Draft Environmental Impact Report

3625 Peterson Way Office Project

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SIGNAGE



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Prepared by

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SUMMARY OF THE PROJECT

The project proposes construction of two eight-story, approximately 338,155 square foot office/research and development (R&D) buildings (totaling approximately 676,310 square feet). The project also proposes a four-level, above-grade parking structure with an attached 13,370 square foot, one-story amenity building.¹

SUMMARY OF PROJECT IMPACTS

This Draft Environmental Impact Report (EIR) concluded that the project would result in the impacts outlined below. Identified impacts would be mitigated to a less than significant level, except for impacts to the Great America Parkway and Great America Way, Bowers Avenue and Augustine Drive, San Tomas Expressway and Scott Boulevard, San Tomas Expressway and Monroe Street Oakmead Parkway/Corvin Drive and Central Expressway intersections under background plus project conditions and impacts to 11 freeway segments, as described in the following table:

Significant Impacts	Mitigation Measures	
Biological Resources		
Impact BIO-1: The project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Less Than Significant Impact with Mitigation Incorporated	 MM BIO-1.1: Construction shall be scheduled to avoid the nesting season to the extent feasible. The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February 1st through August 31st. MM BIO-1.2: If it is not possible to schedule construction and tree removal between September and January, then pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests shall be disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of grading, tree removal, or other demolition or construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). During this survey, the ornithologist shall 	
	inspect all trees and other possible nesting	

¹ The 676,310 square foot of office space does not include the 5,755 square foot bridge connecting the two office buildings or the 13,370 square foot amenity area (since they would not generate new employees or vehicle trips); therefore, the total office space is citated as 676,310 square feet throughout the document.

Significant Impacts	Mitigation Measures
	 habitats within and immediately adjacent to the construction area for nests. If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist, in consultation with CDFW, shall determine the extent of a construction-free buffer zone to be established around the nest to ensure that nests of bird species protected by the MBTA or Fish and Game Code shall not be disturbed during project construction. A final report of nesting birds, including any protection measures, shall be submitted to the Director of Community Development prior to issuance of grading or tree removal permits.
Cultural	Resources
Impact CUL-2: The project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. Less Than Significant Impact with Mitigation Incorporated	 MM CUL-2.1: A qualified archaeologist will be on-site to monitor the initial excavation of native soil once all pavement and engineered soil is removed from the project site. After monitoring the initial excavation, the archaeologist will make recommendations for further monitoring if it is determined that the site has cultural resources. If the archaeologist determines that no resources are likely to be found on-site, no additional monitoring will be required. MM CUL-2.2: In the event that prehistoric or historic resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped, the Director of Community Development will be notified, and the archaeologist will examine the find and make appropriate recommendations prior to issuance of building permits. Recommendations could include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery during monitoring would be submitted to the Director of Community Development.

Significant Impacts	Mitigation Measures
Impact CUL-3: The project would not disturb any human remains, including those interred outside of dedicated cemeteries. Less Than Significant Impact with Mitigation Incorporated	MM CUL-3.1: In the event that human remains are discovered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped. The Santa Clara County Coroner will be notified and shall make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC) immediately. Once the NAHC identifies the most likely descendants, the descendants will make recommendations regarding proper burial, which will be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.
Geology	and Soils
Impact GEO-2: The project would not result in substantial erosion or the loss of topsoil. Less Than Significant Impact with Mitigation Incorporated	 MM GEO-2.1: All excavation and grading work would be scheduled in dry weather months or construction sites would be weatherized to withstand or avoid erosion. MM GEO-2.2: Stockpiles and excavated soils would be covered with secured tarps or plastic sheeting. MM GEO-2.3: Vegetation in disturbed areas would be replanted as quickly as possible.
Hazards and Hazardous Materials	
 Impact HAZ-1: The surface and sub-surface soils on-site could be contaminated due to past agricultural operations. Implementation of the project could expose construction workers and adjacent land uses to residual agricultural soil contamination. Less Than Significant Impact with Mitigation Incorporated 	MM HAZ-1.1: Prior to demolition and excavation of the project site, a limited Phase II Environmental Site Assessment (Phase II ESA) will be completed to determine if agricultural chemicals are present in the soil and groundwater at the site. The site will be sampled for CAM 17 Metals, pesticides, TPH- G, BTEX, and 5-Oxygenates. Phase II ESA sampling activities shall be coordinated with the Santa Clara Fire Department.
	WINI HAZ-1.2: Following demolition and removal of pavement, soil samples will be gathered from the site and sent for laboratory

Significant Impacts	Mitigation Measures
	analyses to evaluate appropriate disposal alternatives. The analyses would include but not be limited to organochlorine pesticides, lead, petroleum hydrocarbons, and other metals. Sampling will occur prior to the issuance of grading permits.
	MM HAZ-1.3: In the event that impacted soil is identified on-site, the Director of Community Development shall be notified and the lateral and vertical extent of soil containing contaminant concentrations greater than the San Francisco Bay Regional Water Quality Control Board's (RWQCB's) environmental screening levels (ESLs) will be notified. Sample results shall be submitted to the Santa Clara Fire Department for review.
	Contaminated soil shall be handled separately from "clean" soil. Common and potentially applicable remedial measures for the impacted soil may include: 1) excavation and off-site disposal at a permitted facility; 2) the use of engineering and administrative controls, such as consolidation and capping of the soil on-site and land use covenants restricting certain activities/uses; and 3) a combination of the above. Remedial activities at the site, if warranted, will be overseen by an appropriate regulatory agency, such as the Department of Toxic Substances Control (DTSC) or the Santa Clara County Department of Environmental Health (SCCDEH).
Transp	ortation
Impact TRN-1a: The addition of project traffic would cause the Lakeside Drive and Augustine Drive intersection to degrade from an acceptable LOS C and D+ during the AM and PM peak hours (under background conditions), respectively, to an unacceptable LOS F during both peak hours which would result in a significant impact to this intersection under existing plus project conditions and background plus project conditions.	MM TRN-1a: The project shall modify the eastbound/westbound approaches of the Lakeside Drive and Augustine Drive intersection to include one shared left-and- through lane and one right-turn lane in the westbound approach, and one shared left-and- through and one shared right-and-through lane in the eastbound approach. These improvements would require changing the signal phasing from protected to split phasing in the eastbound/westbound direction.

