used as input into AERMOD to determine the concentration level in micrograms/cubic meter at off-site sensitive receptors. DPM concentration was assumed to equal the PM_{10} exhaust emissions. Only on-site exhaust emissions were considered in this analysis as implementation of the project is not anticipated to result in a substantial amount of TACs emitted off-site due to a large amount of diesel trucks queuing outside the entrance or hauling materials (BAAQMD 2017c). AERMOD's variable emissions function was used to model a standard Monday through Friday construction schedule. Cancer and non-cancer health impacts were subsequently estimated using the CARB Hot Spots Analysis and Reporting Program Version 2 (HARP 2) and results were compared to BAAQMD thresholds to assess potential impacts.

[2]Off-site receptors are defined as residents, students, and or workers who live, go to school, or work within 1,000-foot radius of the project site but are not located on the project site.

To provide a conservative analysis, air dispersion modeling considered receptors located at the property line of the nearest residences to the north of the project site. Receptors were sited at the front of residential structures on the first floor (ground level), second floor (ground level plus 9.8 feet), and third floor (ground level plus 19.7 feet).

A grid of receptor points was applied over the residential neighborhood north of the project site and the entire project site vicinity to verify that the individual receptors were in line with the risk profile for the area and the Maximum Exposed Individual (MEI) was accurately captured in the analysis. These were identified at the property line of a multi-family residence/townhome located near the intersection of Journey Street and Trade Zone Boulevard, approximately 100 feet north of the project site's northern border. Figure 8 shows the location of individual sensitive receptors, Cartesian grids, and the project site. The results of the HRA are provided in Table 8.

Table 8 Health Risks Associated with Construction Activity at the MEI

Scenario	Excess Cancer Risk (per million)	Chronic Health Risk[1]	$PM_{2.5}$ $\mu g/m^3$ annual average
Maximum Exposed Individual	39.4	0.02	0.19
BAAQMD Significance Threshold	>10	>1	>0.3
Threshold Exceeded?	Yes	No	No

[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.

For HARP model outputs, see Appendix HRA.

As shown in Table 8, at the MEI, the chronic hazard index is less than 1 and $PM_{2.5}$ ground level concentrations do not exceed 0.3 $\mu g/m^3$. However, the excess cancer risk due to DPM exposure during the 18 months of construction at the MEI exceeds the 10 in one million cancer risk. It should be noted that the analysis is considered conservative as CalEEMod defaults for construction equipment, hours of use, and emission rates were used. Nonetheless, the health risk to nearby residents due to project construction would be potentially significant without mitigation. In addition to the Basic Construction Mitigation Measures that BAAQMD requires for all construction activities, Mitigation Measure AQ-2 would be required to reduce health risks to nearby sensitive receptors associated with DPM exposure.

BAAQMD recommends that the cumulative impact of a project should be assessed by evaluating all current and proposed substantial sources of TACs within a 1,000-foot radius of the identified MEI (BAAQMD 2017c). The nearest highways to the project site and the MEI are I-680 and I-880, located approximately 0.8 mile east and west of the project site, respectively. These highways are outside the BAAQMD recommended area of influence requiring source evaluation and therefore were not considered in the cumulative risk assessment (BAAQMD 2017c).

Railroad tracks accommodating the planned BART extension are located approximately 0.3 mile east of the project site and 0.3 mile east of the MEI; therefore, this source was not considered in the cumulative risk assessment. Existing potential sources within 0.2 mile of the MEI include Montague Expressway, Trade Zone Boulevard, Lundy Avenue, and six permitted stationary sources. Cumulative risk impacts to the MEI from these sources was estimated as described below following *BAAQMD's CEQA Guidelines* (2017c). Cumulative impacts from project construction are reported in Table 9.

Figure 8 Project Site and Sensitive Receptors

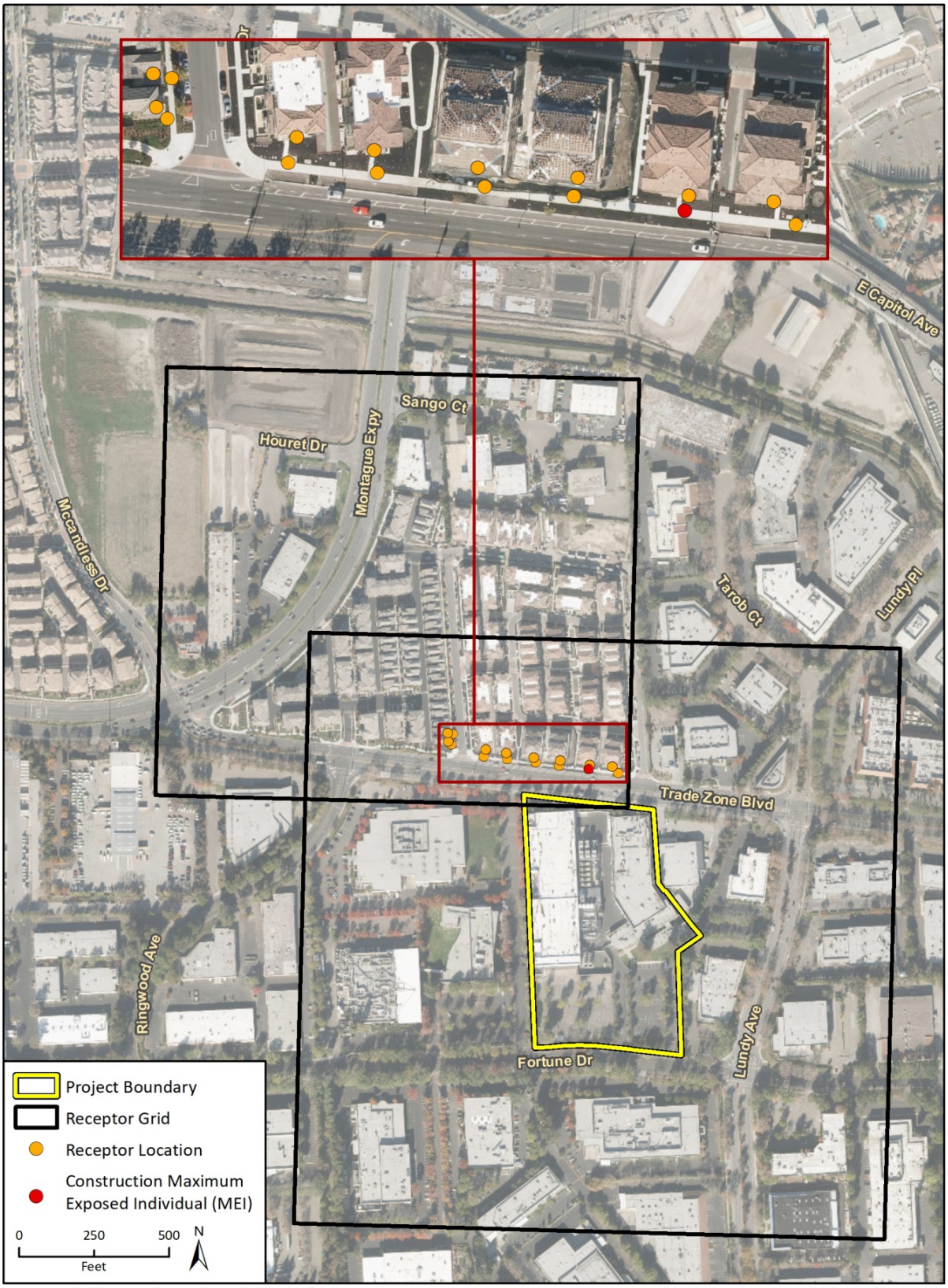

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Fig X Source and Receptors Map

Roadway TAC Impacts

Trade Zone Boulevard and Lundy Avenue are considered significant sources of mobile TAC emissions due to the high level of daily traffic (i.e., greater than 10,000 average daily trips [ADT]). Health risk at the construction MEI from Trade Zone Boulevard and Lundy Avenue was using BAAQMD's *Roadway Screening Analysis Calculator*[2] for Santa Clara County and the City's most recent traffic counts for each roadway segment (City of San José 2019). Montague Expressway is located within approximately 0.2 mile of the MEI and 0.17 mile of the project site. Therefore, it is conservatively included in this analysis. Cancer risk and $PM_{2.5}$ concentrations were obtained from a raster data file of health risks associated with major roadways provided by BAAQMD (BAAQMD 2019a). Roadway cancer risk and $PM_{2.5}$ concentrations at the construction MEI are described in Table 9.

Stationary Source TAC Impacts

BAAQMD's *Stationary Source Risk & Hazard Analysis Tool*[3] and Risk and Hazards Emissions Screening Calculator (beta version) were used to identify permitted stationary sources within 1,000 feet of the MEI and to estimate the health risk and $PM_{2.5}$ impacts based on distance. The stationary sources generating the highest health risks at the MEI are those located on the project site, including stationary and emergency standby diesel generators. This analysis conservatively assumes such sources could be operational during project construction and, therefore, they are incorporated into the cumulative health risk assessment. Health risk and $PM_{2.5}$ concentrations at the construction MEI from permitted stationary sources are summarized in Table 9.

Combined Sources

As shown in Table 9, cumulative sources of TACs would not result in an exceedance of annual $PM_{2.5}$ concentrations, chronic or cancer health risks above cumulative significance thresholds. Therefore, cumulative impacts would be less than significant.

[3]BAAQMD screening and analysis tools recommended for use in the BAAQMD CEQA Guidelines can be accessed here: http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools

Table 9 Cumulative Health Risks Associated with Construction Activity at the MEI

Source	Excess Cancer Risk (per million)	Chronic Health Risk[1]	$PM_{2.5}$ µg/m^3 Annual Average
Unmitigated Project Construction	39.4	0.02	0.19
Trade Zone Boulevard[2]	9.1	–	0.18
Lundy Avenue[2]	0.6	–	0.01
Montague Expressway[3]	3.2	–	0.07
Fortune Data Center (Plant 22974)[4]	8.7	0.01	0.0
Olympus America (Plant 11193)[4]	0.2	0.0	0.0
Courtesy Auto Service (Plant 7611)[4]	0.0	<0.01	0.0
Plasma Ruggedized Solutions Inc. (Plant No.19133)[4]	0.0	<0.01	0.0
Cumulative Total	**61.2**	**0.03**	**0.45**
BAAQMD Significance Threshold	>100	>10	>0.8
Threshold Exceeded?	No	No	No

[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 45 feet for Trade Zone Boulevard and 710 feet for Lundy Avenue.

[3]Based on health risk raster data for Major Streets provided by BAAQMD (BAAQMD 2019a).

[4]To provide a conservative analysis, emergency standby diesel generators at any of the permitted stationary sources were not adjusted based on distance using BAAQMD's multiplier tool.

For model outputs, stationary, and roadway source screening calculations, see Appendix HRA.

Mitigation Measures

Because project construction would not generate emissions exceeding any BAAQMD criteria pollutant emission thresholds but does present a potential excess cancer risk due to DPM exposure at nearby residences during construction, the following mitigation measure focuses on reduction of DPM emissions for construction.

Mitigation Measure AQ-2

The project applicant or contractor shall select equipment during construction to minimize emissions. The project applicant shall submit a construction management plan to the Director of Planning, Building and Code Enforcement or the Director's designee for review and approval, prior to issuance of any grading and building permits. The construction management plan shall demonstrate that the off-road equipment used on site to construct the project would achieve a fleet-wide average 85-percent reduction in $PM_{2.5}$ exhaust emissions or more. Options to achieve this reduction could include, but are not limited to, the following:

- All mobile diesel-powered off-road equipment larger than 25 horsepower and operating on the site for more than two days shall meet USEPA particulate matter emissions standards for Tier 4 engines or equivalent.

- Use of equipment that includes California Air Resources Board (CARB)-certified Level 3 diesel particulate filters or alternatively-fueled equipment (i.e., non-diesel).
- Use of added exhaust muffling and filtering devices.

Significance After Mitigation

DPM and $PM_{2.5}$ construction emissions after implementation of Mitigation Measure AQ-2 was estimated using CalEEMod's construction mitigation option (C-1). The model allows for different levels of DPFs to be selected that correspond to DPFs' average efficiency at removing particulates from equipment exhaust. Table 10 shows the health risks associated with the project's construction activity as a single source after incorporation of a CARB-verified Level 3 DPF on all on-site construction equipment.

Table 10 Health Risks Associated with Construction Activity After Mitigation

Scenario	Excess Cancer Risk (per million)	Chronic Health Risk[1]	$PM_{2.5}$ µg/m^3 Annual Average
Maximum Exposed Resident	5.9	0.004	0.09
BAAQMD Significance Threshold	>10	>1	>0.3
Threshold Exceeded?	No	No	No
Net Decrease Achieved by Mitigation	33.5	0.016	0.1

[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.

For model outputs, see Appendix HRA.

As shown in Table 10, installation of a Level 3 DPF that reduces DPM by at least 85 percent was necessary to reduce the excess cancer risk at the nearest sensitive receptor to below the single-source, 10 in one-million significance threshold. While a reduction in DPM using Level 3 DPFs was modeled, other control technology, as indicated in Mitigation measure AQ-2 above, may be implemented to achieve the same reduction in DPM emissions and associated reduction in health risk. Therefore, implementation of Mitigation Measure AQ-2 that demonstrates at least an 85 percent reduction in DPM emissions would be required to reduce the potentially significant impact to a less than significant level.

Health Impacts of TACs from Operational Activity

Project operation would not create new receptors however will include 20 diesel generators that are a typical source of TAC emissions.

ProActive Consulting Group (ProActive) prepared an HRA for the 20 emergency generators at the project site using the latest version (19121) of CARB's HARP 2 and meteorological data from the Norman Y. Mineta San José International Airport, the same data used in the construction HRA. Each three-megawatt (MW) diesel generator was modeled as a single point source of emissions with the exhaust outlet of the generator at approximately 16 feet above ground level. Emissions were modeled as variable by hour of day assuming testing and operation would generally occur between 10 a.m. and 5 p.m. Ten generators were modeled adjacent to the northern edge of the proposed building and ten generators were modeled adjacent to the southern end of the proposed building. Because the proposed standby diesel generators are point sources located within a commercial area

alongside the proposed building, building downwash effects analysis was performed using BPIP-PRIME and AERMAP to account for the building's potential to influence air flow. Any effects of building downwash were then incorporated into AERMOD dispersion runs.

Two Cartesian grids encompassing the project site and surrounding area were used to evaluate the Project's potential health impacts at the maximum exposed off-site resident and point of maximum impact. The coarse Cartesian grid encompassed the project site and a square area of 7,136 feet (1.35 miles) by 7,136 feet with 246-foot spacing. A refined Cartesian grid with 82-foot spacing over a square area of 1,558 feet by 1,558 feet was used to evaluate the project's health impacts at the point of maximum exposure off-site. See Appendix HRA for ProActive's memorandum and modeling results, including a depiction of modeled point source locations, buildings included for the building downwash analysis, and manufacturer specifications for the generator set.

Diesel generator emission estimates were based on manufacturer specifications, exhaust emission data for USEPA Tier 2 emissions standards, and the estimated frequency and duration of operation of the generators. To evaluate ground level concentration of $PM_{2.5}$, it was conservatively assumed that $PM_{2.5}$ emissions were equivalent to the generator DPM emissions. ProActive modeled health risk for two operational scenarios where generators are assumed to operate either for 50 hours per year or for 40 hours per year. Only the most conservative analysis, 50 hours of operation, is discussed here to provide an estimate of emissions under the greatest operating scenario.

Based on the manufacturer exhaust emissions rate certification, uncontrolled hourly DPM emissions would be 0.80 pounds per hour (lbs/hr). Initial evaluation by ProActive indicated that the generators would generate a cancer risk greater than 1.0 in one million; therefore, pursuant to Regulation 2 Rule 5 the implementation of Best Available Control Technology for Toxics would be required to reduce DPM emissions. With implementation of a diesel particulate filter (DPF) with 85 percent efficiency, the hourly DPM emission rate would be 0.12 lbs/hr resulting in 5.9 lbs/year when operating for 50 hours a year.

Cancer and chronic health impacts were estimated based on a 70-year exposure period per the 2017 BAAQMD CEQA Guidelines using HARP 2 and results were compared to BAAQMD thresholds to assess potential impacts. There is no acute REL for diesel exhaust to calculate acute health risk. Further except for unusual circumstances of high exposure, Office of Environmental Health Hazard Assessment (OEHHA) does not recommend acute analysis for DPM.

For new sources BAAQMD's *Recommended Methods for Screening and Modeling Local Risks and Hazards* (2012) recommends comparing the risk at the MEI to the single source significance thresholds and using the MEI location for cumulative impact analysis. The air dispersion and risk analysis identified the MEI to be located at the property line of 2180 Fortune Drive, approximately 300 feet southeast of the project site's southeast corner. As identified by ProActive this site would also be the location of the maximum exposed individual worker. The exposure at the MEI is a conservative representation of the worker exposure as it is based on a 70-year exposure period whereas per OEHHA guidance workers are assumed a 25-year exposure for only eight hours a day. Table 11 summarizes the results associated with operation of the generators equipped with a DPF for 50 years at the MEI.

Table 11 Health Risks Associated with Operation of Generators for 50 Hours Per Year

Scenario	Excess Cancer Risk (per million)	Chronic Health Risk[1]	$PM_{2.5}$ µg/m^3 annual average
Maximum Exposed Individual	7.62	0.0015	0.007
BAAQMD Significance Threshold	>10	>1	>0.3
Threshold Exceeded?	No	No	No

[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.

For summary of ProActive model outputs, see Appendix HRA.

As shown in Table 11, 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.

The cumulative impact of the operation of the generators was further assessed by evaluating all current and proposed substantial sources of TACS within 1,000 feet of the MEI. Within 1,000 feet of the MEI three stationary sources were identified using the BAAQMD's *Stationary Source Risk & Hazard Analysis Tool*[4]. However, Flextronics International (Plant Number 12011) is no longer operational and Oncord Mfg (Plant Number 19585) had no reported emissions data. Therefore, these sources resulted in no health risks or $PM_{2.5}$ concentrations at the MEI and were excluded from further analysis. The cumulative analysis at the MEI included the stationary source located at Microchip Technology, Inc. (Plant Number 24489), approximately 450 feet to the southeast of the MEI, and Lundy Avenue approximately 60 feet west of the MEI. Cumulative impacts from project operation at the MEI are reported in Table 12.

[4]BAAQMD screening and analysis tools recommended for use in the BAAQMD CEQA Guidelines can be accessed here: http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools

Table 12 Cumulative Health Risks Associated with Operation of Generators

Source	Excess Cancer Risk (per million)	Chronic Health Risk[1]	$PM_{2.5}$ µg/m^3 annual average
Project Operation (50 hours)	7.6	0.0015	0.007
Lundy Avenue[2]	7.4	–	0.17
Microchip Technology, Inc. (Plant 24489)[3]	3.5	3.0	0.0
Cumulative Total[4]	**18.5**	**3.0**	**0.18**
BAAQMD Significance Threshold	>100	>10	>0.8
Threshold Exceeded?	No	No	No

[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.

[3]Calculated using the BAAQMD Health Risk Calculator at a distance of 450 feet from the MEI and using BAAAQMD provided emissions data.

[4]For model outputs, stationary, and roadway source screening calculations, see Appendix HRA.

As shown in Table 12, cumulative sources of TACs would not result in an exceedance of annual $PM_{2.5}$ concentrations, chronic or cancer health risks above cumulative significance thresholds at the MEI with operation of the diesel generators equipped with a DPF for 50 hours per year. Therefore, cumulative operational impacts would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

Odors typically associated with industrial projects involve chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes, and the processes used at sewage treatment facilities and landfills. According to the 2017 BAAQMD CEQA Guidelines, examples of land uses that have the potential to generate considerable odors include, but are not limited to: wastewater treatment plants, landfills, confined animal facilities, composting stations, food manufacturing plants, refineries, and chemical plants. Due to the nature of the project (i.e. a data center with office and conference space), it would not generate objectionable odors that would affect a substantial number of people because odors associated with these uses are limited. Furthermore, odors associated with construction would be those of diesel machinery, which includes the smells of oil or diesel fuels that would be limited to construction duration. As a result, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

Conclusion

Operation of the project with implementation of Mitigation Measure AQ-1 would not result in significant impacts to air quality. The project, with implementation of Mitigation Measure AQ-2 and the Standard Permit Conditions above, would not result in significant impacts to air quality from construction activities.

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4.4 Biological Resources

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

Setting

The project site is fully developed and is bordered by ornamental trees and limited landscaping. The site itself does not support any natural vegetation communities and does not include any features that would function as suitable habitat for special status plants or wildlife. The site does include several trees and is surrounded on all sides by significant residential and commercial urban development. According to the Envision San José 2040 General Plan Final Program Environmental Impact Report (EIR), 13 special-status plants and 41 special-status animals have the potential to occur in the city of San José and its urban growth boundary, but due to the disturbed nature of the site, it has a relatively low habitat value (see Table 4 of Appendix E; San José 2011b). The nearest sensitive habitat to the project site is the riparian habitat along Coyote Creek, approximately one mile to the west. The project site is located south of Route 237, away from baylands, consistent with the City's Riparian Corridor Protection and Bird-Safe Design Policy (City Council Policy 6-34).

Special-status animals are not expected to occur in urban areas of the City developed with structures and paving and that do not support natural plant communities since these areas do not meet habitat requirements for nesting, foraging, or cover. Other than in riparian areas, vacant areas that support grassland, serpentine grassland vegetation, and agricultural habitats, special-status animal species are not expected to occur in most developed areas in the city (City of San José 2011a). However, the site currently contains 116 trees that could support nesting birds protected under the Migratory Bird Treaty Act. These trees include 73 shamel ashes (*Fraxinus uhdei),* 33 coast redwoods (*Sequoia sempervirens*), 12 Chinese tallow trees (*Triadica sebifera*), 11 Callery pear, and the remaining 19 comprise multiple species (refer to Appendix ARB for a full list).

Regulatory Setting

Federal and State

FEDERAL ENDANGERED SPECIES ACT

The U.S. Fish and Wildlife Service (USFWS) implements the Migratory Bird Treaty Act (16 United States Code Section 703-711) and the Bald and Golden Eagle Protection Act (16 United States Code Section 668). The USFWS and National Marine Fisheries Service (NMFS) share responsibility for implementing the federal Environmental Species Act (FESA) (16 United States Code Section 153 et seq.). The USFWS generally implements the FESA for terrestrial and freshwater species, while the NMFS implements the FESA for marine and anadromous species. Projects that would result in "take" of any federally listed threatened or endangered species are required to obtain authorization from the USFWS or NMFS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan) of FESA, depending on the involvement by the federal government in permitting and/or funding of the project. "Take" under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what measures would be required to avoid jeopardizing the species. Proposed or candidate species do not have the full protection of FESA; the USFWS and NMFS advise project applicants the species could be elevated to listed status at any time.

MIGRATORY BIRD TREATY ACT

The federal Migratory Bird Treaty Act of 1918 was originally enacted between the United States and Great Britain (acting on behalf of Canada) for the protection of migratory birds between the two countries. The MBTA has since been expanded to include Mexico, Japan, and Russia. Under MBTA provisions, it is unlawful "by any means or manner to pursue, hunt, take, capture (or) kill" any migratory birds as defined by the Migratory Bird Treaty Act except as permitted by regulations issued by the USFWS. The term "take" is defined by the USFWS regulation to mean to "pursue, hunt, shoot, wound, kill, trap, capture or collect" any migratory bird or any part, nest, or egg of any migratory bird covered by the conventions, or to attempt those activities.

CALIFORNIA ENDANGERED SPECIES ACT

California Fish and Game Code (CFGC), Chapter 1.5, Sections 2050- 2116, known as the California Endangered Species Act, prohibits the take of any plant or animal listed or proposed for listing as rare (plants only), threatened, or endangered. In accordance with California Endangered Species Act, the California Department of Fish and Wildlife (CDFW) has jurisdiction over state-listed species (Fish and Game Code 2070). The CDFW regulates activities that may result in take of individuals (i.e., hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill). Habitat degradation or modification is not expressly included in the definition of take under the CFGC. The CDFW has interpreted take, however, to include the killing of a member of a species as the proximate result of habitat modification.

In addition to species listed under state and federal Endangered Species Acts, Section 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, must be considered as part of the environmental review process. These may include plant species listed by the California Native Plant Society and CDFW listed Species of Special Concern.

CALIFORNIA FISH AND GAME CODE

The CDFW derives its authority from the CFGC. California Endangered Species Act (CFGC Section 2050 et. seq.) prohibits take of state-listed threatened or endangered species. Take of fully protected species is prohibited under CFGC Sections 3511, 4700, 5050, and 5515. Section 86 of CFGC defines "take" as hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, capture, or kill. This definition does not include indirect harm by way of habitat modification.

CFGC Sections 3503, 3503.5, and 3511 restrict the take, possession, and destruction of birds, nests, and eggs. Section 3503.5 of the CFGC protects all birds-of-prey and their eggs and nests against take, possession, or destruction. Fully protected birds may not be taken or possessed except under specific permit (Section 3511).

Species of Special Concern (SSC) is a category CDFW uses for those species considered to be indicators of regional habitat changes or considered to be potential future protected species. SSC do not have any special legal status except that which may be afforded by the CFGC, as noted above. CDFW intends the SSC category as a management tool to include these species into special consideration when decisions are made concerning the development of natural lands.

The CDFW also has authority to administer the Native Plant Protection Act (CFGC Section 1900 et seq.). The Native Plant Protection Act requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under Section 1913(c) of the

Native Plant Protection Act, the owner of land where a rare or endangered native plant grows is required to notify the department at least 10 days in advance of changing the land use to allow for salvage of plant(s).

Perennial, intermittent, and ephemeral streams and associated riparian vegetation, when present, also fall under the jurisdiction of the CDFW. Section 1600 et seq. of the CFGC (Lake and Streambed Alteration Agreements) gives CDFW regulatory authority over work in the bed, bank, and channel (which could extend to the 100-year flood plain), consisting of, but not limited to, the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream or lake.

Regional and Local

SANTA CLARA VALLEY HABITAT PLAN

The Santa Clara Valley Habitat Plan/Natural Community Conservation Plan (Habitat Plan) covers an area of 519,506 acres, or approximately 62 percent of Santa Clara County. It was developed and adopted through a partnership between Santa Clara County, the Cities of San José, Morgan Hill, and Gilroy, Santa Clara Valley Water (Valley Water), Santa Clara Valley Transportation Authority (VTA), US Fish and Wildlife Service (USFWS), and CDFW. The Habitat Plan is intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in approximately 500,000 acres of southern Santa Clara County. The Santa Clara Valley Habitat Agency is responsible for implementing the plan.

Figure 2-2 of the Habitat Plan shows the project site to be entirely within the urban development land use area; it is therefore considered urban development under the plan. The project site is also located in the urban-suburban land cover and the urban areas land cover fee zones. Fees collected from developments in these zones are used to maintain the Plan's Reserve System of protected open space and streams for wildlife habitat. The Reserve System comprises an estimated 46,900 acres that will permanently protect an estimated 33,600 acres of land for the benefit of covered species, natural communities, biological diversity, and ecosystem function and that will incorporate about 13,300 acres of existing open space and enhance the long-term management and monitoring on those lands.