Significant Impacts	Mitigation Measures
Less Than Significant Impact with Mitigation Incorporated	
Impact TRN-1b: The Great America Parkway and Great America Way intersection would operate at an unacceptable LOS F during the AM peak hour under background conditions. The addition of project traffic would cause the intersection's average critical-movement delay to increase by 5.1 seconds and the V/C to increase by 0.011 during the AM peak hour which would result in a significant impact to this intersection under background plus project conditions.	To mitigate the impact at the Great America Parkway and Great America Way intersection, the project would require the addition of a second northbound left-turn lane to the Great America Parkway and Great America Way intersection. This improvement requires the partial removal of the center median on Great America Parkway (south leg of the intersection), widening of Great America Parkway, and implementation of a second receiving lane on the west leg of the intersection (private driveway).
Significant Unavoidable Impact	The widening of Great America Parkway and
	the west leg of the intersection would not be feasible due to right-of-way constraints. The addition of a fourth southbound through-lane would mitigate this impact to acceptable levels; however, this improvement would not be feasible due to right-of-way constraints. Therefore, the project would result in a significant unavoidable level of service impact at the Great America Parkway and Great America Way intersection.
Impact TRN-1c: The addition of project traffic would cause the Great America Parkway and Old Mountain View-Alviso Road intersection's average critical-movement delay to increase by 5.5 seconds and the V/C to increase by 0.011 during the AM peak hour which would result in a significant impact to this intersection under background plus project conditions. Less Than Significant Impact with Mitigation Incorporated	MM TRN-1c: The project shall add a separate southbound right-turn lane at the Great America Parkway and Old Mountain View-Alviso Road intersection. The southbound approach at this intersection currently consists of one left-turn lane, three through lanes, and an eight-foot wide bicycle lane/right-turn lane. Implementation of the separate southbound right-turn lane improvement would require the widening of the west side of Great America Parkway (north of Old Mountain View/Alviso Road) by approximately eight feet to provide one six-foot
	bicycle lane and one 10-foot right-turn lane for a distance of approximately 150 feet. The above mitigation would require partial removal of landscaping on the west side of Great America Parkway and the relocation of two traffic signal/utilities cabinets, a light pole
	and a traffic signal pole. With implementation of the above improvement, the intersection level

Significant Impacts	Mitigation Measures
	of service would improve to an acceptable LOS C during the AM peak hour, reducing the project impact on this intersection to less than significant.
Impact TRN-1d: The addition of project traffic would cause the Bowers Avenue and Augustine Drive intersection's average critical-movement delay to increase by 22.8 seconds and the V/C to increase by 0.057 during the PM peak hour, which would result in a significant impact to this intersection under background plus project conditions.	The project would be required to add a fourth southbound through lane to reduce the impacts at the Bowers Avenue and Augustine Drive intersection to less than significant. This improvement, however, would require the widening of Bowers Avenue which is not feasible due to right-of-way constraints. Therefore, the project impact at this intersection is considered significant and unavoidable.
Significant Chavoluable Impact	
Impact TRN-1e: The addition of project traffic would cause the Bowers Avenue and Scott Boulevard intersection's average critical-movement delay to increase by than 12.4 seconds and 11.6 seconds during the AM and PM peak hours, respectively, and the V/C to increase by more than 0.023 and 0.030 during the AM and PM peak hours, respectively, which would result in a significant impact to this intersection under background plus project conditions. Less than Significant Impact with Mitigation Incorporated	MM TRN-1e: The project applicant shall make a fair-share contribution towards the addition of a second southbound left-turn lane at Bowers Avenue and Scott Boulevard (identified as mitigation for the approved City Place development). This improvement would require reducing the width of the three southbound through-lanes from 12 feet to 10 feet and partial removal of the raised center median to provide a second 10- to 12-foot left-turn lane without affecting the adjacent sidewalks and bicycle lane. A separate northbound right-turn lane shall also be added to this intersection. The northbound approach at this intersection currently consists of one left- turn lane, two through lanes, one shared through- and right- turn lane, and a six-foot wide bicycle lane. Implementation of the separate northbound right-turn lane would require the widening of the east side of Bowers Avenue (south of Scott Boulevard) by a minimum of 10 feet to provide one six-foot bicycle lane and one t10-foot right- turn lane. These improvements would require partial removal of the landscaping and removal of two trees to accommodate a five-foot sidewalk along the east side of Bowers Avenue.
	Mitigation would require implementation of a separate northbound right-turn lane and/or a fair share contribution towards the second southbound left-turn lane. With implementation