The Habitat Plan categorizes covered activities into urban development, in-stream capital projects, in-stream operations and maintenance, rural capital projects, rural operation and maintenance, rural development, and conservation strategy and implementation. The impacts of covered activities have been analyzed in Chapter 4 of the plan. All covered activities in the Habitat Plan area are required to conform with conditions One, Two, and Three of the plan that are listed in Table 13. Condition Two pertains to the proposed project, as it addresses the edge of new urban development in relationship to the Reserve System. Condition One of the Habitat Plan covers the avoidance of direct impacts on legally protected plant and wildlife species. Species listed under this condition include the Contra Costa goldfields plant and several wildlife species common to the area, including:

- Golden eagle
- Bald eagle
- Southern bald eagle
- American peregrine falcon
- White-tailed kite

- California condor
- Ring-tailed cat

Table 13 Santa Clara Valley Habitat Conservation Plan Conditions

Habitat Management Plan Condition	Purpose
Condition 1	Avoid direct impacts on legally protected plant and wildlife species.
Condition 2 (specific to urban development)	Incorporate urban-reserve system interface design requirements.
Condition 3 (specific to urban development)	Maintain hydrologic conditions and protect water quality.
Condition 4 (specific to in-stream projects)	Avoidance and minimization for in-stream projects
Condition 5 (specific to in-stream operations and maintenance)	Avoidance and minimization for in-stream operations and maintenance
Condition 6 (specific to rural projects)	Design and construction requirements for covered transportation projects
Condition 7 (specific to rural projects)	Rural development design and construction guidelines
Condition 8 (specific to rural operations and maintenance)	Implement avoidance and minimization measures for rural road maintenance
Condition 9 (specific to reserve system implementation)	Prepare and implement a recreation plan
Condition 10 (specific to reserve system implementation)	Fuel buffer
Condition 11 (specific to minimize impacts on natural communities	Stream and riparian setback requirements
Condition 12 (specific to minimize impacts on natural communities	Wetland and pond avoidance and minimization
Condition 13 (specific to minimize impacts on natural communities	Serpentine and associated covered species avoidance and minimization
Condition 14 (specific to minimize impacts on natural communities	Valley oak and blue oak woodland avoidance and minimization
Condition 15 (specific to minimize impacts on specific covered species)	Burrowing owl
Condition 16 (specific to minimize impacts on specific covered species)	Least Bell's vireo
Condition 17 (specific to minimize impacts on specific covered species)	Tricolored blackbird
Condition 18 (specific to minimize impacts on specific covered species)	San Joaquin kit fox
Condition 19 (specific to minimize impacts on specific covered species)	Plant salvage when impacts are unavoidable
Condition 20 (specific to minimize impacts on specific covered species)	Avoid and minimize impacts to covered plant occurrences

Protected species are listed under California Fish and Game Code Sections 3511 and 4700. As discussed under criteria (a), above, migratory birds and their nests are also protected. Implementation of standard permit conditions would ensure the avoidance of any protected wildlife species listed under the above referenced section and those listed that may be impacted by the

project, and with issuance of this permit, the project's impacts on legally protected plant and wildlife species would be less than significant.

ENVISION SAN JOSÉ GENERAL PLAN

The City of San José has policies to preserve, avoid, and mitigate impacts to biological resources in the City. The following goals and policies apply to the project:

Goal ER-4: Special-Status Plants and Animals: Preserve, manage, and restore habitat suitable for special-status species, including threatened and endangered species.

- **Policy ER-4.1:** Preserve and restore, to the greatest extent feasible, habitat areas that support special-status species. Avoid development in such habitats unless no feasible alternatives exist and mitigation is provided of equivalent value.
- **Policy ER-4.2:** Limit recreational uses in wildlife refuges, nature preserves and wilderness areas in parks to those activities which have minimal impact on sensitive habitats.

Goal ER-5: Migratory Birds: Protect migratory birds from injury or mortality

- **Policy ER-5.1:** Avoid implementing activities that result in the loss of active native birds' nests, including both direct loss and indirect loss through abandonment, of native birds. Avoidance of activities that could result in impacts to nests during the breeding season or maintenance of buffers between such activities and active nests would avoid such impacts
- **Policy ER-5.2:** Require that development projects incorporate measures to avoid impacts to nesting migratory birds.

Goal MS-21: Community Forest: Preserve and protect existing trees and increase planting of new trees within San José to create and maintain a thriving Community Forest that contributes to the City's quality of life, its sense of community, and its economic and environmental well being

- **Policy MS-21.4:** Encourage the maintenance of mature trees, especially natives, on public and private property as an integral part of the community forest. Prior to allowing the removal of any mature tree, pursue all reasonable measures to preserve it.
- **Policy MS-21.5:** As part of the development review process, preserve protected trees (as defined by the Municipal Code), and other significant trees. Avoid any adverse effect on the health and longevity of protected or other significant trees through appropriate design measures and construction practices. Special priority should be given to the preservation of native oaks and native sycamores. When tree preservation is not feasible, include appropriate tree replacement, both in number and spread of canopy.
- **Policy MS-21.6:** As a condition of new development, require the planting and maintenance of both street trees and trees on private property to achieve a level of tree coverage in compliance with and that implements City laws, policies or guidelines.

City of San José Municipal Code

Chapter 13.32 of the San José Municipal Code requires a permit for the removal of "ordinance-size trees" on private property or the removal of any size tree on multifamily, commercial, or industrial lots. The City also requires a permit for the trimming or removal of any "street tree" located within the City's right of way (i.e., between the curb and the sidewalk), and the trimming or removal of any tree designated as a "heritage tree." The City defines a "tree" under Municipal Code Section 13.28.105 as "any perennial, woody plant species or cultivar that reaches a height exceeding 6 feet at maturity, whether planted singly or as a hedge, and having secondary branches supported on a main stem or stems."

City of San José Riparian Corridor Protection and Bird-Safe Design Policy

The City of San José's Riparian Corridor Protection and Bird-Safe Design Policy is intended to protect, preserve, and restore riparian habitat throughout the city by limiting the creation of new impervious surfaces within the Riparian corridor setbacks. This Policy's guidelines supplement the regulations for Riparian Corridor protection in the Council-adopted Santa Clara Valley Habitat Conservation Plan/Natural Community Conservation Plan (Habitat Plan) (Chapter 18.40 of Title 18 of the San José Municipal Code), the Zoning Code (Title 20 of the San José Municipal Code), and other existing City policies that may provide for riparian protection and bird-safe design.

Impact Analysis

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

The project site consists of existing Industrial buildings in a highly urbanized area of the city. The City's General Plan Final Program EIR identifies the project as entirely in urban and suburban environments where biological resources are limited. Special-status plants are not expected to occur in areas of the city already urbanized due to previous land modifications and removal of native plants, and because they do not support natural plant communities (City of San José 2011b).

The project will remove 44 of the 116 trees currently on site, which may affect protected nesting birds at the project site. Therefore, the following mitigation measure would be required to protect nesting birds that may be found in urban settings, such as the house finch and Anna's hummingbird.

Mitigation Measure

The following Mitigation Measure would be required to avoid or reduce the project's potentially significant impacts to nesting birds and special status wildlife in the adjacent corridor.

BIO-1 Nesting Bird Surveys and Avoidance

The project would implement the following measures to avoid impacts to nesting migratory birds:

- **Avoidance.** The project applicant shall schedule demolition and construction activities to avoid the nesting season. The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February 1st through August 15th (inclusive), as amended.
- **Nesting Bird Surveys.** If it is not possible to schedule demolition and construction between August 16th and January 31st (inclusive), pre-construction surveys for nesting birds shall be

completed by a qualified ornithologist to ensure that no nests shall be disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of construction activities during the early part of the breeding season (February 1st through April 30th inclusive) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May 1st through August 15th inclusive). During this survey, the ornithologist shall inspect all trees and other possible nesting habitats immediately adjacent to the construction areas for nests.

- **Buffer Zones.** If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist, in consultation with the California Department of Fish and Wildlife, shall determine the extent of a construction free buffer zone to be established around the nest, typically 250 feet, to ensure that raptor or migratory bird nests shall not be disturbed during project construction. The no-disturbance buffer shall remain in place until the biologist determines the nest is no longer active or the nesting season ends. If construction ceases for two days or more then resumes during the nesting season, an additional survey shall be necessary to avoid impacts to active bird nests that may be present.
- R**eporting.** Prior to any tree removal, or approval of any grading permits (whichever occurs first), the project applicant shall submit the ornithologist's report indicating the results of the survey and any designated buffer zones to the satisfaction of the Director of Planning, Building and Code Enforcement or the Director's designee, prior to issuance of any grading or building permits.

Implementation of Mitigation Measure BIO-1 would provide protection of nesting birds on-site and reduce impacts to nesting birds to a less than significant level by identifying and, as necessary, avoiding active nests.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

The project site has been identified as entirely within an urban/suburban habitat (City of San José 2011a). The nearest sensitive habitat to the project site is the riparian habitat along Coyote Creek, approximately one mile to the west. The City's Riparian Corridor Policy Study analyzed streams and riparian corridors in the City of San José and addresses how development should protect and preserve these riparian corridors. Furthermore, the City's Riparian Corridor Protection and Bird-Safe Design Policy (Council Policy 6-34) supplements the regulations for riparian corridors and provides guidance for project design that protects and preserves these riparian corridors (City of San José 2016). The Riparian Corridor Policy applies to projects within 300 feet of a riparian corridor's top of bank or edge of vegetation, whichever is greater. It requires commercial/industrial buildings to observe a 100-foot setback from the riparian corridor and orient loading docks and other major activity areas away from the riparian corridors (City of San José 2016). As the project is located more than 300 feet from Coyote Creek, it is not subject to the provisions of the riparian policy. Therefore, the project would not conflict with the Riparian Corridor Policy and impacts would be less than significant. The project would not result in a loss of sensitive habitat. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The National Wetlands Inventory was reviewed to determine if any wetland and/or non-wetland waters had been previously documented and mapped on the project site (USFWS 2018). According to a review of the project site conducted by Rincon Consultants on August 30, 2019, no habitat of a quality to support native riparian plant or wildlife species is present on the project site (Appendix BIO). Additionally, federally protected wetlands or waters as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal) do not occur on-site. The Coyote Creek, a riverine wetland resource, is located one mile west of the project site. The project would not involve the direct removal, filling, hydrological interruption, or other disturbance to the bed, bank, or channel of the adjacent upland area of Coyote Creek corridor. No impact would occur.

NO IMPACT

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

Urbanized parcels of the city are not considered important for regional movement of reptiles, amphibians, mammals, or other wildlife species (City of San José 2011a). Therefore, because the project would be infill development in a previously urbanized part of the city, there would be no impacts on wildlife movement.

Migratory fish species that occur in the city would potentially use streams and local waterways. According to a review of the project site conducted by Rincon Consultants on August 30, 2019, the project site is located approximately one mile from Coyote Creek, a distance far enough that the project would not impede movement of fish species (Appendix BIO). There would be no impact.

NO IMPACT

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

The project site contains 116 mature trees, 36 of which would be removed during implementation of the project (Appendix ARB). Per City Standard Conditions of Approval, the remaining 80 trees would be preserved during project construction and would be fenced and protected to avoid or minimize direct damage to the root systems by a licensed arborist on-site during excavation.

Pursuant to Chapter 13.28 of the Municipal Code, none of the proposed trees to be removed are heritage trees. Consistent with the City's Riparian Corridor Protection and Bird-Safe Design Policy, the project site is located south of Route 237, away from the Baylands. However, the project would be required to adhere to the City's tree replacement requirements, as outlined in the standard permit condition below The 44 removed trees (of which 34 are ordinance sized and 16 are native coast redwood trees) would be replaced by the project The project would avoid impacts to the adjacent trees during construction activities. Therefore, impacts would be less than significant.

Standard Permit Condition

The removed trees would be replaced according to ratios required by the City, indicated in Table 14, and the project would be subject to tree protection measures.

Table 14 City of San José Tree Replacement Ratios

Circumference of Tree to be Removed	Type of Tree to be Removed			Minimum Size of Each Replacement Tree
	Native	Non-Native	Orchard	
38 increase or more	5:1	4:1	3:1	15-gallon
19 to 38 inches	3:1	2:1	None	15-gallon
Less than 19 inches	1:1	1:1	1	15-gallon

x:x = tree replacement to tree loss ratio

Note: Trees greater than or equal to 18-inch circumference shall not be removed unless a Tree Removal Permit, or equivalent, has been approved for the removal of such trees (City of San José Municipal Code Section 13.32).

A 38-inch tree equals 12.1 inches in diameter.

A 24-inch box tree equals two 15-gallon trees

Single-family and two-dwelling properties may be mitigated at a 1:1 ratio.

Of the trees on-site, coast redwood and northern red oak trees are native; shamel ash, Mexican fan palm, Lombardy poplar, Canary Island pine, Liquidambar, and Chinese tallow trees are non-native, and Callery pear and purple-leaf plum trees are orchard.

In the event the project site does not have sufficient area to accommodate the required tree replacement planting scheme, one or more of the following conditions will be implemented, to the satisfaction of Director of Planning, Building, and Code Enforcement:

- Fifteen-gallon-sized replacement trees can be increased to 24-inch boxes and count as two replacement trees.
- Pay Off-Site Tree Replacement Fee(s) to the City, prior to the issuance of Public Works grading permit(s), in accordance to the City Council approved Fee Resolution. The City will use the off-site tree replacement fee(s) to plant trees at alternative sites.

LESS THAN SIGNIFICANT IMPACT

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

Figure 2-2 of the Habitat Plan shows the project site to be entirely within the urban development land use area; it is therefore considered urban development under the plan. As stated above, the project is located within the urban-suburban land cover and the urban areas land cover fee zones. Fees collected from developments in these zones are used to maintain the Plan's Reserve System of protected open space and streams for wildlife habitat. Because the project would generate net new vehicle trips, the project would be subject to a nitrogen deposition fee that accounts for indirect impacts from vehicle emissions on sensitive habitats within the Habitat Plan Permit Area.

Condition Two of the Habitat Plan aims to minimize impacts from development along the interface of existing or future urban development and the Reserve System. The project would constitute infill of a developed site that is entirely surrounded by existing urban development. Therefore, the project would not be located near an interface with the Reserve System. The project is not located near Coyote Creek such that the project would result in any impacts to the creek corridor. Therefore, impacts would be less than significant.

Condition three of the Habitat Plan addresses potential impacts on watershed health through changes in hydrology and water quality and applies to all projects within the Habitat Plan area. As discussed in Section 4.10, *Hydrology and Water Quality*, project construction could result in temporary impacts on water quality from runoff leaving the site. Temporary soil disturbance would

occur during project construction from earth-moving activities, such as excavation and trenching for foundations and utilities, soil compaction and moving, cut and fill activities, and grading. If not managed properly, disturbed soils would be susceptible to high rates of erosion from wind and rain, resulting in sediment transport via stormwater runoff from the project site.

The project would be required to comply with stormwater management regulations under the City of San José's National Pollutant Discharge Elimination System (NPDES) permit, administered by the San Francisco Bay Regional Water Quality Control Board (RWQCB), and the project would be subject to the City's Industrial/Commercial Facility stormwater inspection program that ensures the continued protection of storm drains, creeks, and the San Francisco Bay from polluted discharges originating from industrial and commercial facilities.

As discussed further in Section 4.10, *Hydrology and Water Quality*, because the project would involve disturbance of more than one acre of land surface, it would be subject to the State of California General Stormwater Permit for Construction Activities. Permit conditions require development of a stormwater pollution prevention plan (SWPPP), which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Inspection of construction sites before and after storms also must identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary.

Table 6-2 of the Habitat Plan identifies avoidance and minimization measures for all covered activities in the Habitat Plan area, including the project site, which would be administered by the City of San José. The project would be required to adhere to the applicable avoidance and minimization measures identified in Table 6-2 of the Habitat Plan, including through stormwater protection measures discussed in Section 4.10, *Hydrology and Water Quality*, through permit requirements. Compliance with the Habitat Plan, as outlined in the standard permit conditions below, would result in less than significant impacts.

Standard Permit Condition

The project is subject to applicable Habitat Plan conditions and fees (including the nitrogen deposition fee) prior to issuance of any grading permit. The project applicant shall submit a Santa Clara Valley Habitat Plan Coverage Screening Form to the Supervising Environmental Planner of the Department of Planning, Building, and Code Enforcement for review and will complete subsequent forms, reports, and/or studies as needed.

LESS THAN SIGNIFICANT IMPACT

Conclusion

The project, with implementation of Mitigation Measure BIO-1 and the Standard Permit Conditions above, would not result in significant impacts to biological resources.

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4.5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	■
b. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	■	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	■	☐

Setting

The City of San José was founded on November 29, 1777, making it the first town or "pueblo" (non-military settlement) in what was at that time the Spanish colony of Alta California. It is the oldest colonial civilian settlement in California and retains many remnants of its evolution (City of San José 2011a). A habitation site is located in the project vicinity.

The project site is part of a larger industrial property with three existing buildings, currently occupied by STACK infrastructure. According to a Phase I Environmental Site Assessment conducted for the project site by Cornerstone Earth Group, both buildings on site were constructed between 1974 and 1975 (Cornerstone Earth Group 2019; Appendix HAZ). None of the structures on site are listed on the City's Historic Resources Inventory (City of San José 2016). The project site is paved; it was graded for the existing development, and partially excavated for underground storage tanks (UST). The site was historically used mainly for agriculture with widely spaced residences. By the 1960s, commercial and residential development increased in the vicinity, and adjacent properties were developed for commercial use during the 1980s and 1990s (Appendix HAZ).

Regulatory Setting

Thresholds of Significance

CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1) and tribal cultural resources (PRC Section 21074 [a][1][A]-[B]). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources, a resource included in a local register of historical resources, or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered historically significant pursuant to the California Register of Historical Resources criteria for designation if it meets any of the following:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
2. Is associated with the lives of persons important in our past
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
4. Has yielded, or may be likely to yield, information important in prehistory or history

If it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b]).

PRC, Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person

Federal

NATIONAL HISTORIC PRESERVATION ACT

The National Historic Preservation Act of 1966 (as amended) is the primary federal law dealing with historic preservation. Section 106 of the National Historic Preservation Act requires federal agencies to consult with the Advisory Council on Historic Preservation to consider the effects of their undertakings on historic properties.

NATIONAL REGISTER OF HISTORIC PLACES

The National Register of Historic Places is a comprehensive inventory of known historic resources throughout the U.S. The National Register is administered by the National Park Service and includes buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological or cultural significance. National Register Bulletin Number 15, How to Apply the National Register Criteria for Evaluation, describes the Criteria for Evaluation as being composed of two factors. First, the property must be "associated with an important historic context", and second the property must retain integrity of those features necessary to convey its significance.

The National Register identifies four possible context types or criteria, at least one of which must be applicable at the national, state, or local level. As listed under Section 8, "Statement of Significance," of the National Register of Historic Places Registration Form, these are:

a. Property is associated with events that have made a significant contribution to the broad patterns of our history.
b. Property is associated with the lives of persons significant in our past.

c. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
d. Property has yielded, or is likely to yield, information important to prehistory or history.

SECRETARY OF THE INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES

Under the National Historic Preservation Act, the Secretary of the Interior is responsible for establishing professional standards and for providing guidance on the preservation of the nation's historic properties. The standards address four treatments: preservation, rehabilitation, restoration, and reconstruction. The Secretary of the Interior's Standards for the Treatment of Historic Properties are regulatory only for projects receiving Historic Preservation Fund grant assistance and other federally-assisted projects. Otherwise, they are intended to provide general guidance for work on any historic building.

State

ASSEMBLY BILL 52

As of July 1, 2015, California AB 52 was enacted and expands CEQA by defining a new resource category" "tribal cultural resources." AB 52 establishes that "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (Public Resources Code [PRC] Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

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

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

CALIFORNIA HEALTH AND SAFETY CODE

California Health and Safety Code Section7054 states it is generally illegal to deposit of dispose of human remains in any place other than a cemetery. Section 7050.5 regulates the procedure to be followed if human remains are discovered. Pursuant to PRC Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the County Coroner has made the

necessary findings regarding the origin and disposition of the remains. If the remains are determined to be of Native American heritage, the Coroner is required to contact the Native American Heritage Commission (NAHC). The NAHC is responsible for contacting the most likely Native American descendent, who would consult with the local agency regarding how to proceed with the remains. According to Section 15064.5 of the CEQA Guidelines, all human remains are considered a significant resource.

City of San José

ENVISION SAN JOSÉ 2040 GENERAL PLAN

Chapter 3, Environmental Leadership, of the City's General Plan sets forth sustainability goals for the city of San José through 2040. The Environmental Resources subsection discusses archaeology- and paleontology-related Goals, Policies, and Actions. Chapter 6, Land Use and Transportation, of the General Plan discusses the land use policies that focus on historically-significant buildings and areas of the city. Chapter 7, Implementation, in the General Plan provides environmental clearance goals and policies that relate to cultural resources. The following are applicable policies that relate to the proposed project (City of San José 2011a):

Policy ER-10.1 For proposed development sites that have been identified as archaeologically or paleontologically sensitive, require investigation during the planning process in order to determine whether potentially significant archaeological or paleontological information may be affected by the project and then require, if needed, that appropriate mitigation measures be incorporated into the project design.

Policy ER-10.2 Recognizing that Native American human remains may be encountered at unexpected locations, impose a requirement on all development permits and tentative subdivision maps that upon discovery during construction, development activity will cease until professional archaeological examination confirms whether the burial is human. If the remains are determined to be Native American, applicable state laws shall be enforced.

Policy ER-10.3 Ensure that City, State, and Federal historic preservation laws, regulations, and codes are enforced, including laws related to archaeological and paleontological resources, to ensure the adequate protection of historic and pre-historic resources.

Policy LU-13.9 Promote the preservation, conservation, rehabilitation, restoration, reuse, and/or reconstruction, as appropriate, of contextual elements (e.g., structures, landscapes, street lamps, street trees, sidewalk design, signs) related to candidate and/or landmark buildings, structures, districts, or areas.

Policy LU-13.15 Implement City, State, and Federal historic preservation laws, regulations, and codes to ensure the adequate protection of historic resources.

Policy IP-12.3 Use the Environmental Clearance process to identify potential impacts and to develop and incorporate environmentally beneficial actions, particularly those dealing with the avoidance of natural and human-made hazards and the preservation of natural, historical, archaeological and cultural resources.

Impact Analysis

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

The project site is developed and used by a data storage company. According to the City of San José's Historic Resources Inventory, the project site and adjacent properties do not contain historic resources defined under the PRC Section 15064.5 (City of San José 2016). Additionally, the property has not been the location of known important events and is not associated with any persons important to national, state, or local history. No impact would occur with the demolition and redevelopment of the site.

NO IMPACT

b. Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?

Due to the presence of a habitation site in the immediate vicinity of, and likely on, the project site, archaeological resources and human remains may be present. The project site is considered highly sensitive for archaeological resources. Project construction would involve ground-disturbing activities such as grading and surface excavation that could potentially unearth or adversely impact archaeological resources or human remains. Compliance with City standard permit conditions would reduce potential impacts to archaeological resources. However, due to the high sensitivity of the project site for archaeological resources, further mitigation would be necessary to reduce impacts to a less than significant level.

Standard Permit Condition

Consistent with General Plan policies ER-10.1, ER-10.2, and ER-10.3, the following Standard Permit Condition shall be implemented by the project to reduce or avoid impacts to subsurface cultural resources to a less than significant level.

- **Subsurface Cultural Resources.** If prehistoric or historic resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped, the Director of Planning, Building and Code Enforcement (PBCE) or the Director's designee and the City's Historic Preservation Officer shall be notified, and a qualified archaeologist shall examine the find. The archaeologist shall 1) evaluate the find(s) to determine if they meet the definition of a historical or archaeological resource; and (2) make appropriate recommendations regarding the disposition of such finds prior to issuance of building permits. Recommendations could include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery shall be submitted to Director of PBCE or the Director's designee and the City's Historic Preservation Officer and the Northwest Information Center (if applicable). Project personnel shall not collect or move any cultural materials.

Mitigation Measure

Mitigation Measure CR-1: Cultural Resources Treatment Plan

Prior to the issuance of any grading permit, a project-specific Cultural Resources Treatment Plan shall be prepared by a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for prehistoric archaeology (qualified archaeologist; National Park Service

1983). The Cultural Resources Treatment Plan shall be developed based on available records both onsite and adjacent sites. The Cultural Resources Treatment Plan shall reflect permit-level detail pertaining to depths and locations of all ground disturbing activities. The Cultural Resources Treatment Plan shall be prepared and submitted to the City's Director of Planning or Designee and the Historic Preservation Officer prior to approval of any grading permit. The Treatment Plan shall contain, at a minimum:

- Identification of the scope of work and range of subsurface effects (including location map and development plan), including requirements for preliminary field investigations.
- Description of the environmental setting (past and present) and the historic/prehistoric background of the parcel (potential range of what might be found).
- Development of research questions and goals to be addressed by the investigation (what is significant vs. what is redundant information).
- Detailed field strategy used to record, recover, or avoid the finds and address research goals.
- Analytical methods to be employed for identified resources.
- Requirements for report structure and outline of document contents.
- Disposition of the artifacts.
- Appendices: all site records, correspondence, and consultation with Native Americans, etc.

Mitigation Measure CR-2: Archaeological Monitoring Plan

Prior to issuance of a grading permit, a qualified archaeologist shall prepare an Archaeological Monitoring Plan (AMP).

- The AMP shall a provide a description of methods to be undertaken during monitoring and the steps to be taken in the event of an archaeological discovery.
- Upon acceptance of the plan by the project applicant, City of San José, and the local Native American group(s) (if any), all initial project-related ground-disturbing activities shall be observed by an archaeological monitor under the direction of the qualified archaeologist and by a local Native American (if any) monitor.
- If intact archaeological features are encountered during ground-disturbing activities, work within 50 feet must halt and the find evaluated for significance. Work may continue outside of the 50-foot radius, upon the recommendations of an archaeological and Native American (if any) monitor and approval by the City.

During the course of monitoring, field conditions may indicate a low likelihood of encountering cultural resources. Therefore, full time monitoring may be eliminated or reduced to spot-checking (periodic monitoring). A reduction in the monitoring effort, such as spot-checking, shall be made by the qualified archaeologist in consultation with City staff and Native American representatives (if any). Spot-checking may include a monitoring effort as ground disturbing activities move to new locations within the project site (e.g., monitoring the first day of digging at a new location to determine the potential cultural resources sensitivity of the location). Implementation of the standard permit condition and Mitigation Measure CR-1 would reduce impacts to a less than significant level by ensuring that ground disturbing activities are monitored, and work is halted if archaeological resources are discovered during project construction.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project disturb any human remains, including those interred outside of formal cemeteries?

No human remains are known to be present on the project site. However, the project site is located in an area that contained a Native American village site and human remains are a possibility. Consistent with General Plan Policies ER-10.1 and ER-10.3, the City would apply a standard permit condition, detailed below. Additionally, the project sponsor is required to comply with existing regulations regarding human remains. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of being granted access to the site to provide recommendations to the landowner as to the treatment of the human remains.

Standard Permit Condition

- **Human Remains.** If any human remains are found during any field investigations, grading, or other construction activities, all provisions of California Health and Safety Code Sections 7054 and 7050.5 and Public Resources Code Sections 5097.9 through 5097.99, as amended per Assembly Bill 2641, shall be followed. If human remains are discovered during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The project applicant shall immediately notify the Director of PBCE or the Director's designee and the qualified archaeologist, who shall then notify the Santa Clara County Coroner. The Coroner will make a determination as to whether the remains are Native American. If the remains are believed to be Native American, the Coroner will contact the NAHC within 24 hours. The NAHC will then designate an MLD who will inspect the remains and make a recommendation on the treatment of the remains and associated artifacts. If one of the following conditions occurs, the landowner or his authorized representative shall work with the Coroner to reinter the Native American human remains and associated grave goods with appropriate dignity in a location not subject to further subsurface disturbance:
- The NAHC is unable to identify an MLD or the MLD fails to make a recommendation within 48 hours after being given access to the site
- The identified MLD fails to make a recommendation
- The landowner or their authorized representative rejects the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner

Implementation of this standard permit condition and existing regulations would reduce potential impacts on unknown human remains to a less than significant level.

LESS THAN SIGNIFICANT IMPACT

Conclusion

The project, with implementation of the Mitigation Measure CR-1, Mitigation Measure CR-2, and Standard Permit Conditions, would not result in significant impacts to cultural resources.

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4.6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☐	☐	■

Setting

Energy use is typically quantified using the British Thermal Unit (BTU), which is the amount of energy that is required to raise the temperature of one pound of water by 1°F. As points of reference, the approximate amount of energy contained in a gallon of gasoline, a cubic foot of natural gas, and a kilowatt hour (kWh) of electricity are shown in Table 15. Natural gas usage is expressed in therms. A therm is equal to 100,000 BTU. Electrical energy is expressed in units of kilowatt hours (kWh), megawatt hours (MWh = 1,000 kWh), gigawatt hours (GWh = one million kWh), or terawatt hours (TWh = one billion kWh). One kWh is equal to the amount of energy expended by 1,000 watts (the typical electricity that is consumed by a 1,000-watt hand-held hair dryer) over the period of one hour.

Table 15 Approximate Amount of Energy Converted to BTU

	1 Gallon of Gasoline	1 Cubic Foot of Natural Gas	1 Kilowatt Hour (kWh) of Electricity
Approximate amount of energy in BTU	123,000 BTUs	1,000 BTUs	3,400 BTUs

Electricity and Natural Gas

The project site does not currently and would not use natural gas during project operation. Therefore, no further discussion of natural gas energy consumption is warranted.

In 2018, California used 285,488 gigawatt-hours (GWh) of electricity, of which approximately 31 percent were from renewable resources (CEC 2019a). In 2018, Santa Clara County used 16,708 GWh of electricity (CEC 2019a).

In February 2019, the City of San José launched San José Clean Energy (SJCE), a community choice aggregate program providing carbon-free electricity to municipal customers, residents and businesses in the City of San José. Electricity provided to customers by SJCE is transferred and delivered using existing Pacific Gas and Electric (PG&E) infrastructure. Electricity service at the project site would be provided by SJCE (City of San José 2018).

Electricity supplies, including those supplied to San José by PG&E, are also regulated by the CEC. Table 16 shows the electricity consumption by sector and total for PG&E. In 2017, PG&E provided approximately 28.2 percent of the total electricity used in California.

Table 16 Electricity Consumption in the PG&E Service Area in 2018

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Streetlight	Total Usage
5,831.5	30,148.4	4,265.6	10,518.6	1,593.7	27,700.3	310.6	80,368.7

Notes: All usage expressed in GWh

Source: CEC 2017b

Petroleum

In 2016, approximately 40 percent of the state's energy consumption was used for transportation activities (U.S. Energy Information Administration 2018). Californians presently consume over 19 billion gallons of motor vehicle fuels per year (CEC 2019b). Though California's population and economy are expected to grow, gasoline demand is projected to decline from roughly 15.8 billion gallons in 2017 to between 12.3 billion and 12.7 billion gallons in 2030, a 20 percent to 22 percent reduction. This decline comes in response to both increasing vehicle electrification and higher fuel economy for new gasoline vehicles (CEC 2019b).

As noted in Section 3, *Project Description* above, the project would involve installation of 20 diesel-powered stand-by generators that would be used to provide back-up electricity to the data center during major, prolonged power outage events. Each of the 20 diesel-powered stand-by generators would have the capacity to produce three MW of electric power, or 60 MW in total when all generators are operating at the same time. However, due to standard redundancy practices, 4 generators would remain inactive during power outage events as a back-up in case of failure of the operable generators. Thus, the maximum number of generators in operation at the project site would be 16, producing a maximum of 48 MW of electric power. Therefore, the project would not be subject to power plant licensing through the CEC.

Regulatory Setting

State

RENEWABLE PORTFOLIO STANDARD PROGRAM

In 2002, with the adoption of SB 1078, California established its Renewable Portfolio Standard (RPS) program, with the goal of increasing the percentage of renewable energy in the State's electricity mix by at least one to 20 percent per year by 2017. The adoption of SB 107 subsequently accelerated that goal to 2010 for electrical corporations, and under Executive Order S-14-08 the target for all retail electricity sellers increases to 33 percent by 2020. The Renewable Portfolio Standard was developed to provide a flexible, market-driven policy to ensure that the public benefits of wind, solar, biomass, and geothermal energy continue to be realized as electricity markets become more competitive. The policy aims to ensure a minimum amount of renewable energy is included in the portfolio of electricity resources serving a state or county, putting the energy industry on a path toward increasing sustainability. The CPUC and CEC are jointly responsible for implementing the RPS program. Legislation establishing the RPS created no obligation for local

land authorities. However, to meet the requirements of this legislation, additional renewable energy projects and transmission line connections will be necessary and local land use planning processes can facilitate or hinder the ability of energy providers to establish these additional facilities.

BUILDING ENERGY EFFICIENCY STANDARDS (TITLE 24)

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6, of the California Code of Regulations (CCR), were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The current version of the standards was adopted on April 23, 2008 and took effect August 1, 2009. Compliance with these standards is mandatory at the time new building permits are issued by City and County governments.

In January 2010, the state of California adopted the California Green Building Standards Code, Title 24, Part 11 (CALGreen) that establishes mandatory green building standards for new construction (new buildings and expansions) in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality. These standards include a mandatory set of minimum guidelines, as well as more rigorous voluntary measures, for new construction projects to achieve specific green building performance levels. Local communities may institute more stringent versions of the code if they choose. The code went into effect as part of a local jurisdiction's building code on January 1, 2011.

Regional

SILICON VALLEY ENERGY WATCH

The City of San José is a partner, along with PG&E and Ecology Action, in the Silicon Valley Energy Watch program. This program is designed to assist municipal governments, non-profits, small businesses, community organizations, professionals, and residents in Santa Clara County take advantage of cost-saving, energy-efficient technologies. The program offers free energy audits, targeted retrofits, technical assistance, education, and training.

City of San José

ENVISION SAN JOSÉ 2040 GENERAL PLAN

The Environmental Leadership Chapter (Chapter Three in the General Plan) sets forth goals and policies for topics related to the City's continuing commitment to Environmental Leadership and is organized into four categories: Measure Sustainability, Environmental Resources, Environmental Considerations/Hazards, and Infrastructure. The Measure Sustainability subsection discusses energy conservation and renewable energy use Goals, Policies, and Actions, summarized below (City of San José 2011a):

Goal MS-2 Energy Conservation and Renewable Energy Use. Maximize the use of green building practices in new and existing development to maximize energy efficiency and conservation and to maximize the use of renewable energy sources.

Policy MS-2.2 Encourage maximized use of on-site generation of renewable energy for all new and existing buildings

Policy MS-2.3 Utilize solar orientation (i.e., building placement), landscaping, design, and construction techniques for new construction to minimize energy consumption.

Policy MS-2.4 Promote energy efficient construction industry practices.

Policy MS-2.5 Encourage responsible forest management in wood material selections and encourage the use of rapidly renewable materials.

Policy MS-2.6 Promote roofing design and surface treatments that reduce the heat island effect of new and existing development and support reduced energy use, reduced air pollution, and a healthy urban forest. Connect businesses and residents with cool roof rebate programs through City outreach efforts.

Policy MS-2.7 Encourage the installation of solar panels or other clean energy power generation sources over parking areas.

Action MS-2.8 Develop policies which promote energy reduction for energy-intensive industries. For facilities such as data centers, which have high energy demand and indirect greenhouse gas emissions, require evaluation of operational energy efficiency and inclusion of operational design measures as part of development review consistent with benchmarks such as those in EPA's EnergyStar Program for new data centers. Also require consideration of distributed power production for these facilities to reduce energy losses from electricity transmission over long distances and energy production methods such as waste-heat reclamation or the purchase of renewable energy to reduce greenhouse gas emissions.

Action MS-2.9 Develop, implement, and utilize programs that help businesses and homeowners improve the energy efficiency of new and existing buildings and use of renewable energy sources, such as solar, through on-site generation or purchase of electricity from solar power programs in California.

Action MS-2.10 Develop policies to encourage the use of building materials extracted and/or manufactured in California, or within 500 miles of San José.

Action MS-2.11 Require new development to incorporate green building practices, including those required by the Green Building Ordinance. Specifically, target reduced energy use through construction techniques (e.g., design of building envelopes and systems to maximize energy performance), through architectural design (e.g., design to maximize cross ventilation and interior daylight) and through site design techniques (e.g., orienting buildings on sites to maximize the effectiveness of passive solar design).

Action MS-2.12 Update the Green Building Ordinance to require use of energy efficient plumbing fixtures and appliances that are WaterSense certified, Energy Star rated, or equivalent, in new construction and renovation projects.

Policy MS-14.3 Consistent with the California Public Utilities Commission's California Long Term Energy Efficiency Strategic Plan, as revised, and when technological advances make it feasible, require all new residential and commercial construction to be designed for zero net energy use.

Policy MS-14.4 Implement the City's Green Building Policies (see Green Building Section) so that new construction and rehabilitation of existing buildings fully

implements industry best practices, including the use of optimized energy systems, selection of materials and resources, water efficiency, sustainable site selection, passive solar building design, and planting of trees and other landscape materials to reduce energy consumption.

Policy MS-14.5 Consistent with State and Federal policies and best practices, require energy efficiency audits and retrofits prior to or at the same time as consideration of solar electric improvements.

Goal MS-15 Renewable Energy. Receive 100% of electrical power from clean renewable sources (e.g., solar, wind, hydrogen) by 2022 and to the greatest degree feasible increase generation of clean, renewable energy within the City to meet its own energy consumption needs

Policy MS-15.5 Showcase and apply innovative technologies within San José, including developments that achieve maximum energy efficiency or net zero energy, and renewable energy systems that generate energy equal to or greater than that consumed on site.

SUSTAINABLE CITY STRATEGY

The Sustainable City Strategy is a statement of the City's commitment to becoming an environmentally and economically sustainable city. Programs promoted under this strategy include recycling, waste disposal, water conservation, transportation demand management, and energy efficiency. The Sustainable City Strategy is intended to support these efforts by ensuring that development is designed and built in a manner consistent with the efficient use of resources and environmental protection.

As part of the Sustainable City Strategy, the City of San José has a Greenhouse Gas Reduction Strategy that is being updated to follow the requirements of Senate Bill (SB) 32. The existing Greenhouse Gas Reduction Strategy outlines the methodology to reduce GHGs to 1990 levels by the year 2020. The updated Greenhouse Gas Reduction Strategy will provide guidance to further reduce GHGs to 40 percent below 1990 levels by 2030. Part of this strategy is to reduce energy use and expand the use of renewable energy.

Like Land Use and Local Impacts Measures, Energy, and Climate Control Measures (ECM) are a new category of measures in the Bay Area 2010 CAP designed to reduce ambient concentrations of criteria pollutants and reduce emissions of CO_2. ECMs should promote energy conservation and efficiency in buildings throughout the community, promote renewable forms of energy production, reduce the "urban heat island" effect by increasing reflectivity of roofs and parking lots, and promote the planting of (low-VOC emitting) trees to reduce biogenic emissions from trees, lower air temperatures, provide shade and absorb air pollutants. Table 3.4-11 lists the Envision San José 2040 General Plan policies that are supportive of the Bay Area 2010 Clean Air Plan ECMs. A description of each applicable ECM is provided along with a listing of relevant proposed Envision San José 2040 General Plan policies (Chapter 3) that would implement each measure.

As of 2019, San José receives its energy from SJCE, which procures energy from power suppliers of nuclear, hydroelectric, wind, geothermal, biomass, and solar sources in addition to burning of natural gas and coal. With a City goal of converting its energy sources entirely to clean, renewable sources by 2022, it is expected that the City could employ sources such as wind, geothermal, biomass, and solar (and possibly tidal) to meet demands of General Plan-related growth.

CLIMATE SMART SAN JOSÉ

The City of San José City Council adopted the Climate Smart San José, the City's Climate Action Plan, in 2018. Climate Smart San José builds upon the 2007 Green Vision, encouraging the entire San José community to join an ambitious campaign to reduce greenhouse gas emissions, save water and improve quality of life. The plan focuses on energy, mobility, and water to achieve its climate goals in the City.

SAN JOSÉ'S REACH CODE

The City Council approved Ordinance No. 30311 in September 2019 to amend various sections of Title 24 of the City's Municipal Code to adopt provisions of the 2019 California Green Building Standards Code and California Building Energy Efficiency Standards with certain exceptions, modifications, and additions which serve as a Reach Code to increase building efficiency, mandate solar readiness and increase requirements related to electric vehicle charging stations. The Reach Code goes into effect on January 1, 2020 and affects all new construction.

Impact Analysis

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

Construction Energy Demand

During project construction, energy would be consumed in the form of petroleum-based fuels used to power construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to deliver materials to the site. The project would require site preparation and grading, including hauling material off site, pavement and asphalt installation, building construction, architectural coating, and landscaping and hardscaping.

The total consumption of gasoline and diesel fuel during project construction was estimated using the assumptions and factors from CalEEMod used to estimate construction air emissions (Appendix AQ). Table 17 presents the estimated construction phase energy consumption, indicating construction equipment, vendor trips, and worker trips would consume approximately 64,497 gallons of fuel over the project construction period. Construction equipment would consume an estimated 43,926 gallons of fuel; vendor and hauling trips would consume approximately 8,955 gallons of fuel; and worker trips would consume approximately 11,616 gallons of fuel over the combined phases of project construction.

Table 17 Estimated Fuel Consumption during Construction

Fuel Type	Gallons of Fuel	MMBtu[4]
Diesel Fuel (Construction Equipment)[1]	43,926	6,035
Diesel Fuel (Hauling and Vendor Trips)[2]	8,955	1,230
Other Petroleum Fuel (Worker Trips)[3]	11,616	1,398
Total	**64,497**	**8,663**

[1]Fuel demand rate for construction equipment is derived from the total hours of operation, the equipment's horse power, the equipment's load factor, and the equipment's fuel usage per horse power per hour of operation, which are all taken from CalEEMod outputs (see Appendix AQ), and from compression-ignition engine brake-specific fuel consumptions factors for engines between 0 to 100 horsepower and greater than 100 horsepower (USEPA 2018). Fuel consumed for all construction equipment is assumed to be diesel fuel.

[2]Fuel demand rate for hauling and vendor trips (cut material imports) is derived from hauling and vendor trip number, hauling and vendor trip length, and hauling and vendor vehicle class from "Trips and VMT" Table contained in Section 3.0, *Construction Detail*, of the CalEEMod results (see Appendix AQ). The fuel economy for hauling and vendor trip vehicles is derived from the United States Department of Transportation (DOT 2018). Fuel consumed for all hauling trucks is assumed to be diesel fuel.

[3]The fuel economy for worker trip vehicles is derived from the U.S. Department of Transportation National Transportation Statistics (24 mpg) (DOT 2018). Fuel consumed for all worker trips is assumed to be gasoline fuel.

[4]CaRFG CA-GREET 2.0 fuel specification of 109,786 Btu/gallon used to identify conversion rate for fuel energy consumption for worker trips specified above (California Air Resources Board [CARB] 2015). Low-sulfur Diesel CA-GREET 2.0 fuel specification of 127,464 Btu/gallon used to identify conversion rate for fuel energy consumption for construction equipment specified above (CARB 2015). Totals may not add up due to rounding.

Notes: 1 MMBtu is equal to 1 million BTU

The construction energy estimates represent a conservative estimate because the construction equipment used in each phase of construction was assumed to be operating every day of construction. Construction equipment would be maintained to all applicable standards (including being maintained and properly tuned in accordance with manufacturer's specifications and being checked by a certified mechanic to determine the equipment is running in proper condition prior to operation [BAAQMD 2017c]).Construction activity and its associated fuel consumption and energy use would be temporary and typical for construction sites; not be excessive or inefficient due to best practices to reduce construction costs. As discussed in Section 4.3 *Air Quality* and Section 4.8 *Greenhouse Gas Emissions*, this usage would have a less than significant impact to air quality and less than significant impact with mitigation to greenhouse gas emissions. Therefore, the project would not involve the inefficient, wasteful, and unnecessary use of energy during construction and the construction-phase impact related to energy consumption would be less than significant.

Operational Energy Demand

Project operation would require energy use in the form of electricity and gasoline consumption. Electricity would be used for heating and cooling systems, lighting, appliances, water use, and the overall project operation. Electricity from the existing uses on site were not accounted for and therefore this analysis provides a conservative estimate of the electricity usage associated with the proposed project. Gasoline consumption would be attributed to the trips generated from people employed by the proposed project during normal operations. Unlike electricity data, the vehicle miles travelled (VMT) analysis accounts for the reduction from existing uses because Hexagon included specific traffic counts for the uses currently on site based on actual driveway counts in the Transportation Analysis (Appendix TRA). The project's estimated number of average daily trips is used to determine the energy consumption associated with fuel use from project operation. Most of the fuel consumption would be from motor vehicles traveling to and from the project site. According to the CalEEMod calculations, the project would generate a net-new 461,911 annual VMT

(Appendix AQ). Table 18 shows the estimated total annual fuel consumption of the project using the estimated VMT with the assumed vehicle fleet mix (Appendix AQ).

Table 18 Estimated Project Annual Transportation Energy Consumption

Vehicle Type[1]	Percent of Vehicle Trips[2]	Annual Vehicle Miles Traveled[3]	Average Fuel Economy (miles/gallon)[4]	Total Annual Fuel Consumption (gallons)[5]	Total Fuel Consumption (MMBtu)[6]
Passenger Cars	61.1	281,996	24	11,750	1,290
Light/Medium Trucks	32.6	150,575	17.4	8,654	950
Heavy Trucks/Other	5.8	26,886	7.4	3,633	399
Motorcycles	0.5	2,454	43.9	56	6
Total	**100.0**	**461,911**	**–**	**24,093**	**2,645**

[1]Vehicle classes provided in CalEEMod do not correspond exactly to vehicle classes in DOT fuel consumption data, except for motorcycles. Therefore, it was assumed that passenger cars correspond to the light-duty, short-base vehicle class, light/medium trucks correspond to the light-duty long-base vehicle class, and heavy trucks/other correspond to the single unit, 2-axle 6-tire or more class.

[2]Percent of vehicle trips from Table 4.4 "Fleet Mix" in Air Quality and Greenhouse gas Emissions Study, CalEEMod output (see Appendix AQ).

[3]Mitigated annual VMT found in Table 4.2 "Trip Summary Information" in Air Quality and Greenhouse Gas Emissions Study CalEEMod output (see Appendix AQ).

[4]Average Fuel Economy: U.S. Department of Energy, 2018.

[5]U.S. Department of Transportation 2013

[6]CaRFG fuel specification of 109,786 Btu/gallon used to identify conversion rate for fuel energy consumption for vehicle classes specified above (CARB 2015).

Notes: Totals may not add up due to rounding; 1 MMBtu is equal to 1 million BTU.

Source: Appendix AQ

As shown in Table 17, the project would consume approximately 24,093 gallons of fuel, or 2,645 MMBtu, each year for transportation uses from the operation under the most conservative estimate.

Project operation is expected to consume a high amount of electricity per year to maintain computer components and servers, HVAC units to produce the required temperature for server effectiveness, and other auxiliary uses. The project would use an estimated 356.5 GWh of electricity per year (Appendix AQ), with servers utilizing energy saving features called "EcoMode" that maximize efficiency. The project's electricity demand would be served by SJCE, which provides carbon-free energy, allowing customers to choose between a 45 percent or a 100 percent renewable energy portfolio.

Although the project would use a high amount of electricity, the project would not involve use of natural gas and would comply with all standards set in California Building Code (CBC) Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation**.** Table 19 demonstrates how the project would be consistent with applicable state renewable energy and energy efficiency plans.

Table 19 Project Consistency with State Renewable Energy and Energy Efficiency Plans

Efficiency Measure	Description of Required Action
Title 24, California Code of Regulations (CCR) – Part 6 (Building Energy Efficiency Standards) and Part 11 (CALGreen). The 2019 Building Energy Efficiency Standards move toward cutting energy use in new homes by more than 50 percent and will require installation of solar photovoltaic systems for single-family homes and multi-family buildings of three stories and less. The CALGreen Standards establish green building criteria for residential and nonresidential projects. Updates to the 2016 Standards include the following: increasing the number of parking spaces that must be prewired for electric vehicle chargers in residential development; requiring all residential development to adhere to the Model Water Efficient Landscape Ordinance; and requiring more appropriate sizing of HVAC ducts.	**Consistent**. The proposed project would be required to comply with San José's Municipal Code Title 24, which mandates the implementation of the Building Energy Efficiency Standards and CALGreen requirements of CCR Title 24. Therefore, the proposed project would not conflict with or obstruct implementation of the Title 24 standards.
California Renewable Portfolio Standard. California's RPS obligates investor-owned utilities, energy service providers, and community choice aggregators to procure 33 percent total retail sales of electricity from renewable energy sources by 2020, 60 percent by 2030, and 100 percent by 2045.	**Consistent.** Electricity in the City of San José is provided by San José Clean Energy (SJCE). SJCE is required to generate electricity that would increase renewable energy resources to 60 percent by 2030 and 100 percent by 2045. SJCE currently provides 86 percent carbon-free electricity. Because SJCE would provide electricity service to the project site, it would not conflict with or obstruct implementation of the California Renewable Portfolio Standard.
AB 1493: Reduction of Greenhouse Gas Emissions. AB 1493 requires CARB to develop and adopt regulations that achieve maximum feasible and cost-effective reduction of GHG emissions from passenger vehicles, light-duty trucks, and other vehicles used for noncommercial personal transportation in California.	**Consistent.** Vehicles used by future residents, employees, visitors, and patrons of the proposed project would be subject to the regulations adopted by CARB pursuant to AB 1493. Therefore, the project would not conflict with or obstruct implementation of AB 1493.

Project operation would involve the consumption of fuel and electricity; however, the project's energy usage would be in conformance with the latest version of California's Green Building Standards Code and the Building Energy Efficiency Standards, and reasonable measures, as described above, would be taken to maximize energy efficiency in project operations. Therefore, the project would have a less than significant impact related to consumption of energy resources.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

As mentioned above, 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. Additionally, the City of San José GHG Reduction Strategy contains mandatory emissions-reduction measures for projects and other voluntary measures that may be implemented at the discretion of the City, several of which are energy-related in nature. The GHG Reduction Strategy was adopted as an appendix to the Envision San José 2040 General Plan and as such contains mandatory measures and amendments that apply to the city of San José (City of San José 2011a).

Therefore, the energy efficiency measures contained in the GHG Reduction Strategy contained in the 2040 General Plan are required and would be adhered to with project implementation.

As demonstrated further in Section 4.8, *Greenhouse Gas Emissions*, the proposed project would be consistent with measures and actions from the City of San José GHG Reduction Strategy. Those measures are listed below in Table 25 of Section 4.8, along with a discussion of project consistency with each strategy. The project would not interfere with the energy efficiency strategies for new construction included in City of San José GHG Reduction Strategy and would not conflict with or obstruct the state plan for renewable energy; therefore, no impact would occur.

NO IMPACT

Conclusion

The project would not result in a significant impact regarding energy use or regulations.

4.7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving:				
1. 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?	☐	☐	■	☐
2. Strong seismic ground shaking?	☐	☐	■	☐
3. Seismic-related ground failure, including liquefaction?	☐	☐	■	☐
4. Landslides?	☐	☐	☐	■
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	■
c. Be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	■	☐
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect 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?	☐	☐	☐	■

Setting

San José is in a region of significant seismic activity and geotechnical instability. As shown in Table 20 below, the major earthquake faults in the region are the San Andreas, near the crest of the Santa Cruz Mountains, and the Hayward and Calaveras fault system in the Diablo Range. Other potentially active faults, located in both the hills and valley areas of San José, are the Berryessa, Crosley, Clayton, Quimby, Shannon, Evergreen, and Silver Creek faults (San José 2011a).

The Project site is relatively flat. Based on the soil boring found for the project site, the subsurface soils are mostly alluvial deposits consisting of silty clay, with various percentages of granular material (Appendix GEO).

Table 20 Active Fault Zones Near the Project Site

Fault Name	Distance to Site (miles)
Hayward (Southeast Extension)	2.7
Hayward (total length)	5.4
Calaveras	6.0
Monte Vista-Shannon	11.1
San Andreas	14.9

Notes: Faults were tabulated above and numerous other faults in the region are sources of potential motion. However, earthquakes that might occur on other faults throughout California are also potential generators of significant ground motion and could subject the site to intense ground shaking.

Source: Appendix GEO

Regulatory Setting

Federal and State

ALQUIST-PRIOLO EARTHQUAKE FAULT ZONING ACT

Following the 1989 Loma Prieta earthquake, the Seismic Hazards Mapping Act (SHMA) was passed by the California legislature in 1990. The SHMA (Public Resources Code, Chapter 7.8, Section 2690-2699.6) directs the California DOC, California Geological Survey to identify and map areas prone to liquefaction, earthquake-induced landslides and amplified ground shaking. It also requires that agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the identified hazard is present and the inclusion of appropriate mitigation to reduce earthquake-related hazards.

SEISMIC HAZARDS MAPPING ACT

The Seismic Hazards Mapping Act of 1990 was enacted, in part, to address seismic hazards not included in the Alquist-Priolo Act, including strong ground shaking, landslides, and liquefaction. Under this Act, the State Geologist is assigned the responsibility of identifying and mapping seismic hazards. CGS Special Publication 117, adopted in 1997 by the State Mining and Geology Board, constitutes guidelines for evaluating seismic hazards other than surface faulting, and for recommending mitigation measures as required by Public Resources Code Section 2695(a). In accordance with the mapping criteria, the CGS seismic hazard zone maps identifies areas with the potential for a ground shaking event that corresponds to 10 percent probability of exceedance in 50 years.

The purpose of the Seismic Hazards Mapping Act is to reduce the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards. Cities, counties, and state agencies are directed to use seismic hazard zone maps developed by CGS in their land-use planning and permitting processes. The Seismic Hazards Mapping Act requires site-specific geotechnical investigations prior to permitting most urban development projects in seismic hazard zones.

CALIFORNIA BUILDING CODE (CBC)

The California Building Code (CBC), Title 24, Part 2, provides building codes and standards for the design and construction of structures in California. The purpose of the CBC is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress facilities, and general stability by controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of building and structures. The CBC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities, including drainage and erosion control. Chapter 16 of the CBC contains definitions of seismic sources and the procedure used to calculate seismic forces on structures.

The CBC is updated every three years by order of the legislature, with supplements published in intervening years. State Law mandates that local government enforce the CBC. In addition, a city and/or county may establish more restrictive building standards reasonably necessary because of local climatic, geological, or topographical conditions. The 2016 CBC is based on the 2015 International Building Code with the addition of more extensive structural seismic provisions.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

The federal government administers the NPDES permit program, which regulates discharges into surface waters under the CWA. The primary regulatory control relevant to the protection of water quality is the NPDES permit administered by the State Water Resources Control Board (SWRCB), which establishes requirements prescribing the quality of point sources of discharge and water quality objectives. These objectives are established based on the designated beneficial uses (e.g. water supply, recreation, and habitat) for a particular surface waterbody. The NPDES permits are issued to point source dischargers of pollutants to surface waters pursuant to Water Code Chapter 5.5, which implements the federal CWA. Examples include, but are not limited to, public wastewater treatment facilities, industries, power plants, and groundwater cleanup programs discharging to surface waters (State Water Resources Control, Title 23, Chapter 9, Section 2200). The RWQCB establishes and regulates discharge limits under the NPDES permits.

Construction projects that disturb one or more acres of soil or are part of a larger common plan of development that disturbs one or more acres of soil must obtain coverage under the statewide NPDES General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). To obtain coverage under the Construction General Permit, a project-specific SWPPP must be prepared. The SWPPP outlines Best Management Practices to reduce stormwater and non-stormwater pollutant discharges, including erosion control, minimizing contact between construction materials and precipitation, and strategies to prevent equipment leakage or spills.

California Green Building Standards Code (2016), California Code of Regulations Title 24, Part 11

California's green building code, referred to as CalGreen, was developed to reduce GHG emissions from buildings, promote environmentally responsible, cost-effective, healthier places to live and work, reduce energy and water consumption, and respond to the environmental directives of the administration. The most recent version of CalGreen (January 2016) lays out the minimum requirements for newly constructed residential and nonresidential buildings to reduce GHG emissions through improved efficiency and process improvements. It also includes voluntary tiers to encourage building practices that improve public health, safety, and general welfare by promoting a more sustainable design. If the project is submitted for building plan check on January 1, 2020 or after, the 2019 code cycle will be effective.

Regional and Local

SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD

The City of San José is under the jurisdiction of RWQCB Region 2, the San Francisco Bay Regional Water Quality Control Board (SFB RWQCB). The SFB RWQCB provides permits for projects that may affect surface waters and groundwater locally and is responsible for preparing the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan designates beneficial uses of water in the region and establishes narrative and numerical water quality objectives. The Basin Plan serves as the basis for the SFB RWQCB's regulatory programs and incorporates an implementation plan to ensure water quality objectives are met.

ENVISION SAN JOSÉ GENERAL PLAN

The General Plan includes goals and policies to avoid and mitigate impacts specific to geology and soils from development within the City. The following goals and policies are applicable to the project:

Goal EC-3: Seismic Hazards: Minimize the risk of injury, loss of life, property damage, and community disruption from seismic shaking, fault rupture, ground failure (liquefaction and lateral spreading), earthquake-induced landslides, and other earthquake-induced ground deformation.

Policy EC-3.2: Within seismic hazard zones identified under the Alquist-Priolo Fault Zoning Act, California Seismic Hazards Mapping Act and/or by the City of San José, complete geotechnical and geological investigations and approve development proposals only when the severity of seismic hazards have been evaluated and appropriate mitigation measures are provided as reviewed and approved by the City of San José Geologist. State guidelines for evaluating and mitigating seismic hazards and the City-adopted California Building Code will be followed.

Goal EC-4: Geologic and Soils Hazards: Minimize the risk of injury, loss of life, and property damage from soil and slope instability including landslides, differential settlement, and accelerated erosion.