Significant Impacts	Mitigation Measures
	of the above mitigation, the Bowers Avenue and Scott Boulevard intersection level of service would improve to acceptable LOS E during both the AM and PM peak hours, reducing the project impact to this intersection to less than significant.
Impact TRN-1f: The addition of project traffic would cause the San Tomas Expressway and Scott Boulevard intersection's average critical- movement delay to increase by 4.9 seconds and the V/C to increase by 0.012 during the PM peak hour, which would result in a significant impact to this intersection under background plus project conditions.Significant Unavoidable Impact	MM TRN-1f: The project applicant shall make a fair-share contribution towards planned improvements at the San Tomas Expressway and Scott Boulevard intersection. Planned improvements include the addition of a second westbound right-turn lane at this intersection (identified as a Tier 1C priority improvement in the Comprehensive County Expressway Planning Study 2008 Update and is included in the City of Santa Clara Traffic Mitigation Program). The addition of an interchange is also a planned improvement (Tier 2 priority improvement in the Comprehensive County Expressway Planning Study 2008 Update) at this intersection.
	The above mitigation would reduce the project impact at the San Tomas Expressway and Scott Boulevard intersection to less than significant. Since the San Tomas Expressway and Scott Boulevard intersection is a CMP intersection and is outside of City of Santa Clara jurisdiction, the City would not be able to implement the improvements concurrently with the proposed project. The project impact at this intersection would, therefore, be significant and unavoidable.
Impact TRN-1g: The addition of project traffic would cause the San Tomas Expressway and Monroe Street intersection's LOS to degrade to an unacceptable LOS F during the PM peak hour. Based on the CMP LOS impact criteria.	MM TRN-1g: The project applicant shall pay a fair share contribution toward the addition of a second northbound left-turn lane (identified in the approved City Place FEIR).
the addition of project traffic to this intersection would result in a significant impact under background plus project conditions.	In addition to implementing the planned improvements discussed in the above, the project would be required to add a fourth southbound through lane to the San Tomas
Significant Unavoidable Impact	Expressway and Monroe Street intersection to reduce the project impact at this intersection to less than significant. This improvement will

Significant Impacts	Mitigation Measures
	require the widening of San Tomas Expressway, or conversion of the existing HOV lane to a mixed-flow lane to reduce the project impacts at this intersection to less than significant.
	The widening of San Tomas Expressway, however, is not feasible due to right-of-way constraints and the conversion of the existing HOV lane to a mixed-flow lane is not feasible for a single development. This intersection is a CMP intersection outside of City of Santa Clara jurisdiction, and, therefore, the City would not be able to implement improvements concurrently with the proposed project. The addition of project traffic would result in a significant unavoidable impact to this intersection.
Impact TRN-1h: The addition of project traffic would cause the Oakmead Parkway/Corvin Drive and Central Expressway intersection to degrade from a LOS E to an unacceptable LOS F during both peak hours, which would result in a significant impact to this intersection under background plus project conditions. Significant Unavoidable Impact	MM TRN-1h: The project shall make a fair share contribution to the addition of a second eastbound left-turn lane at the Oakmead Parkway/Corvin Drive and Central Expressway intersection.
	Implementation of the above mitigation would improve the intersection's operating conditions to LOS E during both peak hours, reducing the project impact to less than significant. The Oakmead Parkway/Corvin Drive and Central Expressway intersection is, however, a CMP intersection outside of the City's jurisdiction. The City is not authorized to implement the above mitigation concurrently with the proposed project and, therefore, the addition of project traffic would result in a significant unavoidable impact to this intersection under background plus project conditions.
Impact TRN-1i: Based on the freeway segment analysis, the proposed project is projected to add traffic volumes representing one percent or more of the freeway capacity to the mixed-flow lanes on 11 directional freeway segments and to the HOV lanes on seven directional freeway segments that currently operate at LOS F.	MM TRN-1i: Full mitigation of significant project impacts on freeway segments would require roadway widening to construct additional through lanes, thereby increasing freeway capacity. It is not feasible for an individual development to implement such extensive transportation system improvements due to constraints in acquisition and cost of right-of-way. Therefore, the addition of project

Significant Impacts	Mitigation Measures
Significant Unavoidable Impact	traffic would result in a significant unavoidable impact to the 11 impacted freeway segments identified in Table 3.17-10.
Cumulative T	ransportation
 Impact TRN-C-1: The addition of project traffic would cause the Great America Parkway and Great America Way intersection's average critical-movement delay to increase by 5.2 seconds and the V/C ratio to increase by 0.011 during the AM peak hour, which would result in a significant cumulative impact to this intersection. Significant Unavoidable Impact 	To improve the operations to acceptable levels of service at the Great America Parkway and Great America Way intersection, the project would require the addition of a fourth- southbound through lane. This improvement, however, is not feasible due to right-of-way constraints. Given the constraints which would limit implementation of this mitigation, the project impact to this intersection is considered significant and unavoidable.
 Impact TRNC2: The addition of project traffic would cause the Great America Parkway and Old Mountain View-Alviso Road intersection's average critical-movement delay to increase by 5.4 seconds and the V/C ratio to increase by 0.011 during the AM peak hour, which would result in a significant impact to this intersection under cumulative plus project conditions. Less Than Significant Cumulative Impact with Mitigation Incorporated 	MM TRN-C-2.1: The project shall add a separate southbound right-turn lane at the Great America Parkway and Old Mountain View-Alviso Road intersection. The southbound approach at this location currently consists of one left-turn lane, three through lanes, and an eight-foot wide bicycle lane/right-turn lane. Implementation of the separate southbound right-turn lane improvement will require the widening of the west side of Great America Parkway (north of Old Mountain View/Alviso Road) by approximately eight feet to provide one six-foot bicycle lane and one 10 foot right-turn lane for a distance of approximately 150 feet.
	The addition of a separate southbound right-turn lane would require partial removal of landscaping on the west side of Great America Parkway and the relocation of two traffic signal/utilities cabinets, a light pole, and a traffic signal pole. With the implementation of the above mitigation, operations at the Great America Parkway and Old Mountain View – Alviso Road intersection would improve to an acceptable LOS D during the AM peak hour and the addition of project traffic would result in a less than significant cumulative impact on this intersection.