Policy EC-4.2: Approve development in areas subject to soils and geologic hazards, including unengineered fill and weak soils and landslide-prone areas, only when the severity of hazards have been evaluated and if shown to be required, appropriate mitigation measures are provided. New development proposed within areas of geologic hazards shall not be endangered by, nor

contribute to, the hazardous conditions on the site or on adjoining properties. The City of San José Geologist will review and approve geotechnical and geological investigation reports for projects within these areas as part of the project approval process.

Policy EC-4.4: Require all new development to conform to the City of San José's Geologic Hazard Ordinance.

Policy EC-4.5: Ensure that any development activity that requires grading does not impact adjacent properties, local creeks and storm drainage systems by designing and building the site to drain properly and minimize erosion. An Erosion Control Plan is required for all private development projects that have a soil disturbance of one acre or more, are adjacent to a creek/river, and/or are located in hillside areas. Erosion Control Plans are also required for any grading occurring between October 15 and April 15.

Policy ES-4.9: Permit development only in those areas where potential danger to the health, safety, and welfare of persons in that area can be mitigated to an acceptable level.

Policy ER-10.1 For proposed development sites that have been identified as archaeologically or paleontologically sensitive, require investigation during the planning process in order to determine whether potentially significant archeological or paleontological information may be affected by the project and then require, if needed, that appropriate mitigation measures be incorporated into the project design.

Policy ER-10.3 Ensure that City, State, and Federal historic preservation laws, regulations, and codes are enforced, including laws related to archaeological and paleontological resources, to ensure the adequate protection of historic and pre-historic resources.

CITY OF SAN JOSÉ MUNICIPAL CODE

Title 24 of the San José Municipal Code includes the current California Building, Plumbing, Mechanical, Electrical, Existing Building, and Historical Building Codes. Requirements for building safety and earthquake hazard reduction are also addressed in Chapter 17.40 (Dangerous Buildings) and Chapter 17.10 (Geologic Hazards Regulations) of the Municipal Code. Requirements for grading, excavation, and erosion control are included in Chapter 17.10 (Building Code, Part 6 Excavation and Grading). In accordance with the Municipal Code, the Director of Public Works must issue a Certificate of Geologic Hazard Clearance prior to the issuance of grading and building permits within defined geologic hazard zones, including State Seismic Hazard Zones for Liquefaction.

Impact Analysis

a.1. Directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

The project site is in the seismically active San Francisco Bay Area. However, the nearest fault is the Hayward fault, approximately 2.7 miles from the project site (Appendix GEO). No known fault lines cut through the site. The direct ground rupture from an earthquake fault would be unlikely and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.2. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

As with any site in the Bay Area region, the project site is susceptible to strong seismic ground shaking in the event of a major earthquake. Nearby active faults include the San Andreas Fault, the Hayward and Calaveras fault system, and potentially active faults such as the Berryessa, Crosley, Clayton, Quimby, Shannon, Evergreen, and Silver Creek faults. These are capable of producing strong seismic ground shaking at the project site. The City of San José's Geologic Hazard Regulations (SJMC Chapter 17.10) requires that no discretionary approval for development, grading, or building permit shall be issued for any property located in the geologic hazard zone unless the director has first issued a certificate of geologic hazard clearance. Figure 3.6-1 of the Envision San José 2040 General Plan EIR shows that the project site is not located in an identified geologic hazard zone (City of San José 2011b). Therefore, the project would not require a special geologic clearance. With modern construction and compliance with geology and soil provisions of the CBC, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.3. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Liquefaction is a process whereby soil is temporarily transformed to fluid form during intense and prolonged ground shaking or because of a sudden shock or strain. Liquefaction typically occurs in areas where the groundwater is less than 30 feet from the surface and where the soils are composed of poorly consolidated fine to medium sand. Figure 3.6-1 of the Envision San José 2040 General Plan EIR shows the project site is located within a liquefaction hazard zone, and this is supported by the DOC Earthquake Zones of Required Investigation, (City of San José 2011b; DOC 2018). A geotechnical investigation conducted for the project site by Cornerstone Earth Group (Cornerstone) concluded that soils and the depth of groundwater discovered within the project site were found to have potential for liquefaction (Cornerstone 2019a) (see Appendix GEO). However, the proposed project would be built and maintained in accordance with applicable regulations and a site-specific geotechnical report, prior to issuance of building permits. The proposed project would comply with CALGreen requirements and all City policies and ordinances. According to the General Plan EIR, adherence to CALGreen requirements would reduce seismic related hazards and ensure new development proposed within areas of geologic hazards would not be endangered by the hazardous conditions on-site. Because the proposed project would comply with a design-specific

geotechnical report, CALGreen requirements, and regulations identified in the General Plan EIR, it would comply with Policies EC-4.2 and EC-4.4. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.4. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Earthquakes can trigger landslides that may cause injuries and damage many types of structures. Landslides are typically a hazard on or near slopes or hillside areas, rather than on generally level areas, like the project site and vicinity. Figure 3.6-1 of the Envision San José 2040 General Plan EIR shows the project site is not located in a landslide hazard area (City of San José 2011b). Additionally, according to the state of California Seismic Hazard Zone map, the project site is not located in an earthquake-induced landslide hazard zone (DOC 2019). Therefore, no impact would occur.

NO IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

The project site is developed and generally level, which limits the potential for substantial soil erosion. The grading and excavation phase, when soils are exposed, has the highest potential for erosion. Ground-disturbing activities would include site-specific grading for foundations, the basement, access driveway, and utility trenches. Temporary erosion could occur during project construction. The project would be required to comply with SJMC Chapter 17.04, which requires a grading permit prior to ground-disturbing activities and calls for protection of slopes and the use of erosion and sediment controls on construction sites as necessary to protect water quality.

Since the project would disturb approximately 9 acres, it would be required to obtain a NPDES Construction General Permit and to develop a SWPPP. The SFB RWQCB administers erosion control standards through the NPDES program, which requires implementation of nonpoint source control of stormwater runoff. With compliance with above listed requirements and the following standard permit condition, project impacts associated with soil erosion and the loss of topsoil would be less than significant.

Standard Permit Condition

- All excavation and grading work shall be scheduled in dry weather months or construction sites shall be weatherized.
- Stockpiles and excavated soils shall be covered with secured tarps or plastic sheeting.
- Ditches shall be installed to divert runoff around excavations and graded areas if necessary

Compliance with state and local requirements including City standard conditions would reduce project impacts from soil erosion and the loss of topsoil to less than significant.

NO IMPACT

c. Would the project be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

The project site is not located in a geologic hazard area, but it is in a liquefaction hazard zone, as defined by the City of San José General Plan EIR (City of San José 2011b). The geotechnical investigation concluded that the site is within a State-designated Liquefaction Hazard Zone as well as a Santa Clara County Liquefaction Hazard Zone (Cornerstone 2019). Therefore, the project site is located on soils identified as being prone to liquefaction, and impacts would be potentially significant. Implementation of Standard Permit Condition would be required to reduce impacts related to liquefaction hazards to less than significant.

Lateral spreading is the horizontal movement or spreading of soil toward an open face. When soils located on a sloping site liquefy, they tend to flow downhill. The potential for failure from lateral spreading is highest in areas where the groundwater table is high and topography slopes. The project site is on relatively flat topography. No known landslides are present at the site, nor is the site in the path of any known or potential landslide hazards. Due to these site conditions and the moderate liquefaction hazard, potential for landslides and lateral spreading at the project site would be low. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Expansive soils are those that have a potential to undergo significant changes in volume, either shrinking or swelling, due to their composition and moisture content. Periodic shrinking and swelling of expansive soils can cause extensive damage to other structures and roads. Based on information provided by the U.S. Geological Survey, clay soils found in the project vicinity generally have slight to moderate expansivity (U.S. Geological Survey 1989). The project would be located on expansive soils. However, new habitable structures in San José are required to be constructed in accordance to the most recent CBC, as adopted by the City of San José; this includes provisions for expansive soils. Additionally, the City of San José requires a grading permit and compliance with the Geologic Hazard Regulation Ordinance (SJMC Chapter 17.10), as outlined in the standard permit condition below.

Standard Permit Condition

To avoid or minimize potential damage from seismic shaking, project construction shall use standard engineering and seismic safety design techniques. Complete building design and construction at the site in conformance with the recommendations of an approved geotechnical investigation. The geotechnical investigation report shall be reviewed and approved by the Department of Public Works as part of the building permit review and entitlement process. The buildings shall meet the requirements of applicable Building and Fire Codes as adopted or updated by the City. The project shall be designed to withstand soil hazards identified on the site and the project shall be designed to reduce the risk to life or property on site and off site to the extent feasible and in compliance with the Building Code.

The project shall be constructed in accordance with standard engineering practices in the California Building Code, as adopted by the City of San José. The project applicant shall obtain a grading permit from the Department of Public Works prior to the issuance of a Public Works clearance. These

standard practices would ensure that the future building on the site is designed to properly account for soils-related hazards on the site.

Compliance with this Standard Permit Condition would reduce impacts from expansive soils to less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project 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?

The project would be connected to the local wastewater treatment system. Septic systems would not be used. No impact would occur.

NO IMPACT

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The project site is located in a highly urbanized area and is developed industrial uses. The project would include grading and excavation for the basement. The site has been disturbed previously during construction. New ground disturbance would be limited to excavation for foundations and utility lines. However, there is a possibility of encountering undisturbed subsurface paleontological resources during project excavation.

The project site is directly underlain by Pleistocene-aged older alluvial fan sediments (Helley et al. 1994). Pleistocene alluvium has a record of abundant and diverse vertebrate fauna throughout California, including northern California (Bell et al. 2004; Jefferson 1985, 1991; Maguire and Holroyd 2016; Merriam 1911; Reynolds et al. 1991; Savage 1951; Scott and Cox 2008; Springer et al. 2009; Stirton 1939; Wilkerson et al. 2011; Winters 1954). At the project site in particular, these deposits have been especially productive, yielding dozens of specimens of Pleistocene vertebrates, such as mammoths, horses, ground sloths, camels, cats, bison, antelope, rodents, and turtles from at least nine separate localities (Maguire and Holroyd 2016). Notably, several of these localities are dated with radiocarbon techniques and ages confirm the transition between the Irvingtonian and Rancholabrean North American Land Mammal Ages. This has important implications for the understanding of late Pleistocene vertebrate evolution and paleoclimate in the region just prior to the beginning of the Holocene. Therefore, the Pleistocene older alluvial fan deposits on the project site are considered to have high paleontological sensitivity.

Ground disturbance associated with project construction has a high potential to directly disturb a geologic unit with high paleontological sensitivity (Basin Research Associates 2009). Impacts on paleontological resources resulting from ground-disturbing construction activity at depths below 2 to 3 feet (i.e., below the level of recent grading activities or fill materials underlying pavement on the site) and in undisturbed sediment could include the destruction of fossils. In accordance with the Envision San José 2040 General Plan Policy ER-10.3, the following standard permit condition would be applied to the project, reducing impacts on unknown paleontological resources to a less than significant level.

Standard Permit Condition

- Consistent with General Plan policy ER-10.3, the following Standard Permit Conditions shall be implemented by the project to reduce or avoid impacts to paleontological resources to a less than significant level.
  - The project proponent shall ensure all construction personnel receive paleontological resources awareness training that includes information on the possibility of encountering fossils during construction; the types of fossils likely to be seen based on past finds in the project area; and proper procedures in the event fossils are encountered. Worker training shall be prepared and presented by a qualified paleontologist.
  - If vertebrate fossils are discovered during construction, all work on the site shall stop immediately until a qualified professional paleontologist can assess the nature and importance of the find and recommend appropriate treatment. Treatment may include Virginia Studios Project 61 Final Initial Study City of San José October 2018 preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds. The project proponent shall be responsible for implementing the recommendations of the paleontological monitor.

Compliance with this Standard Permit Condition would ensure the project-related impacts to paleontological resources is less than significant.

NO IMPACT

Conclusion

The project, with implementation of the identified Standard Permit Conditions, would not result in significant impacts to geology and soils.

4.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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 any applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases?	☐	☐	■	☐

Setting

Climate change is the observed increase in the average temperature of the earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of GHGs, which are gases that trap heat in the atmosphere, analogous to the way in which a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), fluorinated gases, and ozone (O_3). GHGs are emitted by both natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential than CO2, include fluorinated gases, such as hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (USEPA 2018).

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources though potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Long-term trends have found that each of the past three decades has been warmer than all the previous decades in the instrumental record, and the decade from 2000 through 2010 has been the warmest. The observed global mean surface temperature (GMST) for the decade from 2006 to 2015 was approximately 0.87°C (0.75°C to 0.99°C) higher than the average GMST over the period from 1850 to 1900. Furthermore, several independently analyzed data records of global and regional Land-Surface Air Temperature (LSAT) obtained from station observations agree that LSAT and sea surface temperatures have increased. Due to past and current activities, anthropogenic GHG emissions are increasing global mean surface temperature at a rate of 0.2°C per decade. In addition to these findings, there are identifiable signs that global warming is currently taking place, including

substantial ice loss in the Arctic over the past two decades (Intergovernmental Panel on Climate Change [IPCC] 2014 and 2018).

According to California's Fourth Climate Change Assessment, statewide temperatures from 1986 to 2016 were approximately 1°F to 2°F higher than those recorded from 1901 to 1960 (IPCC 2007). Potential impacts of climate change in California may include loss in water supply from snowpack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years (State of California 2018). While there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy. In addition to statewide projections, California's Fourth Climate Change Assessment includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the state as well as regionally-specific climate change case studies (State of California 2018).

Regulatory Setting

In response to an increase in man-made GHG concentrations over the past 150 years, California implemented Assembly Bill (AB) 32, the "California Global Warming Solutions Act of 2006." AB 32 codified the statewide goal of reducing emissions to 1990 levels by 2020 (essentially a 15 percent reduction below 2005 emission levels) and adopted regulations to require reporting and verification of statewide GHG emissions.

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, which requires the State to further reduce GHGs to 40 percent below 1990 levels by 2030. SB 32 extends AB 32, directing CARB to reduce GHGs to 40 percent below 1990 levels by 2030. In response, on December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) CO_2e [5]by 2030 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, sub-regional, or regional level), but not for specific individual projects because they include all emissions sectors in the state.[6]

Pursuant to the requirements of Senate Bill (SB) 97, the California Natural Resources Agency adopted amendments to the CEQA Guidelines for the feasible mitigation of GHG emissions and analysis of the effects of GHG emissions. The CEQA Guidelines provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.

[5] Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "carbon dioxide equivalent" (CO_2e), and is the amount of a GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane CH_4 has a GWP of 28, meaning its global warming effect is 28 times greater than carbon dioxide on a molecule per molecule basis (IPCC]2013).

[6] There are a variety of additional regulations related to GHG emissions in the state of California, including Assembly Bill (AB) 1493 (2002), California's Advanced Clean Cars program (referred to as "Pavley"), which requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, USEPA granted the waiver of CAA preemption to California for its GHG emission standards for motor vehicles beginning with the 2009 model year. Pavley I regulates model years from 2009 to 2016 and Pavley II, which is now referred to as "LEV (Low Emission Vehicle) III GHG" regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the Low Emissions Vehicles (LEV), Zero Emissions Vehicles (ZEV), and Clean Fuels Outlet programs, and would provide major reductions in GHG emissions. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels (CARB 2011).

Most individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

City of San José Green Building Policy

Under the City's Green Building Policy, all private sector and municipal building projects constructing or adding more than 10,000 square feet of occupied space (as defined in the adopting building code) are required to be designed and constructed to achieve, at a minimum, the United States Green Building Council's Leadership in Energy and Environmental Design (LEED ™) rating system Silver-level certification with a goal of reaching LEED Gold or Platinum levels.

CLIMATE SMART SAN JOSÉ

Climate Smart San José builds upon the 2007 Green Vision, encouraging the entire San José community to join an ambitious campaign to reduce greenhouse gas emissions, save water and improve quality of life. The plan focuses on energy, mobility, and water to achieve its climate goals in the City.[7]

SAN JOSÉ'S REACH CODE

The City Council approved Ordinance No. 30311 in September 2019 to amend various sections of Title 24 of the City's Municipal Code to adopt provisions of the 2019 California Green Building Standards Code and California Building Energy Efficiency Standards with certain exceptions, modifications, and additions which serve as a Reach Code to increase building efficiency, mandate solar readiness and increase requirements related to electric vehicle charging stations. The Reach Code goes into effect on January 1, 2020 and affects all new construction.

PLAN BAY AREA

Plan Bay Area 2040 is a state-mandated, integrated long-range transportation, land-use, and housing plan that would support a growing economy, provide more housing and transportation choices and reduce transportation-related pollution in the nine-county San Francisco Bay Area (ABAG 2017). The SCS builds on earlier efforts to develop an efficient transportation network and grow in a financially and environmentally responsible way. Plan Bay Area 2040 would be updated every four years to reflect new priorities. A goal of the SCS is to "reduce vehicles miles traveled (VMT) per capita by 10 percent" (ABAG 2017).

2017 BAAMD'S AIR QUALITY GUIDELINES

In the 2017 BAAQMD CEQA Air Quality Guidelines, the BAAQMD outlines an approach to determine the significance of projects. The BAAQMD recommends that lead agencies determine appropriate GHG emissions thresholds of significance based on substantial evidence in the record. The BAAQMD

[7] The City is currently in the process of completing an update to the GHG Reduction Strategy which will expand on Climate Smart San José, in response to Senate Bill 32, which required GHG emissions to be reduced by 40 percent below 1990 levels by 2030.

has not established a quantitative significance threshold for evaluating construction-related emissions; however, the BAAQMD does recommend quantifying and disclosing construction-generated GHG emissions. Significance Thresholds

BAAQMD Significance Thresholds

The significance thresholds established in the 2017 BAAQMD CEQA Guidelines for operational GHG emissions within the SFBAAB are shown in Table 21.

Table 21 GHG Significance Thresholds

GHG Emission Source Category	Operational Emissions
Non-stationary Sources	1,100 MT/year of CO_2e, or 4.6 MT/year of CO_2E/SP/year (residents and employees)
Stationary Sources	10,000 MT/year of CO_2e
Plans	6.6 MT/year of CO_2e/SP/year (residents and employees)

Notes: SP = Service Population.

Project emissions can be expressed on a per-capita basis as MT/year of CO_2E/SP, which represents the project's total estimated annual GHG emissions divided by the estimated total number of new residents and employees resulting from development of a project (BAAQMD 2017c).

According to the BAAQMD CEQA Guidelines (2017c), the efficiency threshold is appropriate for mixed-use projects that include both residential and non-residential land uses. Therefore, this approach is not appropriate for the proposed project because there are no residents. Additionally, business as usual (BAU) emissions are no longer recommended following the Newhall Ranch ruling. Therefore, although the BAAQMD has not yet quantified a threshold for 2030, reduction of the 1,100 MT CO_2e bright-line threshold by 40 percent to 660 MT CO_2e/year would be consistent with state goals detailed in SB 32. As such, the adjusted bright-line threshold of 660 MT CO_2e is the most appropriate threshold for the project. Additionally, per 2017 BAAQMD CEQA guidelines, new stationary sources should be evaluated separately from project operation emissions associated with land use and are not considered "cumulatively considerable" from a land use perspective if the stationary sources comply with the 10,000 MT CO_2e per year threshold.

Local Thresholds

The City of San José adopted a GHG Reduction Strategy in conjunction with the Envision San José 2040 General Plan Update and consistent with the implementation requirements of AB 32. The Strategy was adopted by the City Council on November 1, 2011 as an appendix to the General Plan; it was updated in December 2015. The Strategy establishes mandatory and voluntary GHG reduction measures. Voluntary measures could be incorporated as mitigation measures for proposed projects, at the City's discretion. Applicable mandatory reduction measures include the following:

- Comply with the City Green Building Policy
- Develop green buildings
- Increase density of development
- Increase location efficiency
- Provide bike parking in non-residential projects

Project construction and operation emissions were calculated using the CalEEMod version 2013.2.2 (see Appendix AQ).

Impact Analysis

a. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction

Construction of the proposed project would generate temporary GHG emissions primarily as a result of operation of construction equipment on-site and vehicle trips from the transport of construction workers to and from the project site and from the export of earth materials off-site by heavy trucks. CalEEMod provides an estimate of emissions associated with the construction period, based on parameters such as the duration of construction activity, area of disturbance, and anticipated equipment use during construction.

Neither the City nor BAAQMD have an adopted threshold of significance for construction-related GHG emissions, although the BAAQMD recommends quantifying emissions and disclosing GHG construction emissions.

Therefore, construction-related GHG emissions were quantified for informational purposes. Table 22 shows that project construction would result in a total of 678 MT of CO_2e.

Table 22 Estimated Construction GHG Emissions

Construction Year	Project Emissions MT/yr CO_2e
2020	514.4
2021	163.6
Total	**678.0**

See Appendix AQ for CalEEMod worksheets.

Operation

Operational emissions include area sources (consumer products, landscape maintenance equipment, and painting), energy use (electricity and fuel), solid waste, electricity to deliver water, and transportation emissions and are shown in Table 23. In accordance with AB 939, this analysis assumes that the project would achieve at least a 50 percent waste diversion rate. However, as discussed in Section 17, *Utilities and Service Systems*, the City of San José currently achieves a diversion rate of 73 percent. Therefore, the 50 percent diversion rate presents a conservative estimation of waste related emissions. Because CalEEMod does not calculate N_2O emissions from mobile sources, N_2O emissions were quantified using guidance from CARB and the EMFAC2017 Emissions Inventory for the Santa Clara County region for the year 2022 (the year the project would be operational) using the EMFAC2011 categories (CARB 2018 and 2019b; see Appendix AQ for calculations).

As shown in Table 23, the project's total emissions are estimated to be about 36,285 MT CO_2e per year. However, due to insufficient data on the existing structures and uses, this estimate does not deduct existing emissions from the data center and office buildings on the project site and is therefore a highly conservative estimate. The project's GHG emissions would exceed the 660 MT

CO_2e per year adjusted threshold of significance and would potentially conflict with SB 32. As such, Mitigation Measure GHG-1 would be necessary to reduce impacts to less than significant.

Table 23 Combined Annual Emissions of GHGs

Emission Source	Annual Emissions (CO_2e) in MTs
Operational	
Area	<0.1
Energy	35,509.8
Solid Waste	149.5
Water	483.5
Mobile	
CO_2 and CH_4	168.2
N_2O	11.8
Total	**36,322.8**
BAAQMD Land Use Threshold (Adjusted for SB 32)	660
Exceeds Threshold?	Yes

See Appendix AQ for CalEEMod worksheets.

Due to the nature of the proposed project and number of stand-by generators proposed, the project would be classified as a small quantity stationary source of greenhouse gas emissions per CEC standards. Per 2017 BAAQMD CEQA Guidelines, annual GHG emissions from the operation of permitted stationary sources should be compared to the BAAQMD stationary source threshold of 10,000 MT of CO_2e. GHG emissions associated with the combustion of diesel fuel by the generators was calculated based on hourly fuel consumption conservatively assuming a 100 percent load factor (i.e., 214.e gallons/hour) and 50 hours of operation per generator per year. This results in 214,200 gallons of diesel fuel consumed annually for all 20 generators. GHG emissions as CO_2e were estimated based on the annual fuel consumption and USEPA's recommended emission factors for CO_2, CH_4 and N_2O for distillate fuel oil number 2.[8]

As shown in Table 24, the total emissions generated from the operation of all 20 generators at the project site for 50 hours per year would result in approximately 9,489 MT of CO_2e. The operation of all 20 generators for 50 hours per year would comply with the BAAQMD's stationary source threshold of 10,000 MT CO_2e and is not considered cumulatively considerable per the 2017 BAAQMD CEQA guidelines; therefore, the impact would be less than significant. Additionally, as previously described the generators are designed with redundancies and all twenty generators would never be anticipated to run at the same time.

[8]Federal Register EPA; 40 CFR Part 98; e-CFR, June 13, 2017 (see link below). Table C-1, Table C-2, Table AA-1
file:///C:/Users/elinard/Desktop/Tech%20Referecnces/CAPs/emission-factors_mar_2018_0.pdf

Table 24 Stationary Source Annual Emissions of GHGs

Emission Source	Annual Emissions (CO_2e) in MTs
Single Generator	474.45
Total[1]	**9,489**
BAAQMD Land Use Threshold (Adjusted for SB 32)	10,000
Exceeds Threshold?	No

See Appendix AQ for calculation of GHGs from the stationary sources.

[1]Total annual emissions from diesel fuel combustion is based the operation of each 20 generators for 50 hours per year.

Mitigation Measure

GHG-1 Operational GHG Reductions

Prior to issuance of grading permits, the project applicant shall submit a GHG reduction plan meeting the requirements outlined below and prior to project operation applicant shall implement the following mitigation measures to reduce GHG emissions associated with energy use at the proposed data center:

- Develop a GHG emissions reduction plan that would (1) reduce emissions from project implementation, and (2) demonstrate to the Planning Building and Code Enforcement's Director or director's designee that GHG emissions resulting from project implementation will be reduced by a sufficient amount for each site to achieve the 2030 standard of 660 of CO_2e/year.
- Since the project will be operational after December 31, 2020, it will be subject to 2030 GHG reduction targets. This target requires that the project has GHG emissions not exceeding 660 MT of CO_2e/year. Elements of this plan may include, but would not be limited to, the following:
  - Installation of solar power systems or other renewable electric generating systems that provide electricity to power on-site equipment and possibly provide excess electric power;
  - Construct on site or fund off-site carbon sequestration projects (such as a forestry or wetlands projects for which inventory and reporting protocols have been adopted). If the project develops an off-site project, it must be registered with the Climate Action Reserve or otherwise be approved by the BAAQMD in order to be used to offset Project emissions;
  - Purchase of carbon credits to offset project annual emissions. Carbon offset credits must be verified and registered with The Climate Registry, the Climate Action Reserve, or another source approved by the California Air Resources Board or BAAQMD. The preference for offset carbon credit purchases includes those that can be achieved as follows: 1) within the City of San José; 2) within the SFBAAB; 3) within the State of California; then 4) elsewhere in the United States. Provisions of evidence of payments, and funding of an escrow-type account or endowment fund would be overseen by the City;

With implementation of Mitigation Measure GHG-1 impacts would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The City of San José has an adopted GHG Reduction Strategy as an appendix to the Envision San José 2040 General Plan, which is being updated in response to SB 32. The GHG Reduction Strategy will build on Climate Smart San José, which expands on the City's Green Vision to advance urban sustainability. Because the GHG Reduction Strategy is currently being updated. Table 25 demonstrates that the project would be consistent with the goals, targets, and policies of Plan Bay Area and Climate Smart San José. In addition, to the items outlined in Table 28, the project would comply with the City's Energy and Water Building Performance Ordinance and the San José Green Building Policies, which requires buildings to be designed and constructed to achieve, at a minimum, the United States Green Building Council's LEED™ rating system silver-level certification with a goal of reaching LEED gold or platinum levels. Furthermore, with incorporation of Mitigation Measure GHG-1, the project would not result in a significant impact because of GHG emissions. Therefore, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Impacts would be less than significant.

Table 25 Project Consistency with Applicable Plan Bay Area and Climate Smart San José

Goals, Targets, and Policies	Consistency
Plan Bay Area	
Reduce VMT per capita by 10%	**Consistent** The project is infill development and would not promote urban sprawl. Six VTA bus stops along routes 77, 831, and 321, three VTA light rail stops along routes 901, 909, and 913 and the planned Milpitas BART Station are located within 0.25 mile of the project site. With viable alternative transportation options, people have mobility options that may lead to less driving to the project site. Additionally, the project would provide two short-term and one long-term bicycle parking spaces. Additionally, the project would provide end-of-trip bike facilities including 3 showers and changing rooms with lockers in the building.
City of San José GHG Reduction Strategy	
2.1 Densify our city to accommodate our future neighbors	**Consistent** The project is infill development and would not promote urban sprawl. Six VTA bus stops along routes 77, 831, and 321, three VTA light rail stops along routes 901, 909, and 913 and the planned Milpitas BART Station are located within 0.25 mile of the project site. With viable alternative transportation options, people have mobility options that may lead to less driving to the project site.
2.3 Create clean, personalized mobility choices	**Consistent** Six VTA bus stops along routes 77, 831, and 321, three VTA light rail stops along routes 901, 909, and 913 and the planned Milpitas BART Station are located within 0.25 mile of the project site. With viable alternative transportation options, people have mobility options that may lead to less driving to the project site. Additionally, the project would provide two short-term and one long-term bicycle parking spaces. Additionally, the project would provide end-of-trip bike facilities including 3 showers and changing rooms with lockers in the building.

Goals, Targets, and Policies	Consistency
3.1. Create local jobs in our city to reduce vehicle miles traveled	**Consistent** The project would create approximately 22 new jobs in the City of San José. Residents may choose to actively commute or take available transit to the site, thereby reducing VMT. For example, six VTA bus stops along routes 77, 831, and 321, three VTA light rail stops along routes 901, 909, and 913 and the planned Milpitas BART Station are located within 0.25 mile of the project site. With viable alternative transportation options, people have mobility options that may lead to less driving to the project site. Additionally, the project would provide two short-term and one long-term bicycle parking spaces. Additionally, the project would provide end-of-trip bike facilities including 3 showers and changing rooms with lockers in the building.

Source: AMBAG 2017b; City of San José 2015

LESS THAN SIGNIFICANT IMPACT

Conclusion

The project would not result in a significant GHG emission impact.

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4.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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 0.25 mile of an existing or proposed school?	☐	☐	■	☐
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	■	☐	☐
e. For a project located in 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?	☐	☐	☐	■

Setting

The project site consists of two industrial buildings on one assessor's parcel number (APN: 244-17-003). Aerial photographs and City Directory records indicate the project site was historically used for agricultural row crop and tree fruit cultivation until approximately 1974. Construction of the three existing industrial buildings occurred between 1974 and 1979. Since its initial development with industrial buildings, the project site has been occupied by numerous tenants including metal processing, and computer chip manufacturing facilities as well as a sports and martial arts business.

A records search of federal, State, and local environmental databases was conducted for the project site by Cornerstone Earthworks during a Phase I Environmental Site Assessment in March 2019 and for sites within 0.5-mile radius of the project site by Rincon Consultants in July 2019 (Appendix HAZ). The results of these records searches are included in Table 26 below.

Table 26 Listing of Selected Sites

Site Address	Distance from Project Site	Database Results
Project Site		
Solectron Corporation	–	Historic underground storage tank site; small quantity generator
Sports Center Chiropractic	–	Photochemical processing waste site
MMC Technologies	–	Hazardous material spill site; large quantity generator; hazardous waste treatment and disposal site
Fortune Data Centers	–	Listed in Emissions Inventory 2008 through 2013
ASB Fortune Data Center	–	Listed in Facilities Index System database; above ground storage site
Infomart Data Centers	–	Listed in Emissions Inventory 2013 through 2016; above ground storage site
Sites in the Project Vicinity		
Advanced Ion Exchange Technologies (AIET)	915 feet west	Non-Operating
ASML	860 feet southwest	Tiered Permit, Inactive – Needs Evaluation
Dynamic Circuits, Inc.	0.2-mile north	Tiered Permit, Inactive –Needs Evaluation
Eagle Tech, Inc.	0.23-mile west	Tiered Permit, Inactive- Needs Evaluation
Intersil Corporation	680 feet northeast	Tiered Permit, Inactive- Needs Evaluation
Ionization Research Co DBA Ecosolutions	0.2-mile northeast	Non-Operating Closed
McCandless Additional Parcel for School Site	0.28-mile northwest	School investigation, Inactive-withdrawn
McCandles Proposed K-6 School site	0.28-mile northwest	School Cleanup, Active
Micrel Inc.	370 feet west	Non-Operating, Protective Filer
Micrel Semiconductors, Inc.	370 feet west	Tiered Permit, Inactive-Needs Evaluation
Micro Linear Corp.	0.28 mile southeast	Tiered Permit, Inactive-Needs Evaluation
Mony Property	890 feet northeast	Evaluation, No further action
Photronics California, Inc.	770 feet northeast	Tiered Permit, Inactive-Needs Evaluation
Six Sigma – San José	0.3-mile feet southwest	Tiered Permit, Inactive – Needs Evaluation

Site Address	Distance from Project Site	Database Results
Arco #2089	0.35-mile feet northeast	T0608500169 Completed - Case Closed
Becton Dickinson	160 feet southeast	T0608501761 Completed - Case Closed
Buddy's Floors	0.27-mile north	T0608500268 Completed – Case Closed
Di Salvo Trucking	0.28-mile north	T0608500518 Completed – Case Closed
Dielectric Semiconductor	0.28-mile south	T10000008024 Completed – Case Closed
Former Dynamic Circuits	1180 feet north	T10000008024 Open – Site Assessment
K & H Finishing	0.18-mile east	T0608501921 Completed – Case Closed
Lee's Imperial Welding	0.25-mile northwest	T0608500827 Completed – Case Closed
Roadway Express Inc.	0.33-mile northeast	T0608502004 Completed – Case Closed
Sango Court (Former Viking Freight System Inc.)	0.23-mile north	T10000007695 Open – Remediation
Texaco	0.35-mile northeast	T0608501429 Completed – Case Closed
Therma (Trane Air Conditioning)	850 feet northeast	T0608501453 Completed – Case Closed
Toll Brothers Tarob 3 Development	915 feet northeast	T10000011430 Open – Assessment and Interim Remedial Action
Trade Zone Boulevard Pick Your Part	125 feet north	Completed – Case Closed
Trade Zone Boulevard Trade Zone Boulevard	125 feet north	Completed – Case Closed
Transportation Terminals Co.	0.3-mile west	Completed – Case Closed
Yellow Freight Systems	0.37-mile north	Completed – Case Closed

Source: Cornerstone Earth Group, Inc. 2019; DTSC 2019; SRWCB 2019.

On-site Hazardous Materials Assessment

The records search revealed that historic uses on the project site included agricultural stone fruit cultivation, metals processing and commercial retail sales prior to its current use as a data center (Appendix HAZ).

Metals processing operations conducted at the project site between 1982 and 1992 reportedly used chemicals such as halogenated metals (Freon TMS for decreasing/cleaning), non-halogenated metals (2-propanol), corrosive and caustic materials (acids and bases) and combustible materials (oils and general lubricants) among others. Soldering activities conducted by Solectron at the project site included the use of lead containing solder, and solder flux and thinner. Later manufacturing operations reportedly used or generated a variety of corrosive liquids compressed and flammable gases, flammable liquids and metals which contained nickel, zinc, aluminum, chromium, and cobalt. The portion of the project site subject to demolition under the project was previously used for laboratories and chemical storage. Hazardous waste treatment systems, including a below grade vault were located on equipment pads east of the existing Building B and were equipped with spill containment trenches and drain piping conveyance trenches which remain present at the time this report was drafted.

Chemical storage at the existing data center currently consists of diesel fuel for standby generators that is stored in above ground storage tanks (AST), lead-acid batteries, and cooling water treatment chemicals, along with standard household cleaning products (Appendix HAZ).

Former Underground Storage Tanks

Two 10,000-gallon USTs containing gasoline and diesel fuel were present near the southeast corner of Building A. The USTs were removed in April 1992 under Fire Department oversight. The original tar coating on each tank reportedly was intact and no holes or rust areas were evident on the tanks. Four soil samples collected from the base of the UST excavation were analyzed for total petroleum hydrocarbons gasoline and benzene, toluene, ethylbenzene, and xylene compounds. These materials were not detected in the soil samples and no impacts from the USTs were detected (Appendix HAZ).

Following closure and removal of the two on-site USTs, three groundwater monitoring wells were installed at the project site. Groundwater samples taken from these wells in 1990 and 2006 have detected no hazardous materials. No hazardous materials spills or leaks have been recorded or identified on or within the project vicinity (Appendix HAZ).

On-site Soil and Groundwater Contamination

Following closure of Solectron and MMC, limited soil sampling was conducted to identify Volatile Organic Compounds (VOC) in soil and groundwater at the project site. Three soils samples were taken near Building B roof drains and were found to contain lead concentrations ranging from 160 to 280mg/kg which is below the DTSC soluble levels for lead of 80 and 320 mg/kg. Furthermore, soluble levels of lead in these samples were between 7 and 15 milligrams per liter, exceeding the soluble constituent level concentrations of 5 mg/L established by the DTSC. Despite this exceedance, existing lead concentrations were determined to pose no significant health risk for commercial use. However, ground disturbing activities associated with project implementation would expose construction workers to potentially hazardous materials due to contact with lead impacted soil.

Regulatory Setting

Federal and State

THE FEDERAL TOXIC SUBSTANCES CONTROL ACT (1976) AND THE RESOURCE CONSERVATION AND RECOVERY ACT OF 1976

These acts established a program administered by the USEPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. The Resource Conservation and Recovery Act was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the “cradle to grave” system of regulating hazardous wastes. Among other things, the Hazardous and Solid Waste Act prohibited use of certain techniques for the disposal of some hazardous wastes.

THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (ENACTED 1980), AMENDED BY THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (1986)

This law provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Among other things, Comprehensive Environmental Response, Compensation, and Liability Act established requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. The Comprehensive Environmental

Response, Compensation, and Liability Act also enabled revision of the National Contingency Plan, which provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The National Contingency Plan also established the National Priorities List.

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

As a department of CalEPA, DTSC is the primary agency in California that regulates hazardous waste, cleans up existing contamination, and looks for ways to reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of Resource Conservation and Recovery Act and the California Health and Safety Code.

DTSC also administers the California Hazardous Waste Control Law (HWCL) to regulate hazardous wastes. While the HWCL is generally more stringent than Resource Conservation and Recovery Act, until the USEPA approves the California program, both state and federal laws apply in California. The HWCL lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

Government Code Section 65962.5 requires the DTSC, the State Department of Health Services, the SWRCB, and CalRecycle compile and annually update lists of hazardous waste sites and land designated as hazardous waste sites throughout the state. The Secretary for Environmental Protection consolidates the information submitted by these agencies and distributes it to each city and county where sites on the lists are located. Before the lead agency accepts an application for any development project as complete, the applicant must consult these lists to determine if the site at issue is included.

If any soil is excavated from a site containing hazardous materials, it is considered a hazardous waste if it exceeds specific criteria in Title 22 of the CCR. Remediation of hazardous wastes found at a site may be required if excavation of these materials is performed, or if certain other soil disturbing activities would occur. Even if soil or groundwater at a contaminated site does not have the characteristics required to be defined as hazardous waste, remediation of the site may be required by regulatory agencies subject to jurisdictional authority. Cleanup requirements are determined on a case-by-case basis by the agency taking jurisdiction.

GOVERNMENT CODE SECTION 65962.5 (CORTESE LIST)

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by the State, local agencies, and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by DTSC, SWRCB, and the Department of Resources Recycling and Recovery (CalRecycle).

CALIFORNIA HEALTH AND SAFETY CODE

The California Health and Safety Code defines hazardous materials in section 25501(m) and contains requirements regarding the preparation of Hazardous Materials Business Plans in section 25505. These plans are documents containing information on hazardous materials use at a facility, emergency response plans in the event of a release, and employee training.

CALIFORNIA OCCUPATIONAL HEALTH AND SAFETY

California Division of Occupational Health and Safety (CalOSHA) works to protect and improve the health and safety of workers in California by setting and enforcing safety standards; providing outreach, education, and assistance; and issuing permits, licenses, certifications, registrations, and approvals.

Regional and Local

STATE WATER RESOURCES CONTROL BOARD

The SWRCB, through its nine regional boards, regulates discharge of potentially hazardous materials to waterways and aquifers and administers basin plans for groundwater resources in various regions of the State. The SFB RWQCB is the regional board that has jurisdiction over the project area. The State Water Board provides oversight for sites at which the quality of groundwater or surface waters is threatened and has the authority to require investigations and remedial actions.

REGIONAL WATER QUALITY CONTROL BOARD

SFB RWQCB regulates discharges and releases to surface and groundwater in the project area. The RWQCB generally oversees cases involving groundwater contamination. In the SFB RWQCB, the County of Santa Clara Department of Environmental Health handles most leaking underground storage tank cases, so the RWQCB may oversee cases involving other groundwater contaminants; i.e., Spills, Leaks, Incidents, and Clean-up cases. In the case of spills at a project site, the responsible party would notify the County of Santa Clara and then a lead regulator (County, RWQCB, or DTSC) would be determined.

The RWQCB has established guidelines used to evaluate the potential risk associated with chemicals found in soil or groundwater where a release of hazardous materials has occurred called Environmental Screening Levels developed for a variety of purposes including residential, commercial/industrial, and construction worker human health risk levels.

SANTA CLARA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

The Santa Clara County Department of Environmental Health (SCCDEH) is the Certified Unified Program Agency and through contract with the state. Since July 1, 2004 the SCCDEH has served as the local oversight agency for investigations and cleanup of petroleum releases from USTs through implementation of the local oversight program through contract with the SWRCB.

EMERGENCY OPERATIONS AND EVACUATION PLANS

The City of San José's Emergency Operations Plan includes standard operating procedures for flood events, heat waves, off-airport aviation accidents, power outages, terrorism, and urban/wildland interface fires. The Citywide Emergency Evacuation Plan sets forth the responsibilities of City personnel and coordination with other agencies to ensure the safety of San José citizens if a fire, geologic, or other hazardous occurrence arises.

ENVISION SAN JOSÉ 2040 GENERAL PLAN

The General Plan contains goals and policies which seek to mitigate potential impacts from hazards and hazardous materials in the city. Applicable goals and policies include:

Goal EC-6: Hazardous Materials: Protect the community from the risks inherent in the transport, distribution, use, storage, and disposal of hazardous materials.

Policy EC-6.1: Require all users and producers of hazardous materials and wastes to clearly identify and inventory the hazardous materials that they store, use or transport in conformance with local, state and federal laws, regulations and guidelines.

Policy EC-6.2: Require proper storage and use of hazardous materials and wastes to prevent leakage, potential explosions, fires, or the escape of harmful gases, and to prevent individually innocuous materials from combining to form hazardous substances, especially at the time of disposal by businesses and residences. Require proper disposal of hazardous materials and wastes at licensed facilities.

Policy EC-6.4: Require all proposals for new or expanded facilities that handle hazardous materials that could impact sensitive uses off-site to include adequate mitigation to reduce identified hazardous materials impacts to less than significant levels.

Policy EC-7.8: Where an environmental review process identifies the presence of hazardous materials on a proposed development site, the City will ensure that feasible mitigation measures that will satisfactorily reduce impacts to human health and safety and to the environment are required of or incorporated into the projects. This applies to hazardous materials found in the soil, groundwater, soil vapor, or in existing structures.

Policy EC-7.9: Ensure coordination with the County of Santa Clara Department of Environmental Health, Regional Water Quality Control Board, Department of Toxic Substances Control or other applicable regulatory agencies, as appropriate, on projects with contaminated soil and/or groundwater or where historical or active regulatory oversight exists.

Policy EC-7.10: Require review and approval of grading, erosion control and dust control plans prior to issuance of a grading permit by the Director of Public Works on sites with known soil contamination. Construction operations shall be conducted to limit the creation and dispersion of dust and sediment runoff.

Policy EC-7.11: Require sampling for residual agricultural chemicals, based on the history of land use, on sites to be used for any new development or redevelopment to account for worker and community safety during construction. Mitigation to meet appropriate end use such as residential or commercial/industrial shall be provided.

Goal EC-7: Environmental Contamination: Protect the community and environment from exposure to hazardous soil, soil vapor, groundwater, and indoor air contamination and hazardous building materials in existing and proposed structures and developments and on public properties, such as parks and trails.

Policy EC-7.1: For development and redevelopment projects, require evaluation of the proposed site's historical and present uses to determine if any potential environmental conditions exist that could adversely impact the community or environment.

Policy EC-7.2: Identify existing soil, soil vapor, groundwater and indoor air contamination and mitigation for identified human health and environmental hazards to future users and provide as part of the environmental review process for all development and redevelopment projects. Mitigation measures for soil, soil vapor and groundwater contamination shall be designed to avoid adverse human health or environmental risk, in conformance with regional, state and federal laws, regulations, guidelines and standards.

Policy EC-7.4: On redevelopment sites, determine the presence of hazardous building materials during the environmental review process or prior to project approval. Mitigation and remediation of hazardous building materials, such as lead-paint and asbestos-containing materials, shall be implemented in accordance with state and federal laws and regulations.

Policy EC-7.5: On development and redevelopment sites, require all sources of imported fill to have adequate documentation that it is clean and free of contamination and/or acceptable for the proposed land use considering appropriate environmental screening levels for contaminants. Disposal of groundwater from excavations on construction sites shall comply with local, regional, and state requirements.

Impact Analysis

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

b. Would the project 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?

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

Construction

Due to previous industrial and agricultural uses and the historic presence of underground storage tanks on the project site, it is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, project construction could create a significant hazard to the public or the environment.

Project construction may include the temporary transport, storage, and use of potentially hazardous materials including fuels, lubricating fluids, cleaners, or solvents. Due to the site's previous agricultural and industrial uses, contaminated soils may be present. Thus, project construction may involve the removal of contaminated soil during grading or excavation which would result in the transport and disposal of hazardous materials as they are unearthed and removed from the site.

Furthermore, demolishing the existing building could result in upset and release of hazardous materials into the environment. Due to its age, the existing buildings, constructed between 1974 and 1979 may contain asbestos, Polychlorinated biphenyls (PCB), and/or lead-based paints (LBP). Because the buildings were constructed before the federal ban on PCBs, it is possible that they are present in light ballasts. Demolition could result in health hazard impacts to workers if not

remediated prior to construction activities. However, demolition and construction would be required to comply with BAAQMD Regulation 11, Rule 2, which governs the proper handling and disposal of asbestos containing material for demolition, renovation, and manufacturing activities in the Bay Area. These activities would also need to comply with CalOSHA regulations regarding lead-based materials. The California Code of Regulations, Section 1532.1, requires testing, monitoring, containment, and disposal of lead-based materials such that exposure levels do not exceed CalOSHA standards. DTSC has classified PCBs as a hazardous waste when concentrations exceed 50 parts per million in non-liquids; consequently, the DTSC requires that materials containing those concentrations of PCBs be transported and disposed of as hazardous waste. Any light ballast removed would be evaluated for the presence of PCBs and managed appropriately pursuant to DTSC standards, which would be protective of safety during the construction phase. Compliance with BAAQMD, CalOSHA, and DTSC policies regarding asbestos containing materials (ACM), LBP, and PCBs, would reduce impacts to less than significant.

Project construction would require heavy construction equipment, the operation of which could result in a spill or accidental release of hazardous materials, including fuel, engine oil, engine coolant, and lubricants. As described above, the project was previously used for agricultural and industrial operations indicating potential for residual chemicals in the soil associated with the previous use. Therefore, ground-disturbing activities could expose construction workers to soil contaminated with agricultural and industrial chemicals above the environmental safety limits. Project construction would also include temporary transport, storage, and use of potentially hazardous materials including fuels, lubricating fluids, cleaners, solvents, contaminated groundwater or contaminated soils. The transport of any hazardous materials would be subject to federal, state, and local regulations, which would minimize risks associated with the transport of hazardous materials. Construction activities that involve hazardous materials would be required to transport such materials along roadways designated for that purpose in the County, thereby limiting risk of upset during transportation.

Nevertheless, due to existing soil conditions, the project has the potential to expose the public, construction workers and the environment to on-site hazardous materials due to past agricultural and industrial use and potential soil contamination. Therefore, Mitigation Measures HAZ-1 and HAZ-2 would be required to reduce potential impacts related to upset of hazardous materials.

Operation

The project would include installation of 18 above ground diesel fuel tanks for storage of fuel for the 20 proposed generators. Each generator would be equipped with a 6,000-gallon double-walled fuel storage tank. One fuel storage tank could be attached to the underside of each generator and would be equipped with a leak detection system. Generators and fuel storage tanks would be located within an enclosed area immediately to the north and south of the proposed building. Limited quantities of water treatment chemicals for mechanical equipment would also be used on site. As noted in Section 3. *Project Description*, the nearest sensitive receptors to the project site are the residences approximately 80 feet to the north, across Trade Zone Boulevard.

Hazardous materials storage at the site is regulated under local, State, and federal regulations through the California Health and Safety Code and enforced by agencies including DTSC, SWRCB, and SCCDEH. Pursuant to the requirements of the California Health and Safety Code, businesses must complete a Hazardous Materials Business Plan (pursuant to Health and Safety Code 25505) for the safe storage and use of chemicals if they handle or store large quantities of hazardous materials. Firefighters, health officials, planners, public safety officials, health care providers and other rely on

the Business Plan in an emergency. None of the hazardous materials used on the site are considered regulated substances under the California Accidental Release Prevention program that could have off-site consequences if accidentally released.

Compliance with relevant laws and regulations concerning the storage, transport, and use of hazardous materials would minimize the likelihood of hazardous materials releases from the proposed fuel storage tanks, and the use or storage of diesel fuel, oils, lubricants, and water treatment chemicals on the site by the project would not create a significant hazard to the public or the environment due to foreseeable upset or accident conditions.

Therefore, the proposed project would not emit hazardous emissions or use acutely hazardous materials. Operational impacts would be less than significant.

Mitigation Measures

HAZ-1 Soil Sampling

Prior to issuance of grading permits, shallow soil samples shall be taken in the near surface soil on the proposed project site and tested for organochlorine pesticides and pesticide-based metals, arsenic and lead to determine if contaminants from previous agricultural operations occur at concentrations above established construction worker safety and commercial/industrial standard environmental screening levels. The result of soil sampling and testing will be provided to the City's Supervising Planner and Municipal Environmental Compliance Officer for review.

If contaminated soils are found in concentrations above regulatory environmental screening levels for construction worker safety and/or commercial/industrial standards, a Site Management Plan (SMP), Removal Action Plan, or equivalent document as directed by the regulatory agency(i.e., SCCDEH or the DTSC) must be prepared by a qualified hazardous materials consultant.

HAZ-2 Soil Management Plan

Prior to the issuance of a demolition or grading permit, the applicant shall contact the regulatory agency (i.e., SCCDEH or DTSC) to discuss the proposed redevelopment project and perform any other necessary investigations and studies to address the residual contamination as deemed necessary by the SCCDEH.

The regulatory agency may require an SMP or similar document to manage the cleanup of contaminated soils. If applicable, an SMP shall be prepared by a qualified environmental professional prior to construction to reduce or eliminate exposure risk to human health and the

Isooctane presence shall be noted in the soil management plan, along with provisions for proper handling and/or disposal of impacted groundwater, though no groundwater is anticipated to be encountered during construction. At a minimum, the SMP shall include the following:

- Stockpile management including dust control, sampling, stormwater pollution prevention and the installation of best management practices (BMP)
- Mitigation of soil vapors
- Proper disposal procedures of contaminated materials
- Monitoring, reporting, and regulatory oversight notifications
- A health and safety plan for each contractor working at the site that addresses the safety and health hazards of each phase of site operations with the requirements and procedures for employee protection

- The health and safety plan will also outline proper soil handling procedures and health and safety requirements to minimize worker and public exposure to hazardous materials during construction.

The SMP shall detail procedures and protocols for management of soil containing environmental contaminants during site development activities. If applicable, cleanup and remediation activities on the site shall be conducted in accordance with the SMP prior to construction activities. All measures shall be printed on all construction documents, contracts, and project plans. The SMP shall be reviewed and approved by the City's Supervising Environmental Planner and Environmental Services Department Compliance Officer prior to issuance of any grading or building permit. With implementation of Mitigation Measures HAZ-1 and HAZ-2 impacts would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

There are no schools within 0.25 mile of the project site. As shown in Table 26 above, a proposed school site is located approximately 0.9 mile north of the project site on McCandless Drive. The nearest existing school to the project site is Mabel Mattos Elementary School, located approximately 0.3-mile northwest. The project would not involve use, storage, transportation, or disposal of hazardous materials within 0.25 mile of an existing or proposed school site. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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 for people residing or working in the project area?

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The nearest airport is Norman Y. Mineta San José International Airport, approximately 2.7 miles southwest of the project site. The project site is not located within the Airport Influence area of the Norman Y. Mineta San José International Airport (County of Santa Clara Airport Land Use Commission 2010). Therefore, impacts would be less than significant. The proposed building's maximum height (106.3 feet) is below the minimum elevation established by Federal Aviation Regulations, Part 77, for required filing with the Federal Aviation Administration for San José International Airport airspace safety review.

The project would not construct structures or create changes in circulation or access routes that potentially could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. No roads would be closed during construction and the proposed driveways would be reviewed and approved by the San José Fire Department to ensure that emergency access meets City standards.

NO IMPACT

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

The project would be in an urbanized area of San José on a site that has been previously developed with existing data center and office uses. As noted in Section 4.20, *Wildfire* below, the project site is not in a very high fire hazard severity zone. Project construction and operation would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

NO IMPACT

Conclusion

With implementation of Mitigation Measures HAZ-1 and HAZ-2, the project would not result in significant hazardous materials impacts.

4.10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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 ground water 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?	☐	☐	■	☐

Setting

The generally level and fully developed site is approximately 1.2 miles west of Coyote Creek, which flows in a northerly direction, west of the project site, towards San Francisco Bay.

The project site is located in a flood hazard zone (i.e., a 100-year flood zone) identified by Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map Number 06085C0069H. FEMA designates the project site as Zone AO, a designation assigned to areas with 1-percent annual chance of shallow flooding. The average flood depth in this location is 1 foot and mandatory flood insurance requirements apply. Most of the project site is covered with impermeable surfaces, including two industrial buildings and large paved storage and parking areas.

Regulatory Setting

Federal and State

CLEAN WATER ACT

Congress enacted the federal CWA, formally the Federal Water Pollution Control Act of 1972, with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the U.S. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and non-point source discharges to surface water. Those discharges are regulated by the NPDES permit process (CWA Section 402). California SWRCB and its nine RWQCBs administer NPDES permitting authority. The project site is under the jurisdiction of the RWQCB Region 2 (San Francisco Bay Area Region).

Section 401 of the CWA requires that the RWQCB certify any activity that may result in discharges into a state waterbody. This certification ensures the proposed activity does not violate federal and/or state water quality standards. The limits of non-tidal waters extend to the Ordinary High-Water Mark, defined as the line on the shore established by the fluctuation of water and indicated by physical characteristics, such as natural line impressed on the bank, changes in the character of the soil, and presence of debris. The United States Army Corps of Engineers may issue either individual, site-specific permits or general, nationwide permits for discharge into waters of the U.S.

Section 303(d) of the CWA (CWA, 33 United States Code 1250, et seq., at 1313(d)) requires states to identify "impaired" waterbodies as those which do not meet water quality standards. States are required to compile this information in a list and submit the list to the USEPA for review and approval. This list is known as the Section 303(d) list of impaired waters. As part of this listing process, states must prioritize waters and watersheds for future development of TMDLs. The SWRCB and RWQCBs enact ongoing efforts to monitor and assess water quality, to prepare the Section 303(d) list, and to develop TMDL requirements.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

The primary regulatory control relevant to the protection of water quality is the NPDES permit administered by the SWRCB. The SWRCB establishes requirements prescribing the quality of point sources of discharge and water quality objectives. These objectives are established based on the designated beneficial uses (e.g., water supply, recreation, and habitat) for a particular surface waterbody. The NPDES permits are issued to point source dischargers of pollutants to surface waters pursuant to Water Code Chapter 5.5, which implements the federal CWA. Examples include, but are not limited to, public wastewater treatment facilities, industries, power plants, and

groundwater cleanup programs discharging to surface waters (SWRCB, Title 23, Chapter 9, Section 2200). The RWQCB establishes and regulates discharge limits under the NPDES permits.

PORTER-COLOGNE WATER QUALITY CONTROL ACT

The SWRCB regulates water quality through the Porter-Cologne Water Quality Control Act of 1969, which contains a complete framework for the regulation of waste discharges to both surface waters and groundwater of the State. RWQCBs regulate stormwater quality under authorities of the federal CWA and the state Porter-Cologne Water Quality Control Act.

NPDES STATEWIDE CONSTRUCTION GENERAL PERMIT

Construction projects that disturb one or more acres of soil or are part of a larger common plan of development that disturbs one or more acres of soil must obtain coverage under the statewide NPDES General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). To obtain coverage under the Construction General Permit, a project-specific SWPPP must be prepared. The SWPPP outlines BMP to reduce stormwater and non-stormwater pollutant discharges including erosion control, minimize contact between construction materials and precipitation, and implement strategies to prevent equipment leakage or spills.

Regional and Local

MUNICIPAL REGIONAL STORMWATER NPDES PERMIT

The SFB RWQCB has issued a Municipal Regional Stormwater NPDES Permit (Permit Number CAS612008) (MRP) that covers the project area (SFB RWQCB 2015). 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. The MRP requires regulated projects to include Low Impact Development (LID) practices, such as site design, pollutant source control, and stormwater treatment measures aimed to maintain or restore the site's natural hydrologic functions. The MRP also requires that stormwater treatment measures are properly installed, operated and maintained.