Significant Impacts	Mitigation Measures
Impact TRN-C-3: The addition of project traffic would cause the Bowers Avenue and Augustine Drive intersection's average critical-movement delay to increase by 25.3 seconds and the V/C ratio to increase by 0.057 during the PM peak hour, which would result in a significant impact to this intersection under cumulative plus project conditions.	The project would be required to widen Bowers Avenue to include four through lanes (with a separate right-turn lane in the southbound direction) in the northbound and southbound directions to improve the intersection operations to acceptable levels of service. These improvements, however, are not feasible due to right-of-way constraints.
Significant Unavoidable Cumulative Impact	Since no improvements at this intersection would be feasible, the addition of project traffic would result in a significant unavoidable cumulative impact to this intersection.
Impact TRN-C-4: The addition of project traffic would cause the Bowers Avenue and Scott Boulevard intersection's average critical-movement delay to increase by 11.1 seconds and the volume-to-capacity ratio (V/C) to increase by 0.023 during the AM peak hour, which would result in a significant impact to this intersection under cumulative plus project conditions. Significant Unavoidable Cumulative Impact	To mitigate the impact at Bowers Avenue and Scott Boulevard intersection, the project applicant would be required to make a fair share contribution towards the addition of a second southbound left-turn lane at that Bowers Avenue and Scott Boulevard intersection (planned improvement). Furthermore, the addition of a separate northbound right-turn lane would be required. Implementation of the separate northbound right-turn lane would require the widening of the east side of Bowers Avenue (south of Scott Boulevard) by a minimum of 10 feet to provide one six-foot bicycle lane and one 10-foot right-turn lane. The widening of the east side of Bowers Avenue would require partial removal of landscaping and the removal of two trees to accommodate the five-foot sidewalk on the east side of Bowers Avenue. In addition, to improve the intersection's operating conditions to acceptable levels, the project would be required to add a fourth northbound right-turn lane. The addition of a northbound right-turn lane will require widening of the east side of Bowers Avenue, south of Scott Boulevard which is not feasible due to right-of-way constraints. Therefore, the addition of project traffic would result in a significant unavoidable cumulative impact to the Bowers Avenue and Scott Boulevard intersection.

Significant Impacts	Mitigation Measures
Impact TRN-C-5: The San Tomas Expressway and Scott Boulevard intersection would operate at an unacceptable LOS D and F during the AM and PM peak hours, respectively, under cumulative no project conditions. The addition of project traffic would cause the intersection's level of service to deteriorate to an unacceptable LOS E during the AM peak hour and the	MM TRN-C-5.1: The project applicant shall make a fair-share contribution towards planned improvements at the San Tomas Expressway and Scott Boulevard intersection. Planned improvements include the addition of a second westbound right-turn lane and the addition of an interchange.
4.6, and the V/C to increase by 0.012 during the PM peak hour. This would result in a significant impact to this intersection under cumulative plus project conditions. Significant Unavoidable Cumulative Impact	The above mitigation would reduce the cumulative impact to the San Tomas Expressway and Scott Boulevard intersection operations to less than significant. Since this intersection is a CMP intersection and is located outside of City of Santa Clara jurisdiction, the City would not be able to implement improvements concurrently with the proposed project. Therefore, the addition of project traffic would result in a significant unavoidable cumulative impact to this intersection.
Impact TRN-C-6: The Lakeside Drive and Augustine Drive intersection would operate at an acceptable LOS C and D during the AM and PM peak hours, respectively, under cumulative no project conditions. The addition of project traffic would cause the intersection's level of service to deteriorate to an unacceptable LOS F during both peak hours. The intersection's average critical-movement delay to increase by 69.9 seconds and the V/C ratio to increase by 0.26 during the AM peak hour, and 67.4 seconds and 0.18 during the PM peak hour. Therefore, the addition of project traffic would result in a significant impact to this intersection under cumulative plus project conditions. Less Than Significant Cumulative Impact with Mitigation	MM TRN-C-6.1: The project shall modify the eastbound/westbound approaches of the Lakeside Drive and Augustine Drive intersection to include one shared left-and through-lane and one right-turn lane in the westbound approach, and one shared left-and- through lane and one shared right-and-through lane in the eastbound approach. These improvements also will require changing the signal phasing from protected to split phasing in the eastbound/westbound direction.
Impact TRN-C7: The addition of project traffic would cause the Oakmead Parkway/Corvin Drive and Central Expressway intersection's average critical-movement delay to increase by 11.1 seconds and the V/C ratio to increase by 0.02 during the AM peak hour, which would result in a significant impact to this intersection under cumulative plus project conditions. Significant Unavoidable Cumulative Impact	MM TRN-C-7.1: The project shall add a second eastbound left-turn lane to the Oakmead Parkway/Corvin Drive and Central Expressway intersection to reduce the cumulative impact to this intersection to less than significant. The project applicant shall make a fair-share contribution toward the widening of Central Expressway to include three through lanes in each direction (to improve this intersection's

Significant Impacts	Mitigation Measures
	operating conditions to acceptable levels of service), as identified in the March 2015 update to the 2008 Countywide Expressway Study. Since the intersection is a CMP intersection and is located outside of City of Santa Clara jurisdiction, the City would not be able to implement improvements (described in the above mitigation) concurrently with the proposed project. Therefore, the addition of project traffic would result in a significant unavoidable cumulative impact to this intersection.

CUMULATIVE IMPACTS

The proposed project would result in cumulative impacts to seven intersections (refer to the Summary of Project Impacts table in this section). A full discussion of cumulative impacts related to each resource topic can be found in Sections 3.1- 3.20.

SUMMARY OF ALTERNATIVES TO THE PROPOSED PROJECT

CEQA requires that an EIR identify alternatives to the project as proposed. The CEQA Guidelines specify that an EIR identify alternatives which "would feasibly attain the most basic objectives of the project but would avoid or substantially lessen many of the significant environmental effects of the project." The following table outlines the project alternatives. A full analysis of the project alternatives is provided in *Section 8.0 Alternatives* of this EIR.

Alternatives	Description
No Project – No Development	Retain the existing two-story office buildings and surface parking lot.
Reduced Scale	Reduce the overall size of the project from 676,310 square feet to 365,000 to avoid the 11 identified freeway segment impacts, to 240,000 square feet to avoid the nine project-level traffic intersection impacts, and to 230,000 square feet to avoid the cumulative impacts for the 10 identified intersections.

SECTION 1.0 INTRODUCTION

1.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

The City of Santa Clara, as the Lead Agency, has prepared this Draft Environmental Impact Report (EIR) for the 3625 Peterson Way Office Project in compliance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

As described in CEQA Guidelines Section 15121(a), an EIR is an informational document that assesses potential environmental impacts of a proposed project, as well as identifies mitigation measures and alternatives to the proposed project that could reduce or avoid adverse environmental impacts (CEQA Guidelines 15121(a)). As the CEQA Lead Agency for this project, the City of Santa Clara is required to consider the information in the EIR along with any other available information in deciding whether to approve the project. The basic requirements for an EIR include discussions of the environmental setting, environmental impacts, mitigation measures, cumulative impacts, alternatives, and growth-inducing impacts. It is not the intent of an EIR to recommend either approval or denial of a project.

1.2 EIR PROCESS

1.2.1 <u>Notice of Preparation</u>

In accordance with Sections 15063 and 15082 of the CEQA Guidelines, the City of Santa Clara prepared a Notice of Preparation (NOP) for this EIR. The NOP was circulated to local, state, and federal agencies on April 4, 2018. The standard 30-day comment period concluded on May 7, 2018. The NOP provided a general description of the proposed project and identified possible environmental impacts that could result from implementation of the project.

1.2.2 Draft EIR Public Review and Comment Period

Publication of this Draft EIR will mark the beginning of a 45-day public review and comment period. During this period, the Draft EIR will be available to local, state, and federal agencies and to interested organizations and individuals for review. Notice of this Draft EIR will be sent directly to every agency, person, and organization that commented on the NOP. Written comments concerning the environmental review contained in this Draft EIR during the 45-day public review period should be sent to:

> Debby Fernandez, Associate Planner City of Santa Clara Community Development Department 1500 Warburton Avenue Santa Clara, CA 95050 Email: <u>DFernandez@santaclaraca.gov</u>

1.3 FINAL EIR/RESPONSES TO COMMENTS

Following the conclusion of the 45-day public review period, the City of Santa Clara will prepare a Final EIR in conformance with CEQA Guidelines Section 15132. The Final EIR will consist of:

- Revisions to the Draft EIR text, as necessary;
- List of individuals and agencies commenting on the DEIR;
- Responses to comments received on the DEIR, in accordance with CEQA Guidelines (Section 15088);
- Copies of letters received on the DEIR.

Section 15091(a) of the CEQA Guidelines stipulates that no public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings. If the lead agency approves a project despite it resulting in significant adverse environmental impacts that cannot be mitigated to a less than significant level, the agency must state the reasons for its action in writing. This Statement of Overriding Considerations must be included in the record of project approval.

1.3.1 <u>Notice of Determination</u>

If the project is approved, the City of Santa Clara will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15094(g)).

SECTION 2.0 PROJECT INFORMATION AND DESCRIPTION

2.1 PROJECT LOCATION AND SETTING

The 14.5-acre project site is comprised of one parcel (APN 216-30-049) located at the northeast corner of Peterson Way and Tannery Way in the City of Santa Clara. The project site is in a commercial/office research and development (R&D) area and is bordered by office and hotel development to the north, an office building to the east, Tannery Way and office buildings to the south, and Peterson Way and office buildings to the west. The property is currently developed with a two-story office building (approximately 218,375 square feet) surrounded by a large surface parking lot and landscaping.

Regional, vicinity, and aerial maps of the project site are shown on Figures 2.1-1, 2.1-2, and 2.1-3, respectively.

2.2 PROPOSED DEVELOPMENT

The project proposes to demolish the existing building and parking lot, remove 182 trees, and construct two approximately 338,155 square foot office/R&D buildings, totaling 676,310 square feet (the site plan and building elevations are shown on Figures 2.2-1 and 2.2-2). The project proposes pedestrian walkways to be located between the two office buildings, on the third and seventh floors. The two office/R&D buildings would primarily be comprised of offices, data rooms, mechanical, and electric rooms. The proposed buildings would be 129.5 feet tall (eight stories) to the parapet and 138.5 feet tall to the top of the roof screen. The project would result in a net increase of approximately 457,935 square feet of office/R&D space on the site.

In addition, the project proposes a four-level, above-grade parking structure with an attached 13,370 square foot, one-story amenity building. The project would have approximately 370 surface parking spaces. The parking structure, in combination with surface parking, would provide 2,281 parking spaces.

Vehicles would enter/exit the site via one driveway on Lakeside Drive, two driveways on Peterson Way, and two driveways on Tannery Way.

2.2.1 <u>Utilities</u>

Stormwater runoff would flow to bio-filtration swales and would be collected via catch basins. Stormwater would be treated then directed to the City's stormwater system. New 12-inch storm drains would be installed at the site and would connect to the City's existing storm drains on Peterson Way and Lakeside Drive. New sanitary sewer and water lines at the site would connect to existing sewer and water lines on Tannery Way.

2.2.2 Landscaping and Recreation

The proposed development would have landscaping throughout the site, including trees and shrubs planted along the perimeter of the buildings and in the parking lot area. The development would also include recreational areas available to the tenants including a private patio with a barbeque area and













MANUFACTURER: REYNOBOND SERIES: COLORWELD 500XL FINISH: COPPER PENNY

 ALUMINUM COMPOSITE METAL PANEL:

 MANUFACTURER:
 REYNOBOND

 SERIES:
 COLORWED 500XL

 FINISH:
 NIGHTFALL METALLIC

ALUMINUM COMPOSITE METAL PANEL: MANUFACTURER: REYNOBOND SERIES: DURAGLOSS 5000 FINISH: ZINC PATINA

STONE TILE:



77'-6" SIXTH FLOOR

62'-6" FIFTH FLOOR

47'-6" FOURTH FLOOR

17'-6" SECOND FLOOR

,

1

Draft EIR February 2020 seating, a bocce court, sport court and a beach/play area. The amenity space attached to the parking structure would include a barbeque area, landscaping and seating.