POST-CONSTRUCTION URBAN RUNOFF MANAGEMENT POLICY AND HYDROMODIFICATION MANAGEMENT POLICY

The City of San José's Development Policy 6-29 and Policy 8-14 implements the stormwater treatment requirements of Provision C3 of the Municipal Regional Stormwater NPDES Permit. The City of San José City Council approved policy (Policy 6-29) on post-conduction urban runoff management in February 1988 and last revised it in October 2011. The San Francisco Bay Region Municipal Regional Stormwater NPDES Permit mandates that stormwater management measures, such as site design, pollutant source control, and treatment measures, are included in new and redevelopment projects to minimize and properly treat stormwater runoff. The Municipal Regional Permit requires use of LID techniques including infiltration, harvest and reuse, evapotranspiration, or biotreatment to manage stormwater. The City's Post-Construction Hydromodification Management Policy (Policy 8-14; City of San José 2010) is a companion policy that addresses the management of stormwater runoff to minimize erosion and sedimentation in local rivers and creeks (City of San José 2011a).

ENVISION SAN JOSÉ GENERAL PLAN

The General Plan contains goals and policies which seek to improve hydrology and water quality in the City. Applicable goals and policies include:

Goal IN-3: Water Supply, Sanitary Sewer and Storm Drainage: Provide water supply, sanitary sewer, and storm drainage infrastructure facilities to meet future growth planned within the City, to assure high-quality service to existing and future residents, and to fulfill all applicable local, State, and Federal regulatory requirements.

Policy IN-3.7: Design new projects to minimize potential damage due to stormwaters and flooding to the site and other properties.

Policy IN-3.9: Require developers to prepare drainage plans that define needed drainage improvements for proposed developments per City standards.

Goal MS-3: Water Conservation and Quality: Maximize the use of green building practices in new and existing development to minimize use of potable water and to reduce water pollution.

Policy MS-3.4: Promote the use of greenroofs (i.e., roofs with vegetated cover), landscape-based treatment measures, pervious materials for hardscape, and other stormwater management practices to reduce water pollution.

Policy MS-3.5: Minimize areas dedicated to surface parking to reduce rainwater that comes into contact with pollutants.

Goal ER-8: Stormwater: Minimize the adverse effects on ground and surface water quality and protect property and natural resources from stormwater runoff generated in the City of San José.

Policy MS-8.1: Manage stormwater runoff in compliance with the City's Post-Construction Urban Runoff (6-29) and Hydromodification Management (8-14) Policies.

Policy MS-8.3: Ensure that private development in San José includes adequate measures to treat stormwater runoff.

Policy MS-8.5: Ensure that all development projects in San José maximize opportunities to filter, infiltrate, store and reuse or evaporate stormwater runoff on site.

Goal EC-4: Geologic and Soils Hazards: Minimize the risk of injury, loss of life, and property damage from soil and slope instability including landslides, differential settlement, and accelerated erosion.

Goal EC-5: Flooding Hazards: Protect the community from flooding and inundation and preserve the natural attributes of local floodplains and floodways,

Policy EC-5.7: Allow new urban development only when mitigation measures are incorporated into the project design to ensure that new urban runoff does not increase flood risks elsewhere.

Impact Analysis

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

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Construction

Project construction could result in temporary impacts on water quality from runoff leaving the site. Temporary soil disturbance would occur during project construction from earth-moving activities, such as excavation and trenching for foundations and utilities, soil compaction and moving, cut and fill activities, and grading. If not managed properly, disturbed soils would be susceptible to high rates of erosion from wind and rain, resulting in sediment transport via stormwater runoff from the project site. The types of pollutants contained in runoff from construction would be typical of urban areas, and may include sediments and contaminants such as pesticides, oils, fuels, paints, solvents, and other pollutants.

Because the project would involve disturbance of more than one acre of land surface, it would be subject to the State of California General Stormwater Permit for Construction Activities. Compliance with the permit would require the applicant to file a Notice of Intent with the SWRCB. Permit conditions require development of a SWPPP, which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Inspection of construction sites before and after storms is also required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary.

In addition, all development projects in San José must comply with the City's Grading Ordinance, which requires the use of erosion and sediment controls to protect water quality while a site is under construction. Prior to issuance of a permit for grading activity occurring during the rainy season (October 1 to April 30), the applicant would be required to comply with the City's standard conditions of approval which involve the preparation and submittal of an Erosion Control Plan to be submitted to the Director of Public Works for review and approval. The plan must detail the BMPs that would be implemented to prevent the discard of stormwater pollutants.

Consistent with the NPDES Municipal Regional Stormwater Permit, the City's Post-Construction Urban Runoff Management Policy (City Council Policy 6-29) establishes specific requirements to minimize and treat stormwater runoff from new and redevelopment projects. Additionally, the project would be required to comply with the City of San José General Plan standard permit conditions during construction, as follows:

Standard Permit Condition

Prior to the issuance of a grading permit, the applicant shall prepare and submit an Erosion Control Plan for review and approval by City Public Works Department.

The project applicant shall implement the following conditions:

- Install burlap bags filled with drain rock around storm drains to route sediment and other debris away from the drains.

- Suspend earthmoving or other dust-producing activities during periods of high winds.
- Water all exposed or disturbed soil surfaces at least twice daily to control dust as necessary.
- Water or cover stockpiles of soil or other materials that can be blown by the wind.
- Cover all trucks hauling soil, sand, and other loose materials and maintain at least two feet of freeboard on all trucks.
- Sweep all paved access roads, parking areas, staging areas and residential streets adjacent to the construction sites daily (with water sweepers).
- Replant vegetation in disturbed areas as quickly as possible.
- Fill with rock all unpaved entrances to the site to remove mud from tires prior to entering City streets. Install a tire wash system if requested by the City.
- Comply with the City of San José Grading Ordinance, including implementing erosion and dust control during site preparation and with the City's Zoning Ordinance requirements for keeping adjacent streets free of dirt and mud during construction.

Compliance with applicable State General Permit requirements, City ordinances, General Plan requirements, and standard permit condition for construction activities would ensure that project construction would not result in significant impacts on water quality and would not result in a violation of any water quality standards.

Operation

Project operation has the potential to introduce contaminants associated with diesel fuel for standby generators, lead-acid batteries, and cooling water treatment chemicals (Appendix HAZ). However, project operation would not represent a significant increase in generation of pollutants that could potentially impact water quality. Additionally, the project would be required to comply with the current NPDES Regional Municipal Stormwater Permit during operation. The Regional Municipal Stormwater Permit convers stormwater discharges from municipalities and local agencies in Santa Clara County and other parts of the Bay Area. This permit identifies low-impact development techniques that the City of San José, as a permittee, must require of new development and redevelopment projects, for the purpose of reduction the discharge of pollutants in stormwater runoff and preventing increases in runoff flows (RWRCB 2009).

The Municipal Regional Permit also requires regulated projects to include measures to control hydromodification impacts where the project would otherwise cause increased erosion, silt pollutant generation, or other adverse impacts to local rivers and creeks. Development projects that create and/or replace one acre or more of impervious surface and are in a subwatershed or catchment that is less than 65 percent impervious, must manage increases in runoff flow and volume so that post-project runoff shall not exceed estimated pre-project rates and durations. The City's Post-Construction Hydromodification Management Policy (City Council Policy 8-14) establishes an implementation framework for incorporating measures to control hydromodification impacts from development projects.

The Envision San José 2020 General Plan EIR concluded that with the regulatory programs currently in place, stormwater runoff from new development will have a less than significant impact on stormwater quality. Therefore, with compliance with the Regional Municipal Stormwater Permit requirements and the City's regulatory policies pertaining to stormwater runoff, the project would have a less than significant impact on water quality.

LESS THAN SIGNIFICANT IMPACT

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

The San José Water Company (SJWC) would provide potable water for the project. SJWC receives one-third of its potable water supply from groundwater from the Santa Clara subbasin, which is managed by the Valley Water (SJWC 2016). Available groundwater supply is predicted to remain the same through 2040 (SJWC 2016). In addition, the Valley Water groundwater supply is not in chronic overdraft (Valley Water 2016). As discussed in Section 17, *Utilities and Service Systems*, the project site is almost completely impermeable, and the project would not increase the amount of impermeable surface. In addition, the project would not increase water demands compared to existing conditions. Therefore, the project would not deplete groundwater resources substantially nor impede groundwater recharge. The impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

c.(ii) Would the project substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

c.(iii) Would the project 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 that would 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?

c.(iv) Would the project 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 that would impede or redirect flood flows?

Project construction would not alter the course of the Coyote Creek or any other streams or rivers. Most of the project site and surrounding area are paved with impermeable surfaces. The project site would connect to the City of San José storm drain system, which delivers water to local creeks and ultimately to San Francisco Bay.

The project site is nearly entirely paved, and the project would not represent a substantial increase in impervious surfaces. Additionally, the project would be required to install LID features in accordance with the City of San José Post-Construction Urban Runoff Management Policy, thereby either reducing the amount of stormwater runoff generated at the project site or by directing project-generated polluted runoff to treatment. Although the project would increase impervious surfaces at the project site, with implementation of LID features, the project is not anticipated to result in a substantial increase in surface run-off. Therefore, the project would not result in on-site or off-site flooding or substantial erosion or siltation of a creek or river. There would be no impact.

NO IMPACT

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

The project site is approximately 7 miles southeast of the San Francisco Bay and 29 miles from the Pacific Ocean. The project site is not in a tsunami inundation zone (DOC 2009). The San Francisco Bay is also the closest body of water that could experience a seiche event. The distance from the Bay and intervening development would prevent a seiche in the San Francisco Bay from having potential to affect the project site. Additionally, the project site and surrounding area are predominantly flat and largely developed and distant from steep hillsides. Therefore, the project is in a low hazard area for tsunami, seiche, and mudflow. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

Conclusion

With implementation of Standard Permit Condition, the project would not result in significant hydrology and water quality impacts.

4.11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☐	■	☐

Setting

The project site is in the TEC Zoning District. The San José Municipal Code indicates this Zoning District is intended for intensive industrial park and supportive commercial uses with development generally at least four stories in height, consistent with General Plan height policies, and in proximity to existing or planned transit in employment districts designated as growth areas in the General Plan. New development should orient buildings towards public streets and transit facilities and include features to provide an enhanced pedestrian environment.

The project site is bordered by Trade Zone Boulevard to the north, Fortune Drive to the south, and one-story Industrial buildings to the east and west. The adjacent properties to the east and west of the project site consist of various commercial and office uses. To the north are multi-family residential townhomes. The site is located approximately 0.8 mile east of I-880 and 0.8 mile west of I-680.

Regulatory Setting

Local

ENVISION SAN JOSÉ 2040 GENERAL PLAN

A primary strategy of the Envision San José 2040 General Plan is to direct new employment and housing growth to identified Urban Growth Areas that have the potential to develop into key employment centers with employment facilities close to transit. The Urban Village Area Boundary delineates these areas of the City identified as having the potential to support growth through redevelopment and intensification to implement the Envision San José General Plan Focused Growth Major Strategy.

The project site has a General Plan Land Use designation of TEC is intended to provide a space for increased job growth near existing and planned transit facilities. Uses allowed in TEC designated sites, include commercial and industrial uses similar to those allowed under the Industrial Park general plan designation. Furthermore, due to the proximity of TEC designated sites to regional transit services, developments on sites with this designation should reflect more intense, transit-

oriented land use pattern than that typically found in Industrial Park areas and has the following requirements:

- Density: FAR Up to 12.0 (4 to 25 stories)
- Supports a varied mixture of compatible commercial and industrial uses. Properties with this designation are intended for commercial, office, or industrial developments or a compatible mix of the uses.
- Development intensity is intense transit-oriented land use.

Impact Analysis

a. Would the project physically divide an established community?

The project would continue the existing urban development of the area and would not cut off connected neighborhoods or land uses from each other. The project does not involve new roadways, linear infrastructure, or other development features that would divide an established community or limit movement, travel, or social interaction between established land uses. Therefore, the project would not physically divide an established community.

NO IMPACT

b. Would the project 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?

As discussed above under *Project Information*, the project site is in the TEC Zoning District and has a General Land Use Designation of TEC.

Consistent with the General Plan and Zoning Ordinance, the proposed project would have a FAR of 11.8 and would increase building height and intensity of use at the project site above existing conditions. Therefore, the project would comply with the allowed building massing and height guidelines associated established per the General Plan. Although data centers do not generate job growth consistent with the intent of the TEC land use designation, the project would continue an existing permitted use established prior to adoption of the Envision San José 2040 General Plan and the data center would foster future industrial growth in the area, and would therefore, not conflict with the 2040 General Plan.

The project includes review of a Special Use Permit for a data center, consistent with the Zoning Ordinance. Therefore, the project would not conflict with the City's land use designation or any other applicable policy or regulation such that the project would cause a significant environmental impact.

LESS THAN SIGNIFICANT IMPACT

Conclusion

The project would not result in significant land use impacts.

4.12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☐	☐	■

Setting

Extractive resources known to exist in and near the Santa Clara Valley include cement, sand, gravel, crushed rock, clay, and limestone. All of these have been used as building materials by the construction industry. Santa Clara County has also supplied a significant portion of the nation's mercury over the past century (City of San José 2011a).

Pursuant to the mandate of the Surface Mining and Reclamation Act of 1975, the State Mining and Geology Board has designated the Communications Hill Area (Sector EE), bounded generally by the Southern Pacific Railroad, Curtner Avenue, State Route 87, and Hillsdale Avenue, as containing mineral deposits which are of regional significance as a source of construction aggregate materials. Neither the State Geologist nor the State Mining and Geology Board has classified any other areas in San José as containing mineral deposits which are either of statewide significance or the significance of which requires further evaluation. Therefore, other than the Communications Hill area cited above, San José does not have mineral deposits subject to Surface Mining and Reclamation Act (City of San José 2011a). The project site is approximately 7 miles northeast of the Communications Hill Area.

Regulatory Setting

City of San José

ENVISION SAN JOSÉ 2040 GENERAL PLAN

Chapter 3, Environmental Leadership, in the City of San José General Plan sets forth sustainability goals for the city through 2040. None of the extractive resources-related goals, policies, and actions are relevant to the project (City of San José 2011a).

Impact Analysis

a. Would the project 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. Would the project 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?

The project site is not located in a portion of the city identified as containing mineral deposits by the City's General Plan (City of San José 2011a). Therefore, the project would not result in the loss of any known mineral resources. There would be no impact.

NO IMPACT

Conclusion

The project would not result in the loss of mineral resources.

4.13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☐	☐	■

Setting

Overview of Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs (e.g., the human ear). Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (Crocker 2007). Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz (Hz) and less sensitive to frequencies around and below 100 Hz (Kinsler 1999). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as a doubling of traffic volume, would increase the noise level by 3 dB; similarly, dividing the energy in half would result in a decrease of 3 dB (Crocker 2007).

Human perception of noise has no simple correlation with acoustical energy. The perception of noise is not linear in terms of dBA or in terms of acoustical energy. Two equivalent noise sources combined do not sound twice as loud as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease; that a change of 5 dBA is readily

perceptible; and that an increase (decrease) of 10 dBA sounds twice (half) as loud (California Department of Transportation 2013a).

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors has been developed. The noise descriptors used for this analysis are the one-hour equivalent noise level (L_{eq}) and the Day-Night Average Level (L_{dn}).

- The L_{eq} is the level of a steady sound that, in a stated period and at a stated location, has the same A-weighted sound energy as the time-varying sound. For example, $L_{eq(1h)}$ is the equivalent noise level over a 1-hour period and $L_{eq(8h)}$ is the equivalent noise level over an 8-hour period. $L_{eq(1h)}$ is a common metric for limiting nuisance noise, whereas $L_{eq(8h)}$ is a common metric for evaluating construction noise.
- The L_{dn} is a 24-hour equivalent sound level. The L_{dn} calculation applies an additional 10 dBA penalty is added to noise occurring during nighttime hours (i.e., 10:00 p.m. to 7:00 a.m.).[9] This increase for nighttime hours is intended to account for the added sensitivity of humans to noise during the night.

Sound from a small, localized source (approximating a "point" source) decreases or drops off at a rate of 6 dBA for each doubling of the distance. However, traffic is not a single, stationary point source of sound. Over some time interval, the movement of vehicles makes the source of the sound appear to emanate from a line (line source) rather than a point. The drop-off rate for a line source is 3 dBA for each doubling of distance.

Overview of Vibration

While people have varying sensitivities to vibrations at different frequencies, they are generally most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses (Federal Transit Administration [FTA] 2018).

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (California Department of Transportation 2013b). Vibration significance ranges from approximately 50 vibration decibels (VdB), which is the typical background vibration-velocity level, to 100 VdB, the general threshold where minor damage can occur in fragile buildings. The general human response to different levels of groundborne vibration velocity levels is described in Table 27 (FTA 2018).

[9] The L_{dn} can also be expressed as DNL.

Table 27 Human Response to Different Levels of Groundborne Vibration

Vibration Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception for many people
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible (many people find that transportation-related vibration at this level is unacceptable)
85 VdB	Vibration acceptable only if there are an infrequent number of events per day

Source: FTA 2018

Site Conditions

The primary noise sources in the project area are traffic on Trade Zone Boulevard and mechanical equipment at the existing on-site data center and adjacent industrial use. Ambient traffic noise levels are generally highest during the daytime and rush hours unless congestion substantially slows speeds, which tends to reduce ambient noise levels. The predominant noise-sensitive land uses in the vicinity of the project site are residential neighborhoods located across Trade Zone Boulevard to the north.

To characterize existing ambient noise levels, Rincon Consultants, Inc. conducted two long-term 24-hour sound level measurements from July 10 to 12, 2019 and four short-term 15-minute noise measurements on July 12, 2019 (see Appendix NOI). Figure 9 shows the noise measurement locations. Table 28 and Table 29 summarize the results of the short- and long-term sound level measurements, respectively.

Table 28 Short-Term Sound Level Monitoring Results

Measurement Number	Measurement Location	Primary Noise Source	Sample Time	dBA L_{eq}
1	20 feet west of east property line, along Fortune Drive	Roadway traffic along Fortune Dr	4:40 pm – 4:55 pm	56
2	Eastern corner of site, near proposed loading dock	Mechanical equipment on site and at adjacent industrial use	5:01 pm – 5:16 pm	53
3	30 feet west of northwest corner of Trade Zone Blvd and Journey Street	Roadway traffic along Trade Zone Blvd	5:28 pm – 5:43 pm	69
4	Trade Zone Blvd, 10 feet west of eastern property line	Roadway traffic along Trade Zone Blvd	5:52 pm – 6:07 pm	69

Source: Appendix NOI

Table 29 Long-Term Sound Level Monitoring Results

Measurement Number	Measurement Location	Sample Date	24-Hour L_{eq} (dBA)	L_{dn}
1	Trade Zone Boulevard	July 10 – July 11, 2019	66	71
2	Fortune Drive	July 11 – July 12, 2019	64	66

Source: Appendix NOI

Figure 9 Noise Measurement Locations

Imagery provided by Microsoft Bing and its licensors © 2019.

Fig 6 Noise Measurements

Regulatory Setting

Federal

FEDERAL TRANSIT ADMINISTRATION

The FTA has recommended noise criteria related to traffic-generated noise in *Transit Noise and Vibration Impact Assessment* that can be used to determine whether a change in traffic would result in a substantial permanent increase in noise (FTA 2006). Under the FTA standards, the allowable noise exposure increase is reduced with increasing ambient existing noise exposure, such that higher ambient noise levels have a lower allowable noise exposure increase. Table 30 shows the significance thresholds for increases in traffic-related noise levels. These standards are applicable to project impacts on existing sensitive receptors (as defined under *Environmental Setting* above).

Table 30 Significance of Changes in Operational Roadway Noise Exposure

Existing Noise Exposure (dBA DNL or Leq)	Allowable Noise Exposure Increase (dBA DNL or Leq)
45-49	7
50-54	5
55-59	3
60-64	2
65-74	1
75+	0

dBA = A-weighted sound pressure level
DNL = Day-Night Average Level
Leq = Equivalent continuous sound level
Source: FTA 2006

In addition to the groundborne vibration thresholds outlined above, the FTA provides human responses to different levels of groundborne vibration and recommends vibration impact thresholds to determine whether groundborne vibration would be "excessive." Groundborne vibration impact criteria for residential receptors are 72 VdB for frequent events, 75 VdB for occasional events, and 80 VdB for infrequent events (FTA 2006). With regard to groundborne vibration impacts on structures, the FTA states that groundborne vibration levels in excess of 100 VdB could damage fragile buildings (FTA 2006).

City of San José

CITY OF SAN JOSÉ MUNICIPAL CODE

The City of San José regulates noise through the City's Zoning Ordinance contained in SJMC Chapter 20. SJMC Chapter 20.50.300 establishes noise standards for industrial zoning districts. For industrial uses adjacent to properties used or zoned for residential uses, the maximum noise level at the property line is 55 dBA L_{eq}. For industrial uses adjacent to properties used or zoned for commercial uses, the maximum noise level at the property line is 60 dBA L_{eq}. For industrial uses adjacent to properties used or zoned for industrial or other uses, the maximum noise level at the property line is 70 dBA L_{eq}.

Chapter 20.100.450 limits the hours of construction on sites within 500 feet of a residential land use between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and does not allow construction at any time on weekends.

ENVISION SAN JOSÉ 2040 GENERAL PLAN

The City's General Plan establishes interior and exterior noise thresholds for different land uses within the City and vibration thresholds during demolition and construction. The following are applicable policies to the proposed project (City of San José 2011a):

Goal EC-1: Community Noise Levels and Land Use Compatibility. Minimize the impact of noise on people through noise reduction and suppression techniques, and through appropriate land use policies.

Policy EC-1.1 Locate new development in areas where noise levels are appropriate for the proposed uses. Consider federal, state and City noise standards and guidelines as a part of new development review. Applicable standards and guidelines for land uses in San José include:

Interior Noise Levels

The City does not have a standard for interior noise levels in commercial/industrial uses.

Exterior Noise Levels

The City's acceptable exterior noise level objective is 60 dBA DNL or less for residential and most institutional land uses (Table EC-1 [reproduced herein as Table 31]).

Table 31 City of San José Noise and Land Use Compatibility Guidelines

	Noise Exposure Levels (DNL, dBA)		
Land Use Category	**Normally Acceptable**	**Conditionally Acceptable**	**Unacceptable**
Residential, Hotels and Motels, Hospitals, and Residential Care	50-60	60-75	>75
Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds	50-65	65-80	>80
Schools, Libraries, Museums, Meeting Halls, Churches	50-60	60-75	>75
Office Buildings, Business Commercial, and Professional Offices	50-70	70-80	>80
Sports Arena, Outdoor Spectator Sports	50-70	70-80	>80
Public and Quasi Public Auditoriums, Concert Halls, Amphitheaters	NA	50-70	>70

dBA = A-weighted sound pressure level; DNL = Day-Night Average Level

Source: City of San José 2011a

Policy EC-1.2 Minimize the noise impacts of new development on land uses sensitive to increased noise levels (Categories 1, 2, 3 and 6) by limiting noise generation and by requiring use of noise attenuation measures such as acoustical enclosures and sound barriers, where feasible. The City considers significant noise impacts to occur if a project would:

- Cause the DNL at noise sensitive receptors to increase by five dBA DNL or more where the noise levels would remain "Normally Acceptable"; or
- Cause the DNL at noise sensitive receptors to increase by three dBA DNL or more where noise levels would equal or exceed the "Normally Acceptable" level.

Policy EC-1.3 Mitigate noise generate of new nonresidential land uses to 55 dBA DNL at the property line when located adjacent to existing or planned noise sensitive residential and public/quasi-public land uses.

Policy EC-1.7 Require construction operations within San José to use best available noise suppression devices and techniques and limit construction hours near residential uses per the City's Municipal Code. The City considers significant construction noise impacts to occur if a project located within 500 feet of residential uses or 200 feet of commercial or office uses would:

- Involve substantial noise generating activities (such as building demolition, grading, excavation, pile driving, use of impact equipment, or building framing) continuing for more than 12 months. For such large or complex projects, a construction noise logistics plan that specifies hours of construction, noise and vibration minimization measures, posting or notification of construction schedules, and designation of a noise disturbance coordinator who would respond to neighborhood complaints will be required to be in place prior to the start of construction and implemented during construction to reduce noise impacts on neighboring residents and other uses.

Policy EC-2.3 Require new development to minimize vibration impacts to adjacent uses during demolition and construction. For sensitive historic structures, a vibration limit of 0.08 in/sec PPV (peak particle velocity) will be used to minimize the potential for cosmetic damage to a building. A vibration limit of 0.20 in/sec PPV will be used to minimize the potential for cosmetic damage at buildings of normal conventional construction.

CITY OF MILPITAS MUNICIPAL CODE

The City of Milpitas regulates noise and vibration in Chapter 213 of the Milpitas Municipal Code (MMC). MMC Section V-213-3.05 establishes allowed construction hours of 7:00 a.m. to 7:00 p.m. on all weekdays and weekends. No construction is permitted on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

MILPITAS GENERAL PLAN

The Milpitas General Plan Noise Element contains the following goals and policies that would be applicable to the proposed project:

Goal 6-G-1. Maintain land use compatibility with noise levels similar to those set by State guidelines.

Goal 6-G-2. Minimize unnecessary, annoying, or injurious noise.

Policy 6-G-1 Use the guidelines in Table 6-1 (Noise and Land Use Compatibility) (reproduced herein as Table 32) as review criteria for development projects.

Policy 6-I-7 Avoid residential DNL exposure increases of more than 3 dB or more than 65 dB at the property line, whichever is more restrictive.

Policy 6-I-11 Minimize noise impacts on neighbors caused by commercial and industrial projects.

Policy 6-I-12 New noise-producing facilities introduced near sensitive land uses which may increase noise levels in excess of "acceptable" levels will be evaluated for impact prior to approval; adequate mitigation at the noise source will be required to protect noise-sensitive land uses.

Policy 6-I-13 Restrict the hours of operation, technique, and equipment used in all public and private construction activities to minimize noise impact. Include noise specifications in requests for bids and equipment information.

Table 32 City of Milpitas Noise and Land Use Compatibility Guidelines

	Noise Exposure Levels (L_{dn} or CNEL, dBA)			
Land Use Category	**Normally Acceptable**	**Conditionally Acceptable**	**Normally Unacceptable**	**Clearly Unacceptable**
Residential – Low Density, Single Family, Duplex, Mobile Homes	50-60	55-70	70-75	>75
Residential – Multi-Family	50-65	60-70	70-75	>75
Transit Lodging – Motels, Hotels	50-65	60-70	70-80	>80
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-70	60-70	70-80	>80
Auditoriums, Concert Halls, Amphitheaters	n/a	<70	n/a	<65
Sports Arena, Outdoor Spectator Sports	n/a	<75	>70	n/a
Playgrounds, Neighborhood Parks	<70	n/a	67-75	<72
Golf Courses, Riding Stables, Water Recreation, Cemeteries	>75	n/a	70-80	>80
Office Buildings, Business Commercial, and Professional	<70	67-77	>75	n/a
Industrial, Manufacturing, Utilities, Agriculture	<75	70-80	>75	n/a

L_{dn} = Day-Night Average Level; CNEL = Community Noise Equivalent; dBA =A-weighted sound pressure level; n/a = not applicable

Source: City of Milpitas 2015

Impact Analysis

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 Noise

Project construction would generate temporary noise that would exceed existing ambient noise levels, but such noise would cease upon the completion of construction activity. Noise impacts associated with construction activity are a function of the noise generated by construction equipment, the location and sensitivity of nearby land uses, and the timing and duration of the noise-generating activities.

Table 33 provides estimates of construction noise at the nearest sensitive receiver, the residences located across Trade Zone Boulevard. Noise was modeled based on the project's construction equipment list for each phase and distance to nearby receivers.

Table 33 Estimated Maximum Construction Noise

Construction Phase	Equipment	Estimated Noise at 80 feet (dBA L_{eq})
Phase 1		
Demolition	Concrete saw, excavators (3), dozers (2)	82
Site preparation	Dozers (3), tractors/backhoes/loaders (4)	82
Grading	Tractor/backhoe/loader (3), dozer, grader	83
Phase 2		
Building construction	Crane, forklifts (3), tractors/backhoes/loaders (3), generator set, welder	77
Paving	Paving equipment (2), pavers (2), rollers (2)	82
Architectural coating	Air compressor	70

See Appendix NOI for RCNM modeling results.