2.2.3 <u>Green Building Measures</u>

The project would comply with the California Green Building Standards code (CALGreen) and achieve a minimum of 50 points through the GreenPoint Rated certification system or a Leadership in Energy and Energy and Environmental Design (LEED) Gold certification.² The project would include the following green building measures:

- Proposing access (within walking distance) to existing public transit;
- Constructing in conformance with the Title 24 and CALGreen to promote energy and water efficiency;
- Vegetation that requires low water usage;
- Recycling services on-site to reduce solid waste disposal;
- Planting trees to reduce the heat island effect;
- Buildings with low emitting interior building materials (e.g., flooring, ceilings); and
- Provide for use of electrical lawn and garden equipment.

2.2.4 <u>Transportation Demand Management Plan</u>

In compliance with the City's Climate Action Plan, the project would achieve a 25 percent vehicle miles traveled (VMT) reduction, of which 10 percent would be achieved with implementation of the project's transportation demand management (TDM) measures and the remaining 15 percent from the project's design and location. The project would include:

- Carpool and vanpool programs;
- Clean air and electric vehicle parking and charging stations;
- Bicycle parking facilities;
- Incentives for alternative modes for transportation (e.g., pre-tax clipper card benefit for transit);
- Emergency ride home program;
- Program monitoring and reporting to determine the success of the TDM program (e.g., annual count of vehicles entering the site and annual reporting to the City); and
- Provide Transportation Coordinator, for the proposed office buildings, who will be responsible for implementing and managing the TDM Plan. The Transportation Coordinator will be a point of contact and will be responsible for ensuring that the employees are aware of transportation options. The Transportation Coordinator will provide the following services:
 - Provide information to employees about the emergency ride home program;
 - Manage the annual employee survey and driveway counts; and
 - Provide trip planning assistance and/or ride-matching assistance to employees who are considering an alternative mode of transportation.

² The GreenPoint Rated system was established by the U.S. Green Building Council.

2.2.5 <u>Construction and Demolition</u>

Demolition and construction of the proposed office project would take approximately 24 months in one phase. The project would remove approximately 19,000 cubic yards of soil from the site.³

2.2.6 <u>General Plan and Zoning</u>

The project site is designated Low-Intensity Office/R&D in the General Plan and the project is consistent with the allowable uses under the General Plan designation. The *Low-Intensity Office/R&D* designation is intended for campus-like office development that includes office and R&D, as well as medical facilities, free standing data centers, and limited manufacturing uses. This designation includes landscaped areas for employee activities and parking in either surface lots or structured parking (above or below grade). Small scale supporting retail uses that serve local employees and visitors are allowed. The maximum floor area ratio (FAR) for this designation is 1.00. The project would have a FAR of 1.1, which is slightly above the maximum FAR.

The zoning designation for the project site is Light Industrial (ML). The project is consistent with the ML zoning district's building coverage requirements, which limits building lot coverage to 75 percent. The project's building footprint covers 38 percent of the site. The project is not consistent with the zoning district's height requirements, which limits building heights to 70 feet above ground surface. The maximum height of the proposed buildings would be eight stories tall (approximately 129.5 feet to the parapet and 138.5 feet to the top of the roof screen). The project includes a variance application to increase the maximum building height allowed for the proposed development. Please see Section 3.10 for a full discussion of the project's consistency with applicable land use controls.

2.3 PROJECT OBJECTIVES

Pursuant to CEQA Guidelines Section 15124, the EIR must include a statement of the objectives sought by the proposed project. The overall goal of the project applicant is to construct a new office development, following the requirements of the Santa Clara General Plan.

The overall development objectives of the project proponent (applicant) are to:

- 1. Construct a high-quality project with enough office floor area to produce a return on investment sufficient to attract private capital and construction financing.
- 2. Improve the architectural and urban design character of the project site by replacing existing structures and surface parking with a high-quality office campus meeting LEED Gold equivalency.
- 3. Construct two office/R&D buildings totaling up to 676,310 square feet.
- 4. Construct a new parking garage along the northern property line to accommodate up to 1,910

³ It is possible that the project would construct the project in two phases. The first phase would include demolition of the existing building and construction of one office/R&D building. The second phase would include the construction of the second office/R&D building and the parking structure with the attached amenity building. If this option is selected, each phase would have a construction duration of approximately 18 to 20 months. ⁴ City of Santa Clara. 2010. *City of Santa Clara 2010-2035 General Plan*.

cars with an attached amenity building totaling up to 13,370 square feet.

- 5. Provide increased landscape and open space of up to 120,000 square feet at the central core of the site.
- 6. Improve the surrounding streets with added landscaping and preservation of existing heritage trees.
- 7. Encourage multimodal transit opportunities by accommodating private on-site shuttle stops, secure bike storage and shower facilities, and expanded bicycle pathways.

The City's objectives for development at the project site are to:

- 1. Promote quality job growth within the City.
- 2. Encourage innovative design of new office space to promote higher-intensity development and on-site expansion of existing uses.
- 3. Support campus development that can take advantage of transit opportunities by concentrating jobs near existing transit facilities.
- 4. Support development of higher-intensity employment centers located near local and regional transportation corridors in the City of Santa Clara to facilitate use of transit services and reduce vehicle miles traveled.

2.4 USES OF THE EIR

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

- Variance
- Architectural Approval
- Certification of the EIR
- Issuance of Demolition, Grading, Building, and Occupancy permits.

SECTION 3.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

3.1	Aesthetics	3.11
3.2	Agriculture and Forestry Resources	3.12
3.3	Air Quality	3.13
3.4	Biological Resources	3.14
3.5	Cultural Resources	3.15
3.6	Energy	3.16
3.7	Geology and Soils	3.17
3.8	Greenhouse Gas Emissions	3.18
3.9	Hazards and Hazardous Materials	3.19
3.10	Hydrology and Water Quality	3.20

- 3.11 Land Use and Planning
- .12 Mineral Resources
- 3.13 Noise
- .14 Population and Housing
- .15 Public Services
- .16 Recreation
- 3.17 Transportation
- 3.18 Tribal Cultural Resources
- 3.19 Utilities and Service Systems
- .20 Wildfire

The discussion for each environmental subject includes the following subsections:

Environmental Setting – This subsection: 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project; and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.