As shown in Table 33, construction noise would reach as high as 83 dBA L_{eq} at a distance of 80 feet during the grading phase, which would exceed the measured ambient noise level of 66 dBA L_{eq} by 17 dBA. Per SJMC Chapter 20.100.450, the hours of construction would be limited to 7:00 a.m. to 7:00 p.m. Monday through Friday because the project site is within 500 feet of a residential land use. These hours of construction would be consistent with MMC Section V-213-3.05.

The Cities of San José and Milpitas do not currently have any established quantitative noise standards for construction noise. However, according to the City of San José's General Plan, the project would have a significant impact if it generates substantial noise continuing for more than 12 months within 500 feet of a residence or 200 feet of commercial or office use, or does not use best available suppression devices and techniques. The project would be located approximately 80 feet south of existing residences along Trade Zone Boulevard, and construction activities associated with the project would occur over 18 months. Therefore, construction noise would represent a potentially significant impact and mitigation would be required.

Operational Noise

The proposed project would generate non-mobile operational noise that would be typical of data center uses, including continuous sounds from HVAC equipment and periodic instantaneous sounds such as vehicular movement, other mechanical equipment, and infrequent generator operation. Table 34 summarizes project-generated hourly operational noise levels at the nearest receiver locations. As shown therein, hourly operational noise levels would not exceed the City of San José's industrial use noise standards of 55 dBA L_{eq} at the nearest residential property lines and 70 dBA L_{eq} at the nearest industrial property lines.

Table 35 summarizes project-generated 24-hour operational noise levels at residential receivers to the north. As shown therein, project operational noise levels would not exceed the City of San José's 24-hour noise standard of 55 L_{dn} or the City of Milpitas' 24-hour noise standard of 65 L_{dn}. In addition, the project would result in less than 0.1 L_{dn} change in 24-hour noise levels at residential receivers, which would not exceed the Cities of San José and Milpitas' threshold of 3 L_{dn}. Therefore, operational noise impacts would be less than significant.

Table 34 Modeled Project Hourly Noise Levels

Receiver	Location	Hourly Noise Level (dBA L_{eq})	Hourly Threshold (dBA L_{eq})[1]	Threshold Exceeded?
R-1	2130 Trade Zone Boulevard (east)	39	70	No
R-2	Residential uses (north)	36	50	No
R-3	East of cooling towers	28	70	No
R-4	2091 Fortune Drive (east)	37	70	No
R-5	2090 Fortune Drive (south)	37	70	No
R-6	1849 Fortune Drive (west)	32	70	No
R-7	2400 Ringwood Avenue (west)	32	70	No

[1]Based on SJMC Section 20.50.300.

See Appendix NOI for operational noise modeling results.

Table 35 Modeled Project 24-Hour Noise Levels

Receiver	Location	Existing 24-Hour Noise Level (L_{dn})[1]	24-Hour Noise Level (L_{dn})[2]	City of Milpitas 24-Hour Threshold (L_{dn})[3]	City of San José 24-Hour Threshold (L_{dn})[4]	Change in 24-Hour Noise Level (L_{dn})	Cities of San José and Milpitas Change in 24-Hour Noise Level Threshold (L_{dn})[5]	Thresholds Exceeded?
R-2	Residential uses north of site	71	39	65	55	<0.1	3	No

Note: The City of Milpitas 24-hour noise standard only applies to residential land uses, and the City of San José's 24-hour noise standard only applies to sensitive receivers. Therefore, this table only compares modeled 24-hour noise levels at residential uses north of the site to the Cities' 24-hour noise standards.

[1]Based on long-term Noise Measurement 1 (see Table 29).

[2]SoundPlan reports 24-hour noise levels in terms of CNEL. However, noise levels described by L_{dn} and CNEL usually do not differ by more than 1 dB and are used interchangeably in practice.

[3]Based on City of Milpitas General Plan Policy 6-I-7.

[4]Based on San José General Plan Policy EC-1.3.

[5]Based on San José General Plan Policy EC-1.2 and City of Milpitas General Plan Policy 6-1-7. The existing ambient noise level at residential land uses is approximately 71 L_{dn} (based on long-term Noise Measurement 1 [see Table 29]), which falls within the City of San José's "conditionally acceptable" range for residential land uses. Therefore, the threshold of a 3-dBA change in DNL levels is utilized.

See Appendix NOI for operational noise modeling results.

Mitigation Measure

The following mitigation measure would be required to reduce impacts from construction noise to a less than significant level, consistent with General Plan Policy EC-1.7. With implementation of Mitigation Measure N-1, impacts would be less than significant.

Mitigation Measure N-1

Prior to the issuance of any grading permits or demolition, the project applicant shall submit and implement a construction noise control plan that specifies hours of construction, noise minimization measures, posting and notification of construction schedules, equipment to be used, and designation of a noise disturbance coordinator. The noise disturbance coordinator shall respond to neighborhood complaints and shall be in place prior to the start of construction and implemented during construction to reduce noise impacts on neighboring residents and other uses.

- As part of the noise logistic plan and project, construction activities for the proposed project shall include, but is not limited to, the following best management practices: Limit construction activities shall be limited to the hours between 7:00 a.m. and 7:00 p.m., Monday through Friday, unless permission is granted with a development permit or other planning approval. No construction activities are permitted on the weekends at sites within 500 feet of a residence.
- Construct temporary noise barriers, where feasible, to screen mobile and stationary construction equipment. The temporary noise barrier fences would provide noise reduction if the noise barrier interrupts the line-of sight between the noise source and receiver and if the barrier is constructed in a manner that eliminates any cracks or gaps. Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Prohibit unnecessary idling of internal combustion engines.
- Locate stationary noise-generating equipment such as air compressors or portable power generators as far as possible from sensitive receivers. Construct temporary noise barriers to screen stationary noise-generating equipment when located near adjoining sensitive land uses. Temporary noise barriers could reduce construction noise levels by 5 dBA.
- Utilize “quiet” air compressors and other stationary noise sources where technology exists.
- Control noise from construction workers’ radios to a point where it is not audible at existing residences bordering the project site.
- A temporary noise control blanket barrier could be erected, if necessary, along building facades facing construction sites. This mitigation would only be necessary if conflicts occurred which were irresolvable by proper scheduling. Noise control blanket barriers can be rented and quickly erected.
- Notify all adjacent business, residences, and other noise-sensitive land uses of the construction schedule, in writing, and provide a written schedule of “noisy” construction activities to the adjacent land uses and nearby residences.
- Designate a “disturbance coordinator” who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

The noise control plan shall be submitted to the Director of Planning, Building, and Code Enforcement or Director's designee for review and approval prior to the issuance of any grading permit.

Significance After Mitigation

Implementation of this mitigation measure would avoid potentially significant construction-related noise impacts to adjacent residential receivers during construction activities. Temporary plywood noise barrier fences would reduce noise by 5 to 10 dBA L_{eq} and exhaust mufflers would reduce noise by 8 dBA L_{eq}. Assuming a conservative reduction of 5 dBA Leq for the fences and noise barriers, the noise reduction mitigation would reduce noise from project construction by at least 13 dBA Leq. Therefore, ambient noise levels 80 feet from the construction site would be reduced to 70 dBA Leq during the loudest construction phase. This would exceed the measured ambient noise level of 66 dBA L_{eq} by 4 dBA L_{eq}. However, increases in ambient noise levels of 3 dBA are imperceptible to the human ear (Crocker 2007) and consistent with the General Plan this mitigation measure would be using the best available noise suppression devices and techniques and would be limited to construction hours, Monday through Friday 7AM to 7PM. Thus, mitigation of construction noise would substantially reduce construction noise impacts at the nearest sensitive receivers. Mitigation Measure N-1 would reduce construction noise to the degree feasible; therefore, the proposed project would have a less than significant construction noise impact.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Project construction would result in some vibration that may be felt on properties in the vicinity. In accordance with the SJMC, project construction would be limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday and at no time on weekends because it is located within 500 feet of a residence (SJMC Chapter 20.100.450). These timing restrictions on construction activity would avoid vibration during normal sleeping hours. As shown in Table 33, equipment used during project construction would generate vibration of up to 0.20 in/sec PPV at 25 feet, which would not exceed the San José General Plan Policy EC-2.3 thresholds of 0.20 in/sec PPV (approximately 94 VdB at 25 feet distance) for buildings of normal conventional construction. Therefore, construction vibration impacts would be less than significant.

Table 36 Vibration Source Levels for Construction Equipment

	Approximate VdB		Approximate PPV (in/sec)	
Equipment	**25 Feet**	**100 Feet**	**25 Feet**	**100 Feet**
Large Bulldozer	87	69	0.089	0.011
Loaded Trucks	86	68	0.076	0.010
Jackhammer	79	61	0.035	0.004
Vibratory Roller	94	76	0.204	0.026

VdB = vibration decibels

PPV = particle velocity in inches per second

Note: Per General Plan Policy EC-2.3, the reference distances of 25 feet was used to determine the significance of vibration levels; The reference distance of 100 feet was used to determine vibration levels at the nearest sensitive receptors (residences on Trade Zone Boulevard)

Source: FTA 2018

LESS THAN SIGNIFICANT IMPACT

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

The nearest airport to the project site is the San José International Airport, approximately 3 miles west. The project site is not located within the airport land use plan area (Santa Clara County Airport Land Use Commission 2011). According to the City's projected aircraft noise contours, the project site is located outside the Airport's noise impact area. Therefore, the project would not expose people to excessive noise associated with an airstrip. There would be no impact.

NO IMPACT

Conclusion

The project, with implementation of Mitigation Measure N-1, would not result in significant noise impacts.

4.14 Population and Housing

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

Setting

According to the California Department of Finance (DOF), San José had an estimated 2019 population of 1,043,058. This population forms an estimated 335,000 housing units. The average number of persons per household is estimated at 3.20 (DOF 2019). Based on the City's General Plan, the projected population in 2040 would be 1.3 million persons occupying 430,000 housing units (City of San José 2011a).

Regulatory Setting

City of San José

ENVISION SAN JOSÉ 2040 GENERAL PLAN

Chapter 4, Quality of Life, in the City's General Plan addresses how quality of life will be advanced as the City promotes economic development and continues to grow a safe, diverse, and thriving community with employment opportunities, well-maintained infrastructure, urban services, and cultural and entertainment options. There are no goals, policies, and actions relating to housing in the city that are applicable to the project (City of San José 2011a). However, the City's General Plan establishes achievement of a jobs to employed residents ratio of between 1.1:1 by the year 2040 as a core objective (i.e., 1.1 jobs per one employed resident of San José). The City currently has approximately 335,164 housing units and, by 2040, the City's population is projected to reach 1,445,000 with 472,000 households.

The jobs/housing balance refers to the ratio of employed residents to jobs in a given community or area. When the ratio reaches 1.0, a balance is struck between the supply of local housing and jobs. The jobs/housing resident ratio is determined by dividing the number of local jobs by the number of employed residents that can be housed in local housing. The City currently has a higher number of employed residents than jobs (approximately 0.8 jobs per employed resident), but this trend is projected to reverse with full build out under the General Plan.

Impact Analysis

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

The project would not involve the production of any dwelling units and, therefore, would not induce localized residential growth. The project would create jobs that could indirectly cause population growth through employee relocations to the project area. Based on the applicant's employment estimates for the project, it would result in a net increase of 22 jobs.[10] However, it is anticipated that employees would mainly come from the existing labor pool in the region and would not relocate to the City of San José. No new roads or infrastructure are proposed. Therefore, the project would not result in unplanned direct or substantial indirect population growth in San José or the region. There would be a less than significant impact.

LESS THAN SIGNIFICANT IMPACT

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

The project would not result in any housing demolition nor displace any people. There would be no impact to dwelling unit supply nor to population.

NO IMPACT

Conclusion

The project would not result in significant population and housing impacts.

[10]There are currently 10 existing full-time employees, the project would add 22 new full-time employees, resulting in a total of 32 full-time employees.

4.15 Public Services

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

Setting

The San José Fire Department (SJFD) provides fire protection to the project site, and responds to all fires, hazardous materials spills, and medical emergencies (including injury accidents) in the city. The SJFD consists of four bureaus: Administrative Services, Field Operations, Fire Prevention and Permits, and Fire Dispatch. In addition to fire and emergency response, the SJFD provides permitting, inspection, and planning services through the Fire Prevention and Permits Bureau. The City's General Plan establishes a goal of a total response time (reflex) of eight minutes and a total travel time of four minutes for 80 percent of emergency incidents.

Police protection services in San José are provided by the San José Police Department (SJPD). The SJPD is administered by a command staff including the Chief, Assistant Chief and four Deputy Chiefs, presiding over an Operations Command divided into four Bureaus: Bureaus of Administration, Field Operations, Investigations, and Technical Services. SJPD is authorized to employ approximately 1,400 employees including both sworn and non-sworn. Department employees are assigned to one of four bureaus composed of 11 divisions with more than 50 specialized units and assignments (SJPD 2018). According to the most recent Annual Report on City Services (2017-2018), the Police Department initiated or responded to approximately 1.2 million calls for service with an average response time of 9.2 minutes for Priority I calls (San José Police Department 2019).

The nearest existing school to the project site is Mabel Mattos Elementary School, located approximately 0.3-mile northwest. Additionally, a proposed school site is located approximately 0.9 mile north of the project site on McCandless Drive.

As of 2010, the City of San José provides and manages approximately 3,520 acres of parks (regional/city-wide and neighborhood/community), community gardens, and open space lands; it also manages over 50 community facilities. As described in the San José 2040 General Plan, the City plans to implement a 100-mile network of multi-use trails (City of San José 2011a). Parks nearest the project site include Brooktree Park, approximately 0.6 mile to the southeast. Brooktree park occupies a 7.7-acre site and features a playing field, playground and picnic areas (City of San José 2019a). Northwood Park is located approximately 0.7-mile northeast of the project site is 3.9 acres in size and includes picnic areas, BBQs and a playground (City of San José 2019c). Pinewood Park is located approximately 0.7-mile northwest of the project site in the City of Milpitas. Pinewood Park is an 8-acre park and features four tennis courts, a basketball hoop, playground BBQ and picnic areas (City of Milpitas 2019). The project site is located approximately 1 mile away from the partially completed Coyote Creek Trail which provides recreational opportunities for pedestrians and bicyclists. When complete, the Coyote Creek Trail will extend over 19.7 miles from Route 237 Bikeway to Morgan Hill near Anderson County Park (City of San José 2019b).

The San José Public Library is the largest public library system between San Francisco and Los Angeles. The San José Public Library System consists of the main library (Dr. Martin Luther King Jr. Library) and 22 branch libraries. Libraries near the project site include Vineland Branch Library (approximately 1.43 miles west of the project site) and Almaden Branch Library (approximately 1.8 miles south of the project site).

Regulatory Setting

City of San José

ENVISION SAN JOSÉ 2040 GENERAL PLAN

Chapter 4, Quality of Life in the City's General Plan includes goals, policies and implementation actions for various public services, including education, libraries, health care, public safety (police and fire), and code enforcement. In addition, the Parks, Open Space, and Recreation Subsection of the same chapter, provides the goals, policies, and actions related to parks, open space, and recreational facilities. The following is a summary of the applicable goals and policies related to police and fire protection.

Goal CD-5: Community Health, Safety, and Welfare. Create great public places where the built environment creates attractive and vibrant spaces, provides a safe and healthful setting, fosters interaction among community members, and improves quality of life.

Policy CD-5.5 Include design elements during the development review process that address security, aesthetics and safety. Safety issues include, but are not limited to, minimum clearances around buildings, fire protection measures such as peak load water requirements, construction techniques, and minimum standards for vehicular and pedestrian facilities and other standards set forth in local, state, and federal regulations.

Goal ES-3: Law Enforcement and Fire Protection. Provide high-quality law enforcement and fire protection services to the San José community to protect life, property and the environment through fire and crime prevention and response. Utilize land use planning, urban design and site development measures and partnerships with the community and other public agencies to support long-term community health, safety and well-being.

Policy ES-3.1 Provide rapid and timely Level of Service (LOS) response time to all emergencies:

1. For police protection, use as a goal a response time of six minutes or less for 60 percent of all Priority 1 calls, and of eleven minutes or less for 60 percent of all Priority 2 calls.
2. For fire protection, use as a goal a total response time (reflex) of eight minutes and a total travel time of four minutes for 80 percent of emergency incidents.
3. Enhance service delivery through the adoption and effective use of innovative, emerging techniques, technologies and operating models.
4. Measure service delivery to identify the degree to which services are meeting the needs of San José's community.
5. Ensure that development of police and fire service facilities and delivery of services keeps pace with development and growth in the city.

Policy ES-3.9 Implement urban design techniques that promote public and property safety in new development through safe, durable construction and publicly-visible and accessible spaces.

Policy ES-3.10 Incorporate universal design measures in new construction and retrofit existing development to include design measures and equipment that support public safety for people with diverse abilities and needs. Work in partnership with appropriate agencies to incorporate technology in public and private development to increase public and personal safety.

Policy ES-3.15 Apply demand management principles to control hazards through enforcement of fire and life safety codes, ordinances, permits and field inspections.

Policy ES-3.17 Promote installation of fire sprinkler systems for both commercial and residential use and in structures where sprinkler systems are not currently required by the City Municipal Code or Uniform Fire Code.

Policy ES-3.20 Require private property owners to remove excessive/overgrown vegetation (e.g., trees, shrubs, weeds) and rubbish to the satisfaction of the Fire Chief to prevent and minimize fire risks to surrounding properties.

Action ES-3.23 Engage public safety personnel in the land use entitlement process for new development projects.

Impact Analysis

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the 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?

The SJFD Fire Station 23 located at 1771 Via Cinco de Mayo, approximately 0.7 mile east of the project site, currently serves the project site. The site is within the existing service area of the SJFD and construction would be required to comply with applicable Fire Code standards. In addition, the project site is located within a developed area and involves an industrial use, and the proposed structure's size would be generally similar to other existing buildings in the area. Therefore, there would be no need for new or expanded fire department facilities to serve the project. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Officers patrolling the City are dispatched from police headquarters at 201 West Mission Street. The City General Plan establishes the goal for response times of six minutes or less for 60 percent of all Priority 1 calls, and 11 minutes or less for 60 percent of all Priority 2 calls.

Project implementation would create a new building in the city, activities at which could warrant police response. However, the project would replace an existing low-intensity industrial use, and no substantial increase in service demand for police would be anticipated. The project would not result in an increased population in the SJPD service area; therefore, the number of residential service calls would not change. There would be no need for new or expanded police department facilities to serve the project and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

As noted under Population and Housing, new jobs generated by the project are expected to be filled by the existing San José labor pool. Therefore, the proposed project would not increase the number of permanent residents in the City of San José and the project would not affect school classroom demand or result in the need for new or expanded school facilities. There would be no impact.

NO IMPACT

a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

As discussed in Section 14, *Population and Housing*, the project would not directly increase the City's population and would not substantially affect use of the existing or planned parks. Project employees may use the City's parks and recreation resources. However, because the project would not result in population growth in the City, the project would not substantially alter citywide demand for parks nor would it result in a substantial physical deterioration of existing recreational facilities. Impacts would be less than significant.

NO IMPACT

a.5. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities?

According to the General Plan EIR, existing and planned library facilities in the City would provide approximately 0.68 square feet of library space per capita for the anticipated population growth under the Envision San José General Plan which is above the City's General Plan service goal of 0.59 square feet of library space per capita (General Plan Policy ES-2.2). Thus, the General Plan EIR concluded that development and redevelopment allowed under the proposed General Plan would be adequately served by existing and planned library facilities. As discussed in Section 4.14, *Population and Housing*, the project would not involve construction of new dwelling units and would generate 22 new jobs that could be filled by the existing labor pool. Therefore, the project would not result in significant impacts to San José Library facilities.

NO IMPACT

Conclusion

The project would not result in significant impacts to public services.

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4.16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☐	☐	■

Setting

There are 15,808 acres of parkland in the city of San José (The Trust for Public Land 2016). Parklands in the city are managed by the U.S. Department of Fish and Wildlife, Santa Clara County Parks and Recreation, the City of San José Department of Parks, Recreation, and Neighborhood Services, and the Santa Clara Valley Open Space Authority (The Trust for Public Land 2016). Parks nearest the project site include Brooktree Park, approximately 0.6 mile to the southeast, Northwood Park approximately 0.7-mile northeast, and Pinewood Park approximately 0.7-mile northwest of the project site. The project site is located approximately 1 mile away from the partially completed Coyote Creek Trail which provides recreational opportunities for pedestrians and bicyclists. When complete, the Coyote Creek Trail will extend over 19.7 miles from Route 237 Bikeway to Morgan Hill near Anderson County Park (City of San José 2019b).

Regulatory Setting

Please see Section 4.15, Public Services, subsection *Regulatory Setting* subsection.

Impact Analysis

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?

The project would not include any public recreational facilities. As discussed in Section 14, *Population and Housing*, the project would not directly increase the City's population and would not substantially affect use of the existing or planned parks. Project employees may use the City's parks and recreation resources. However, the proposed project would not directly result in unplanned direct or substantial indirect population growth.

Therefore, the project would not affect the City's parkland ratio goals established in the General Plan nor increase the demand for parks or recreational facilities. No impacts to parks or recreational facilities would occur.

NO IMPACT

Conclusion

The project would not impact public parks and recreational facilities.

4.17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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 geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	☐	☐	■	☐
d. Result in inadequate emergency access?	☐	☐	■	☐

Setting

The following analysis of the potential traffic impacts resulting from the proposed project is based primarily on the Traffic Operations and VMT Analysis conducted for the project by Hexagon Consultants (see Appendix TRA). The Analysis evaluated the projected trip generation to and from the project site, pedestrian and bicycle facilities, transit facilities, on-site circulation and access, and on-site parking. For a more detailed description of existing facilities, please see Appendix TRA.

Regulatory Setting

Federal and State

STATE SENATE BILL 743

Senate Bill (SB) 743 was signed into law by Governor Brown in 2013 and tasked the State Office of Planning and Research (OPR) with establishing new criteria for determining the significance of transportation impacts under CEQA. SB 743 requires the new criteria to "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." It also states that alternative measures of transportation impacts may include "vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated."

In January 2018, OPR transmitted its proposed CEQA Guidelines implementing SB 743 to the California Natural Resources Agency for adoption. The CEQA Guidelines promulgated under SB 743 will change the way that public agencies evaluate the transportation impacts of projects under CEQA, recognizing that roadway congestion, while an inconvenience to drivers, is not itself an

environmental impact (Public Resource Code, § 21099, subd. (b)(2)). In addition to new exemptions for projects consistent with specific plans, the draft CEQA Guidelines proposed by the Office of Planning and Research replace congestion-based metrics, such as auto delay and level of service, with Vehicle Miles Traveled as the basis for determining significant impacts, unless the Guidelines provide specific exceptions.

Because the draft CEQA Guidelines have not yet been adopted by the California Natural Resources Agency, the Statewide implementation of SB 743 with regards to CEQA compliance is not anticipated to be required until by at least mid-2019. (See Natural Resources Agency Notice of Public Availability of Modifications dated July 2, 2018 at Appendix A [Proposed CEQA Guidelines Section 15064.3(c) states that "Beginning on July 1, 2020, the provisions of this section shall apply statewide"]).

Regional

REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY)

The Metropolitan Transportation Commission (MTC) is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Santa Clara County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and Association of Bay Area Governments (ABAG) adopted Plan Bay Area 2040 in July 2017, which includes the region's Sustainable Communities Strategy (integrating transportation, land use, and housing to meet GHG reduction targets set by CARB) and Regional Transportation Plan (including a regional transportation investment strategy for revenues from federal, state, regional and local sources over the next 24 years).

City of San José

CONGESTION MANAGEMENT PROGRAM

In accordance with California Statute, Government Code Section 65088, Santa Clara County has established a Congestion Management Program (CMP). The intent of the CMP legislation is to develop a comprehensive transportation improvement program among local jurisdictions that will reduce traffic congestion and improve land use decision-making and air quality. VTA serves as the Congestion Management Agency for Santa Clara County and maintains the county's CMP.

Congestion management agencies are required by the state statute to monitor roadway traffic congestion and the impact of land use and transportation decisions on a countywide level, at least every two years. VTA conducts CMP monitoring and produces the CMP Monitoring & Conformance Report annually for freeways, rural highways, and CMP-designated intersections. Legislation requires that each CMP contain the following five mandatory elements: 1) a system definition and traffic level of service standard element; 2) a transit service and standards element; 3) a trip reduction and transportation demand management element; 4) a land use impact analysis program element; and 5) a capital improvement element. The Santa Clara County CMP includes the five mandatory elements and three other elements: a county-wide transportation model and data base element, an annual monitoring and conformance element, and a deficiency plan element. The VTA has review responsibility for proposed development projects expected to affect CMP designated intersections.

COUNCIL POLICY 5-1 TRANSPORTATION ANALYSIS

As established in City Council Policy 5-1 "Transportation Analysis Policy" (2018), the City of San José uses VMT as the metric to assess transportation impacts from new development. According to the policy, an employment (e.g. office, R&D) or residential project's transportation impact would be less than significant if the project VMT is 15 percent or more below the existing average regional VMT per employee, or the existing average citywide VMT per capita respectively. For industrial projects (e.g. warehouse, manufacturing, distribution), the impact would be less than significant if the project VMT is equal to or less than existing average regional VMT per employee. The threshold for a retail project is whether it generates net new regional VMT, as new retail typically redistributes existing trips and miles traveled as opposed to inducing new travel. If a project's VMT does not meet the established thresholds, mitigation measures would be required, where feasible. The policy also requires preparation of a Local Transportation Analysis to determine non-CEQA transportation issues, including local transportation operations, intersection level of service, site access and circulation, and neighborhood transportation issues such as pedestrian and bicycle access, and recommend or conditioned transportation improvements. Screening criteria have been established to determine which projects require a detailed VMT analysis. If a project meets the relevant screening criteria, it is considered to a have a less than significant VMT impact.

ENVISION SAN JOSÉ 2040 GENERAL PLAN

Chapter 6, *Land Use and Transportation*, of the City's General Plan includes the Circulation Element, which defines a set of balanced, long-range, multi-modal transportation goals and policies that provide for a safe, efficient, and sustainable transportation network.

San José's Transportation goals, policies and actions aim to:

- Establish circulation policies that increase bicycle, pedestrian, and transit travel, while reducing motor vehicle trips, to increase the City's share of travel by alternative transportation modes
- Promote San José as a walking- and bicycling-first city by providing and prioritizing funding for projects that enhance and improve bicycle and pedestrian facilities

The following goals, policies, and actions are applicable to the proposed project (City of San José 2011a):

Goal TR-1: Balanced Transportation System. Complete and maintain a multimodal transportation system that gives priority to the mobility needs of bicyclists, pedestrians, and public transit users while also providing for the safe and efficient movement of automobiles, buses, and trucks.

Policy TR-1.2	Consider impacts on overall mobility and all travel modes when evaluating transportation impacts of new developments or infrastructure projects.
Policy TR-1.4	Through the entitlement process for new development, fund needed transportation improvements for all transportation modes, giving first consideration to improvement of bicycling, walking and transit facilities. Encourage investments that reduce vehicle travel demand.
Policy TR-1.6	Require that public street improvements provide safe access for motorists and pedestrians along development frontages per current City design standards.
Policy TR-1.7	Require that private streets be designed, constructed and maintained to provide safe, comfortable, and attractive access and travel for motorists and

for pedestrians, bicyclists, and transit users of all ages, abilities, and preferences.

Policy TR-1.10 Require needed public street right-of-way dedication and improvements as development occurs. The ultimate right-of-way shall be no less than the dimensions as shown on the Functional Classification Diagram except when a lesser right-of-way will avoid significant social, neighborhood or environmental impacts and perform the same traffic movement function. Additional public street right-of-way, beyond that designated on the Functional Classification Diagram, may be required in specific locations to facilitate left-turn lanes, bus pullouts, and right-turn lanes in order to provide additional capacity at some intersections.

Goal TR-2: Walking and Bicycling. Improve walking and bicycling facilities to be more convenient, comfortable, and safe, so that they become primary transportation modes in San José.

Policy TR-2.8 Require new development where feasible to provide on-site facilities such as bicycle storage and showers, provide connections to existing and planned facilities, dedicate land to expand existing facilities or provide new facilities such as sidewalks and/or bicycle lanes/paths, or share in the cost of improvements.