Impact Discussion – This subsection includes the recommended checklist questions from Appendix G of the CEQA Guidelines to assess impacts.

- **Project Impacts** This subsection discusses the project's impact on the environmental subject as related to the checklist questions. For significant impacts, feasible mitigation measures are identified. "Mitigation measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Each impact is numbered to correspond to the checklist question being answered. For example, Impact BIO-1 answers the first checklist question in the Biological Resources section. Mitigation measures are also numbered to correspond to the impact they address. For example, MM BIO-1.3 refers to the third mitigation measure for the first impact in the Biological Resources section.
- **Cumulative Impacts** This subsection discusses the project's cumulative impact on the environmental subject. Cumulative impacts, as defined by CEQA, refer to two or more individual effects, which when combined, compound or increase other environmental impacts. Cumulative impacts may result from individually minor, but collectively significant effects taking place over a period of time. CEQA Guideline Section 15130 states that an EIR should discuss cumulative impacts "when the project's incremental effect is cumulatively considerable." The discussion does not need to be in as great detail as is necessary for project impacts but is to be "guided by the standards of practicality and reasonableness." The purpose of the cumulative analysis is to allow decision makers to better understand the impacts that might result from approval of past, present, and reasonably foreseeable future projects, in conjunction with the proposed project addressed in this EIR.

The CEQA Guidelines advise that a discussion of cumulative impacts should reflect both their severity and the likelihood of their occurrence (CEQA Guidelines Section 15130(b)). To accomplish these two objectives, the analysis should include either a list of past, present, and probable future projects or a summary of projections from an adopted general plan or similar document (CEQA Guidelines Section 15130(b)(1)). This EIR uses the list of projects approach.

The analysis must determine whether the project's contribution to any cumulatively significant impact is cumulatively considerable, as defined by CEQA Guideline Section 15065(a)(3). The cumulative impacts discussion for each environmental issue accordingly addresses the following issues: 1) would the effects of all of past, present, and probable future (pending) development result in a significant cumulative impact on the resource in question; and, if that cumulative impact is likely to be significant, 2) would the contribution from the proposed project to that significant cumulative impact be cumulatively considerable?

Table 3.0-1 identifies the approved (but not yet constructed or occupied) and pending projects in the project vicinity that are evaluated in the cumulative analysis.

Table 3.0-1: Cumulative Projects List			
Project Name	Address	Distance from Proposed Project (miles)	Project Description
	Pendin	g Projects	-
NVIDIA	2788 San Tomas Expressway	1.1 miles southeast	Architectural review for a 1,100,000 square feet office and lab space.
	Approv	ved Project	
Yahoo! Campus	5010 Old Ironsides Drive, Santa Clara	1 mile north	Phased development of a 3,060,000 square foot office/R&D campus consisting of 13, six-story buildings, three commons buildings, surface parking, and two levels of below-grade parking.
2950 Lake Side Drive	2950 Lakeside Drive, Santa Clara	10 feet northeast	Construction of a seven-story hotel with 188 rooms.
City Place Santa Clara	5155 and 5120 Stars and Stripes Drive, Santa Clara	1.4 miles northeast	Construction of a mixed-use development consisting of up to 5.7 million square feet of office, 1.1 million square feet of retail, 1,360 residential units, 700 hotel rooms, 250,000 square feet of restaurant space, and 190,000 square feet of entertainment space.

Table 3.0-1: Cumulative Projects List			
Project Name	Address	Distance from Proposed Project (miles)	Project Description
NVIDIA	2600 and 2800 San Tomas Expressway and 2400 Condensa Street, Santa Clara	1 mile southeast	Demolition of 690,000 square feet of office space and construction of 1,200,000 square feet of office.
Santa Clara Square Mixed-Use	2600 Augustine Drive, Santa Clara	0.4 mile southeast	Development of 2,000 rental housing units, 40,000 square foot of retail, and 30 acres of parks/open space on a 100+ acre site.
North San José Development Policy Phase II	North and west of I-880 and south of SR 237	2.5 miles east	Development of 16,000 dwelling units and 200,000 sf of commercial space

For each resource area, cumulative impacts may occur over different geographic areas. For example, the project effects on air quality would combine with the effects of projects in the entire air basin, whereas noise impacts would primarily be localized to the surrounding area. The geographic area that could be affected by the proposed project varies depending upon the type of environmental issue being considered. Section 15130(b)(3) of the CEQA Guidelines states that lead agencies should define the geographic scope of the area affected by the cumulative effect. Table 3.0-2 provides a summary of the different geographic areas used to evaluate cumulative impacts.

Table 3.0-2: Geographic Considerations in Cumulative Analysis		
Resource Area	Geographic Area	
Aesthetics	Project site and adjacent parcels	
Agriculture and Forestry Resources	Countywide	
Air Quality	San Francisco Bay Area Air Basin	
Biological Resources	Project site and adjacent parcels	
Cultural Resources	Project site and adjacent parcels	
Energy	Energy provider's territory	
Geology and Soils	Project site and adjacent parcels	
GHGs	Global	
Hazards and Hazardous Materials	Project site and adjacent parcels	
Hydrology and Water Quality	Calabazas watershed	
Land Use and Planning/Population and Housing	Citywide	
Minerals	Identified mineral recovery or resource area	
Noise and Vibration	Project site and adjacent parcels	
Public Services and Recreation	Citywide	

Table 3.0-2: Geographic Considerations in Cumulative Analysis		
Resource Area	Geographic Area	
Transportation/Traffic	Citywide	
Tribal Cultural Resources	Project site and adjacent parcels	
Utilities and Service Systems	Citywide	
Wildfire	Within or adjacent to the wildfire hazard zone	

3.1 **AESTHETICS**

3.1.1 <u>Environmental Setting</u>

3.1.1.1 *Regulatory Framework*

State

Scenic Highways Program

The California Scenic Highway Program is managed by the California Department of Transportation (Caltrans). The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. There are no state-designated scenic highways in Santa Clara.