Goal TR-3: Maximize Use of Public Transit. Maximize use of existing and future public transportation services to increase ridership and decrease the use of private automobiles.

Policy TR-3.3: As part of the development review process, require that new development along existing and planned transit facilities consist of land use and development types and intensities that contribute toward transit ridership. In addition, require that new development is designed to accommodate and to provide direct access to transit facilities.

Goal TR-5: Vehicular Circulation. Maintain the City's street network to promote the safe and efficient movement of automobile and truck traffic while also providing for the safe and efficient movement of bicyclists, pedestrian, and transit vehicles.

Policy TR-5.5 Require that new development, which includes new public or private streets, connect these streets with the existing public street network and prohibit the gating of private streets with the intention of restricting public access. Furthermore, where possible, require that the street network within a given project consists of integrated short blocks to facilitate bicycle and pedestrian travel and access

Goal TR-8: Parking Strategies. Develop and implement parking strategies that reduce automobile travel through parking supply and pricing management.

Policy TR-8.1 Promote transit-oriented development with reduced parking requirements and promote amenities around appropriate transit hubs and stations to facilitate the use of available transit services.

Policy TR-8.4 Discourage, as part of the entitlement process, the provision of parking spaces significantly above the number of spaces required by code for a given use.

SAN JOSÉ BIKE PLAN 2020

The San José Bike Plan 2020 also known as the Bicycle Master Plan, defines the City's vision to make bicycling an integral part of daily life in San José. The plan recommends policies, projects, and programs to realize this vision and create a San José community where bicycling is convenient, safe, and commonplace. The Bicycle Master Plan defines a 500-mile network of bikeways that focuses on connecting off-street bikeways with on-street bikeways.

Impact Analysis

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

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

The project's traffic impacts were analyzed under a Transportation Analysis (see Appendix TRA). Hexagon developed trip estimates using trip rates published in the Institute of Transportation Engineers (ITE) *Trip Generation*, 10th Edition (2017), and the City's Transportation Analysis Handbook (2018).

Pedestrian, Bicycle, and Public Transit

The City's Envision San José 2040 General Plan includes policies aimed to improve transportation throughout the City. Policy TR-1.2 states that new developments or infrastructure projects must consider impacts to overall mobility and all travel modes, including pedestrian, bicycle, and public transit.

The project includes pedestrian and bicycle access via gates adjacent to the driveways on Fortune Drive. The project would not involve removal of any pedestrian and bike facilities nor transit service facilities. The site is located near several transit lines including one VTA light rail line, two local VTA bus routes, and one VTA shuttle route. The project site is also located approximately 0.8 mile south of the planned Milpitas BART station which is scheduled to begin operations in 2020.

The project would not conflict with any applicable standards or policies establishing a measure of effectiveness for the performance of pedestrian, bicycle, or public transit.

Vehicle Miles Traveled

The City of San José has developed the San José VMT Evaluation Tool (evaluation tool) to streamline the analysis of transportation impacts related to VMT for residential, office, and industrial projects. The regional average VMT for industrial uses is 14.37 per employee. Hexagon utilized this evaluation tool to determine the existing VMT for industrial uses in the project vicinity and to estimate the project's VMT. The existing VMT for industrial uses in the project vicinity is 14.96 per employee. The project is estimated to generate a total of 14.95 VMT per employee, lower than the average VMT per employee in the project vicinity but higher than the regional average for industrial uses and exceeding the City's threshold of 14.37 VMT per employee. Therefore, the project's impact on VMT would be significant but mitigable.

Mitigation Measure

The following mitigation measure would be required to reduce impacts from VMT to a less than significant level. With implementation of Mitigation Measure T-1, impacts would be less than significant.

Mitigation Measure T-1

Prior to the issuance of any grading permits or demolition, the project applicant shall submit and implement a Transportation Demand Management (TDM) Plan that includes the following VMT reduction measures.

- Provide commute trip reduction marketing and education for 100 percent of eligible employees. This would educate and encourage employees to use transit, shared rides, and active modes, therefore lowering the number of single occupancy vehicle trips.
- Provide rideshare program for 100 percent of eligible employees. This would encourage employees to carpool with other employees and/or through ride matching services, which help employees find other commuters traveling in the same direction.
- Provide a TDM plan prior to issuance of the Building permit. Include annual monitoring requirement establishing an average daily trip (ADT) cap of 31 a.m. peak-hour traffic. The annual monitoring report must demonstrate the project is within 10 percent of the ADT trip cap and must be prepared by a traffic engineer.
- If the project is not in conformance with the trip cap, the project may add additional TDM measures to meet the trip cap. A follow up report will be required within six months. If the project is still out of conformance, penalties will be assessed (see Council Policy 5-1).

The combination of mitigation measures would reduce the project VMT to 14.36 per employee, which is below the City's threshold of 14.37 VMT per employee.

The Transportation Demand Management Plan will be conditioned as part of the project prior to the approval of the Special Use permit by the Director of Planning, Building, and Code Enforcement.

Significance After Mitigation

Implementation of this mitigation measure would avoid potentially significant VMT-related transportation impacts. Implementation of a Transportation Demand Management Plan including commute trip reduction marketing and education and an employee ride share program would reduce VMT to 14.18, a reduction of 0.52 VMT per employee. Thus, with implementation of this mitigation project generated VMT would be below the City's threshold of 14.37 VMT per employee. Mitigation Measure T-1 would reduce VMT to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

Access to the existing structure is provided via three two-way driveways on Fortune Drive adjacent to the southern property line and one two-way driveway on Trade Zone Boulevard. However, vehicle and pedestrian access to the project site is currently and will continue under the proposed project to be restricted to the middle driveway on Fortune Drive. All other driveways on site would be limited in use to truck and equipment loading and emergency access. The driveways along

Fortune Drive currently measure 26 feet in width, 6 feet less than the 32-foot recommended standard set by the City of San José Department of Transportation Geometric Design Guidelines (Hexagon 2019). The proposed driveway would be similar in design and dimensions to existing driveways in the surrounding area.

Due to the relatively low number of project-generated trips at the driveway, significant operational issues related to vehicle queuing, stacking, and/or vehicle delay are not expected to occur at the driveway. Field observations indicate that there were no vehicle queuing issues for the left-turn and right-turn inbound traffic at the driveway in the a.m. and p.m. peak hours (Hexagon 2019). Therefore, the project would not increase hazards due to design features. Impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project result in inadequate emergency access?

The project would be required to conform to traffic and safety regulations that specify adequate emergency access measures. In addition, the project site would be required to meet the standards set forth by the San José Fire Department. Compliance with existing state and federal regulations and City's General Plan policies and goals would reduce impacts. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACTLESS THAN SIGNIFICANT IMPACT

Non-CEQA Effects

Trip Generation

Trip estimates for the proposed project were based on ITE average trip rates for the land use category of Data Center (ITE Land Use 160) while average trip rates for the existing data center buildings (one of which will remain during project operation) were calculated based on counts conducted at the project driveway in September 2019. All existing and proposed average trip rates were used to estimate daily and peak-hour trip generation.

As shown in Table 37, the project would result in a net increase of 18 a.m. peak-hour trips, and 15 p.m. peak-hour trips.

Table 37 Estimated Project Traffic Trip Generation

	Weekday Peak Hour	
ITE Land Use	**A.M.**	**P.M.**
Proposed Project		
Data Center	35	29
Location-Based Mode Share reduction (8%)	(3)	(2)
VMT reduction (5%)	(1)	(1)
Proposed Trips After Reduction	31	26
Existing Land Use		
Data Center	(13)	(11)
Net Change in Peak Hour Traffic	18	15

Notes: () indicate a negative number. See Appendix TRA for details about reductions.

Source: Hexagon 2019 (Appendix TRA)

On-site Parking

Parking is not identified as an environmental impact topic in the CEQA Appendix G checklist. Therefore, the following discussion of available parking is included for informational purposes only. As shown in Table 6 of Appendix TRA, Section 20.90.060 SJMC requires 4 parking space per 1,000 square feet of office use floor area, plus 0.2 space per 1,000 square feet of floor area devoted to computer equipment space. In addition, for every 25 parking spaces provided, SJMC also requires one Americans with Disabilities Act (ADA) accessible van parking space. Based on the City's requirements the project would be required to provide a total of 89 parking spaces (see Appendix TRA). The project would provide 103 standard parking spaces, 7 accessible spaces (2van accessible space), and 7 clean air vehicle spaces, for a total of 117 parking spaces. Therefore, the project meets the City's parking requirement of 89 parking spaces.

The City of San José Municipal Code states that industrial uses are required to provide bicycle parking at a rate of one space per 10 full-time employees, with a minimum of two short-term parking spaces and one long-term parking space. As the project would generate 22 full-time jobs, the project would be required to provide four short-term and one long-term bicycle parking spaces. The project would provide eight bicycle racks and therefore meets this requirement. The project would provide two short-term and one long-term bicycle parking spaces. Additionally, the project would provide end-of-trip bike facilities including three showers and changing rooms with lockers in the building. Therefore, the project would not conflict with SJMC Section 20.90.60.

Conclusion

The project would not result in significant transportation impacts with incorporation of Mitigation Measure T-1.

4.18 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☐	■	☐
a. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	■	☐
b. 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?	☐	☐	■	☐
c. 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?	☐	☐	■	☐
d. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	■	☐

Setting

Potable Water

Potable water would be provided to the project by SJWC, which currently provides water to commercial and residential customers in the project area. SJWC water supply comes from several sources including local groundwater and local surface water treated by the SJWC and imported surface water purchased from and treated by Valley Water (SJWC 2016). SJWC's local water supplies are treated at the Montevina water treatment plant (WTP) and Saratoga WTP while surface water supplies purchased from Valley Water are treated in Valley Water's three WTPs: the Penitencia WTP, Rinconada WTP, and Santa Teresa WTP (SJWC 2018; Valley Water 2019).

The SJWC receives approximately 40 percent of its potable water supply from groundwater sourced from the Santa Clara sub-basin. The remaining potable water supply is provided by surface water purchased from Valley Water and imported from the State Water Project and the Central Valley Project, as well as local surface water supplies originating from the Santa Cruz Mountains (SJWC 2016).

The SJWC projects water supply availability will increase from 35,369 million gallons per year in 2015 to approximately 55,213 million gallons in 2040 (SJWC 2016). Projected population growth in San José is anticipated to result in a water demand increase from 34,729 million gallons in 2015 to 55,213 million gallons in 2040. This increase would account for 100 percent of water supply available through 2040 under average conditions (Table 38). However, as shown in Table 39, under a multiple year drought scenario, it is anticipated that the water demand would exceed available water supply by as much as 21,437 million gallons during the third year of drought in 2040.

Table 38 San José Water Company Supply/Demand Balance Normal Year (million gallons)

	2020	2025	2030	2035	2040
Supply Total	47,144	49,561	51,648	53,390	55,213
Demand Total	47,144	49,561	51,648	53,390	55,213
Difference	0	0	0	0	0

Source: SJWC 2016

Table 39 San José Water Company Supply/Demand Balance Multiple Years of Drought (million gallons)

		2020	2025	2030	2035	2040
First Year	Supply Total	45,871	47,328	48,927	50,663	52,486
	Demand Total	45,871	47,328	48,927	50,663	52,486
	Difference	0	0	0	0	0
Second Year	Supply Total	40,909	47,134	45,293	43,316	42,890
	Demand Total	45,817	47,328	48,927	50,663	52,486
	Difference	(4,908)	(194)	(3,634)	(7,347)	(9,596)
Third Year	Supply Total	31,843	40,120	36,857	32,901	31,094
	Demand Total	45,817	47,328	48,927	50,663	52,486
	Difference	(13,974)	(7,208)	(12,070)	(17,762)	(21,437)

( ) indicates a negative number

Source: SJWC 2016

To account for the potential water shortage under severe drought conditions, the SJWC has adopted a Water Shortage Contingency Plan that establishes staged mandatory water use reductions to reduce water supply from 10 percent under Stage 1, with voluntary conservation, to 50 percent under Stage 5, with emergency conservation. Furthermore, the plan established prohibited end uses of water under each water shortage stage (SJWC 2016); the City of San José General Plan contains policies and actions that require the installation of water-efficient landscaping, and water efficient fixtures and appliances.

Wastewater

The City of San José oversees a wastewater collection system consisting of over 2,200 miles of sewer lines. The City's Department of Environmental Services administers and operates the San José/Santa Clara Regional Wastewater Facility (RWF), which provides primary, secondary, and tertiary treatment of wastewater. After treatment, approximately 13 percent of the water from the RWF is delivered to the adjacent South Bay Water Recycling pump station, with the remainder being discharged into the San Francisco Bay (City of San José 2019e).

The RWF has a maximum permitted capacity of 167 million gallons per day (MGD). As of September 2019, average flows are approximately 110 MGD (City of San José 2019f). Therefore, the current available capacity of the RWF is 57 MGD. The plant capacity is sufficient for current dry and wet weather loads. However, the Plant Master Plan prepared for the RWF projects that population growth will lead to an increase in wastewater flows to 172 MGD by 2040, which would require modifications to RWF facilities and to the RWF NPDES permit (City of San José 2013). The RWF currently does not experience any major treatment system constraints. The RWF serves approximately 1.4 million people and 17,000 businesses (City of San José 2018b).

Stormwater

The generally level and fully developed site is located approximately 1.2 miles west of the Coyote Creek. The site drains into the City's storm drain system, which delivers water to local creeks and ultimately to the San Francisco Bay. See Section 4.10, *Hydrology and Water Quality*, for more information.

Solid Waste

Republic Services would collect solid waste from the project site. Landfills serving the City include Guadalupe Mines, Kirby Canyon, and Newby Island. Table 40 shows the estimated remaining capacity and anticipated closure dates of landfills serving the city.

Table 40 Estimated Landfill Capacities and Closure Dates

Landfill Facility	Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)	Anticipated Closure Date
Guadalupe Mines	28,600,000	11,055,000[1]	2048
Kirby Canyon	34,400,000	16,191,600[2]	2022
Newby Island	57,500,000	21,200,000[3]	2041

[1]Estimated remaining capacity date January 2011 from CalRecycle

[2]Estimated remaining capacity date July 2015 from CalRecycle[3] Estimated remaining capacity date October 2011 from CalRecycle

Other Utilities

In February 2019, the City of San José launched San José Clean Energy (SJCE), a community choice aggregate program providing carbon-free electricity to municipal customers, residents and businesses in the City of San José. Electricity provided to customers by SJCE is transferred and delivered using existing Pacific Gas and Electric (PG&E) infrastructure. Electricity service at the project site would be provided by SJCE (City of San José 2018). For more information, see Section 4.6, *Energy*.

Regulatory Setting

State of California

URBAN WATER MANAGEMENT PLAN

Pursuant to the State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events. The City of San José adopted its most recent UWMP in June 2016.

REGIONAL WATER QUALITY CONTROL BOARD

The SFB RWQCB has regulatory requirements that each wastewater collection system agency shall, at a minimum, develop goals for the City's Sewer System Management Plan to provide adequate capacity to convey peak flows.

ASSEMBLY BILL 939 AND SENATE BILL 1016

The California Integrated Waste Management Act of 1989, or Assembly Bill 939 (AB 939), established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals must include waste diversion mitigation measures.

ASSEMBLY BILL 341

Assembly Bill 341 (AB 341) sets forth the requirements of the statewide mandatory commercial recycling program in the Public Resources Code. All businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units in California are required to recycle. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

SENATE BILL 1383

Senate Bill (SB) 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025.

CALIFORNIA GREEN BUILDING STANDARDS CODE

In January 2010, the state of California adopted the California Green Building Standards Code that establishes mandatory green building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality. These standards include a mandatory set of guidelines, as well as more rigorous voluntary measures, for new construction projects to achieve specific green building performance levels:

- Reducing indoor water use by 20 percent
- Reducing wastewater by 20 percent
- Recycling and/or salvaging 50 percent of nonhazardous construction and demolition debris
- Providing readily accessible areas for recycling by occupant

City of San José

ENVISION SAN JOSÉ 2040 GENERAL PLAN

Chapter 3, Environmental Leadership, in the City's General Plan sets forth sustainability goals for the City of San José through 2040. The Goals and Policies of this chapter relate to Green Building design, construction, location, and operation. The following are applicable policies that relate to the proposed project (City of San José 2011a):

Policy MS-2.11 Require new development to incorporate green building practices, including those required by the Green Building Ordinance. Specifically, target reduced energy use through construction techniques (e.g., design of building envelopes and systems to maximize energy performance), through architectural design (e.g., design to maximize cross ventilation and interior daylight) and through site design techniques (e.g., orienting buildings on sites to maximize the effectiveness of passive solar design).

Policy MS-3.1 Require water-efficient landscaping, which conforms to the State's Model Water Efficient Landscape Ordinance, for all new commercial, institutional, industrial, and developer-installed residential development unless for recreation needs or other area functions.

Policy MS-3.2 Promote use of green building technology or techniques that can help reduce the depletion of the City's potable water supply, as building codes permit. For example, promote the use of captured rainwater, graywater, or recycled water as the preferred source for non-potable water needs such as irrigation and building cooling, consistent with Building Codes or other regulations.

Policy MS-3.3 Promote the use of drought tolerant plants and landscaping materials for nonresidential and residential uses.

Under the Infrastructure subsection of Chapter 3, the following policies apply to the proposed project (City of San José 2011a):

Policy IN-1.5 Require new development to provide adequate facilities or pay its fair share of the cost for facilities needed to provide services to accommodate growth without adversely impacting current service levels.

Under the Police and Fire Protection subsection of Chapter 3, the following policies apply to the proposed project (City of San José 2011a):

Policy ES-3.11 Ensure that adequate water supplies are available for fire-suppression throughout the City. Require development to construct and include all fire suppression infrastructure and equipment needed for their projects.

CITY OF SAN JOSÉ GREEN BUILDING POLICY

Under the City's Green Building Policy, all private sector and municipal building projects constructing or adding more than 10,000 square feet of occupied space (as defined in the adopting building code) are required to be designed and constructed to achieve, at a minimum, the United States Green Building Council's LEED ™ rating system Silver-level certification with a goal of reaching LEED Gold or Platinum levels.

CITY OF SAN JOSÉ GREEN REACH CODE

The City Council approved Ordinance No. 30311 in September 2019 to amend various sections of Title 24 of the City's Municipal Code to adopt provisions of the 2019 California Green Building Standards Code and California Building Energy Efficiency Standards with certain exceptions, modifications and additions which serve as a Reach Code to increase building efficiency, mandate solar readiness and increase requirements related to electric vehicle charging stations. The Reach Code goes into effect on January 1, 2020 and affects all new construction. **CLIMATE SMART SAN JOSÉ**

Climate Smart San José is the City's approved climate action plan, adopted in 2018. It focuses on nine key strategies to reduce GHG emissions, including transitioning to renewable energy, lowering water use, densifying the city, promoting energy efficiency, creating local jobs, encouraging transit-oriented development, moving goods efficiently, reducing car dependency, and increasing use of clean electric vehicles.

SAN JOSÉ ZERO WASTE STRATEGIC PLAN

The Zero Waste Strategic Plan outlines policies to help the City foster a healthier community and achieve its Green Vision goals, including 75 percent diversion by 2013 and zero waste by 2022. The Green Vision also includes ambitious goals for economic growth, environmental sustainability and an enhanced quality of life for San José residents and businesses.

Impact Analysis

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?

c. Would the project 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?

As discussed below under criterion (b), the project site would be served by adequate water supplies from the SJWC. Therefore, the project would not result in the need for new or expanded water treatment facilities.

The City of San José does not provide wastewater generation factors for development projects. Furthermore, CalEEMod wastewater generation estimates do not account for wastewater associated with mechanical cooling equipment used in data centers. Thus, the City of Los Angeles standard wastewater-generation factor for data centers were applied to estimate average annual wastewater generation from the project. According to standard wastewater-generation rates for office buildings with cooling towers of 170 gallons per day/1,000 square feet (the land use category

closest to the project), the project would generate 40,630 gallons per day or 14.83 million gallons (MG) per year of wastewater (City of Los Angeles 2017).[11] This is less than 1 percent of the 167 MG total capacity of the San José/Santa Clara RWF (City of San José 2019).[12] Therefore, the project would not result in any measurable impact to wastewater treatment services as adequate capacity is available at the San José/Santa Clara RWF to serve the negligible wastewater generated by the proposed project. Impacts would be less than significant.

The project site would continue to connect to the existing storm drain system operated and maintained by the City of San José. The City's storm drain system delivers water to local creeks and ultimately to San Francisco Bay. The project would construct a new data center on a site that is currently developed with commercial uses. As the project site is already covered by impervious surfaces, project development would primarily replace existing impervious area with impervious surfaces. The project also includes new pervious landscaping areas and stormwater treatment that collects polluted runoff sourced from impervious surfaces, consistent with the MRP and Council Policy 6-29. There would be no increase in runoff generated from the site as a result of the project due to the implementation of low-impact development features. The project would not necessitate the construction of new off-site stormwater drainage facilities or expansion of existing facilities. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

SJWC would provide potable water for the project. Project operation would increase the number of employees on site from 10 to 32, a net increase of 22 employees above existing conditions.

Estimated water demand for the proposed project would be 164 million gallons per year, or 0.03 percent of SJWC's projected annual water demand (SJWC 2016).[13] Therefore, although the project would increase water demand on the site by expanding existing operations, this increase would be incremental and could be fulfilled by existing SJWC entitlements.

The project would not result in a significant increase in demand for water beyond current demand at the project site. Therefore, sufficient water supplies are available to serve the project from existing entitlements and resources. This would be a less than significant impact.

LESS THAN SIGNIFICANT IMPACT

d. Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

e. Would the project comply with federal, state, and local statutes and regulations related to solid waste?

Solid waste from the project site would be collected by Republic Services. Landfills serving the City include Guadalupe Mines, Kirby Canyon, and Newby Island. Table 40 above, shows the estimated remaining capacity and anticipated closure dates of landfills serving the city. According to the City's

[11] 239,725 sf data center/1,000 sf = 239 x 170 gallons wastewater per day = 40,630 gallons per day. 40,630 x 365 = 14.829 MG per year
[12] 14.83 MG per year/167 MG wastewater treatment facility capacity = 0.08 x 100 = 0.8 percent
[13] Project water demand 164 MG per year/San José Water Company total annual water demand for 2040: 55,213 MG = 0.029 times 100 = 0.029 percent (SJWC 2016)

General Plan EIR, development through 2020 would not exceed the capacity of existing landfills serving the City.

The project would generate minor quantities of solid waste on a regular basis due to the limited number of personnel required for project operations. However, temporary increases in solid waste generation may occur on a periodic basis as old servers are retired. According to a list prepared by the City of San José, there are eight approved Recyclers/Collectors of E-waste within the city. Furthermore, the project would be required to conform to City plans and policies, such as the City's Zero Waste Strategic Plan and the GHG Reduction Strategy discussed in Section 4.6, *Energy*, to reduce solid waste generation. The City is served by landfills with adequate capacity to accommodate project waste. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

Conclusion

The project would not result in significant impacts to utilities and service systems.

4.19 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a 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:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	■	☐
b. 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 Cod Section 2024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significant of the resource to a California Native American tribe.	☐	☐	■	☐

Setting

In 2017, the City had sent a letter to tribal representatives in the area to welcome participation in consultation process for all ongoing, proposed, or future projects within the City's Sphere of Influence or specific areas of the City. No tribes have sent written requests for notification of projects outside of a 2.0-mile radius of the downtown area to the City of San José.

Regulatory Setting

State

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

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

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

Local

ENVISION SAN JOSÉ 2040 GENERAL PLAN

The Environmental Leadership Chapter (Chapter Three in the General Plan) sets forth the goal to preserve and conserve archeologically significant structures, sites, districts, and artifacts in order to promote a greater sense of historic awareness and community identity. The Environmental Resources subsection contains a goal for archaeology and paleontology that includes the following relevant policy:

Policy ER-10.2 Recognizing that Native American human remains may be encountered at unexpected locations, impose a requirement on all development permits and tentative subdivision maps that upon discovery during construction, development activity will cease until professional archaeological examination confirms whether the burial is human. If the remains are determined to be Native American, applicable state laws shall be enforced.

Impact Analysis

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

b. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is 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 2024.1?

The topic of Tribal Cultural Resources considers the value of a resource to tribal cultural tradition, heritage, and identity, to establish potential mitigation options for Tribal Cultural Resources and to recognize that California Native American tribes have expertise concerning their tribal history and practices.

No tribes have requested notification of projects from the City; thus, the City assumes that no tribal cultural resources are present on the project site. However, the project site is located in an area of high archaeological sensitivity and there is potential for Native American resources or human remains to be present in the project area. With project adherence to the standard permit conditions and mitigation measures outlined in Section 4.5, Cultural Resources, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

Conclusion

The project would not result in significant impacts to tribal cultural resources.

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4.20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
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 downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	■

Setting

Within the City limits, very high fire hazard severity zones (VHFHSZ) are located in Alum Rock Park, east of The Villages Golf and Country Club in the Evergreen Planning Area and on both sides of Casa Loma Road in the Calero Planning Area. All these areas are outside the City's Urban Growth Boundary. The project site is located in an urbanized area of the City of San José and is surrounded by existing urban development. Furthermore, the project site is identified as not being within a VHFHSZ and is over 13 miles from the nearest VHFHSZ (CAL FIRE 2007).

Regulatory Setting

City of San José

ENVISION SAN JOSÉ 2040 GENERAL PLAN

The Environmental Leadership Chapter (Chapter Three in the General Plan) sets forth the goal to protect lives and property from risks associated with fire-related emergencies at the urban/wildland interface. The Environmental Resources subsection discusses wildfire-related Goals, Policies, and Actions, summarized below (City of San José 2011a):

Policy EC-8.1 Minimize development in very high fire hazard zone areas. Plan and construct permitted development so as to reduce exposure to fire hazards and to facilitate fire suppression efforts in the event of a wildfire.

Policy EC-8.2 Avoid actions which increase fire risk, such as increasing public access roads in very high fire hazard areas, because of the great environmental damage and economic loss associated with a large wildfire.

Policy EC-8.4 Require use of defensible space vegetation management best practices to protect structures at and near the urban/wildland interface.

Impact Analysis

a. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

b. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The project site is located in an urbanized area of the City of San José and is surrounded by existing urban development. Furthermore, the project site is identified as not being within a VHFHSZ and is located over 13 miles from the nearest VHFHSZ (CAL FIRE 2007). No new infrastructure would be required. Therefore, the project would not expose people or structures to a significant risk involving wildfires nor exacerbate the risk of wildfire. There would be no impact.

NO IMPACT

Conclusion

The project would not result in significant impacts related to wildfire.

4.21 Mandatory Findings of Significance

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

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

As noted in Section 4.4, *Biological Resources*, impacts on nesting birds could be potentially significant and implementation of Mitigation Measure BIO-1 would reduce potential nesting bird impacts. Section 4.5, *Cultural Resources* discusses impacts on archaeological resources that would be potentially significant and where implementation of Mitigation Measure CR-1 would reduce potential archaeological resources impacts to a less than significant level. The project would not impact known historic resources. However, the standard permit conditions required by the City of

San José would be implemented to avoid potential impacts on unknown archaeological and paleontological resources, and impacts would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

As described in the preceding discussion of environmental checklist sections 1 through 20, the project would have no impact, a less than significant impact, or a less than significant impact with mitigation with respect to all environmental issues. Cumulative impacts in some of the resource areas have been addressed in the individual resource sections above: Air Quality, Greenhouse Gases, Water Supply, Traffic, and Solid Waste (see CEQA Guidelines Section 15064(h)(3)). Some of the other resource areas were determined to have no impact or would result in improvements in comparison to existing conditions and therefore would not contribute to cumulative impacts and did not warrant further analysis, such as Mineral Resources and Agricultural Resources. Nearby project permits included minor planning adjustments for exterior remodeling and live tree removals. As such, cumulative impacts would also be less than significant (not cumulatively considerable).

LESS THAN SIGNIFICANT IMPACT

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

In general, direct and indirect impacts on human beings are associated with air quality, hazards and hazardous materials, geology and soils, traffic hazards, and noise impacts. As detailed in the preceding responses, the project would not result, either directly or indirectly, in significant adverse impacts related to traffic, noise or air quality. Mitigation Measures AQ-1, HAZ-1 and HAZ-2, as well as T-1would reduce impacts related to diesel fuel emissions, hazardous materials, and project-generated VMT to a less than significant level. As noted in Section 6, *Geology and Soils*, compliance with the applicable CBC regulations would avoid potentially significant impacts from expansive soils. Impacts would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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