Local

Santa Clara City Code

The City Code includes regulations associated with protection of the City's visual character, to promote a sound and attractive community appearance, as stated in Chapter 8.30 Public Nuisances and Chapter 18.52 Regulations for Public, Quasi-Public, and Public Park or Recreation Zoning Districts.⁴ The City Code also includes an Architectural Review process, as outlined in Zoning Ordinance Chapter 18.76. The Architectural Review process is intended to serve the following purposes:

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

Architectural Committee Policies - Community Design Guidelines

The Architectural Committee reviews plans and drawings submitted for architectural review for design, aesthetic considerations, and consistency with zoning standards, generally prior to submittal for building permits. The Architectural Committee follows the City's Community Design Guidelines. The intent of these guidelines is to provide consistent development standards in the interest of continued maintenance and enhancement of the high-quality living and working environment in the City.

⁴ City of Santa Clara. 2010. City of Santa Clara 2010-2035 General Plan.

3.1.1.2 *Existing Conditions*

Project Site

The project site is comprised of one parcel located within a developed area of Santa Clara. The site is currently developed with a two-story office building (approximately 218,375 square feet) surrounded by a large surface parking lot. The site is set back from Peterson Way, Tannery Way and Lakeside Drive by sidewalks, a surface parking lot, and landscaping. Landscaping consists of grass, shrubs, and trees along the perimeter of the site, around the building, and within the parking lot. The building, constructed in 1979, is primarily concrete with tinted windows and a flat roof. There are security lights located along all building façades. Loading docks are located along the eastern building façade. Additional surface parking with parking lot lights is located east of the building. Please refer to Photos 1 and 2.

Surrounding Land Uses

Development in the project area is primarily office with some commercial land uses. Building heights in the area vary in height from one- to eight-stories.

The project site fronts Peterson Way, a two-lane roadway, along its western edge. West of Peterson Way is a one-story, rectangular office building surrounded by a surface parking lot. The building is comprised of tinted glass and a stucco exterior. The building is set back from Peterson Way by a sidewalk, landscaping, and a parking lot (see Photo 3).

Located north of the project site is a hotel, a parking structure, and an office building. The sevenstory hotel is primarily stucco with alternating stripes of pink and beige. The main entrance to the hotel is located on the eastern building façade (see Photo 4). A square-shaped entryway canopy is located along the eastern façade of the building. Located east of the hotel is a two-story parking structure. Located immediately east of the parking structure is a two-story office building. The twostory office building is primarily stucco with tinted windows.

A portion of the project site fronts Lakeside Drive, a two-lane roadway, at the northeast corner of the project site. Located immediately east of the project site is a parcel currently under construction (File No. PLN2015-11204) and a two-story office building. The parcel located east of the site has been approved for a seven-story hotel with up to 188 rooms. South of the parcel, and east of the project site, is a two-story office building. The windows located along the southern building façade are tinted and set back from the walls. The building is designed so that vehicles are able to park under the building and drive through the surface lot to get to the other side. Please see Photos 5 and 6.

The project site fronts Tannery Way, a two-lane roadway, along the site's southern edge. Located south of Tannery Way is a corporate campus consisting of two eight-story office buildings and a three-story above-grade parking garage. The front façade of the office buildings is primarily made of tinted glass (see Photo 7). Located east of the office buildings is the four-story concrete above-grade parking garage.






Phot 7 View of development in the project area, looking southeast on Tanner V	With the second seco

3.1.1.3 Scenic Views and Resources

The project site and the surrounding area are relatively flat and, as a result, the site is only visible from the immediate area. The project area is not located within a designated scenic vista or corridor based on the City's General Plan.

3.1.1.4 Light and Glare

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

3.1.2 <u>Impact Discussion</u>

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

- 1) Have a substantial adverse effect on a scenic vista?
- 2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
- 3) In non-urbanized areas, substantially degrade the existing visual character or quality of public views⁵ of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?
- 4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

3.1.2.1 *Project Impacts*

Impact AES-1: The project would not have a substantial adverse effect on a scenic vista. (No Impact)

The project site is developed with an office building and surface parking lot and is not a designated scenic vista. The project site is surrounded by commercial/office R&D and a hotel and is not in proximity to any scenic vistas (e.g., the Ulistac Natural Area, Santa Cruz Mountains, Diablo Range). Given the distance of these vistas from the project area, flat topography of the area, and surrounding development which blocks views of these vistas, the proposed office development would not result in an impact to views of scenic vistas within or surrounding the City. (No Impact)

Impact AES-2:	The project would not substantially damage scenic resources, including, but
	not limited to, trees, rock outcroppings, and historic buildings within a state
	scenic highway. (Less than Significant Impact)

Scenic resources in the City include Mission Santa Clara (the restored church of Santa Clara de Asis located on 500 El Camino Real, approximately three miles southeast of the site) and areas of historic

⁵ Public views are those that are experienced from publicly accessible vantage points.

sensitivity. There are no historic buildings or rock outcroppings located on the project site or within the immediate area.

There are 239 trees on- and adjacent to the site. Of the 239 trees on-site, 182 trees would be removed as part of the project. Trees would be replaced in accordance with the City's requirements to offset the aesthetic effects of tree removal (refer to Section 3.3, *Biological Resources* for a detailed discussion regarding tree removal and replacement).

In addition, the project site is not located along or adjacent to a state-designated scenic highway and, therefore, the project would not impact scenic resources within a scenic highway. The nearest designated highway is Interstate (I-280), located over four miles south of the project site.⁶ Therefore, the project would not substantially damage scenic resources. (Less Than Significant Impact)

Impact AES-3: The project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. The project is in an urbanized area and would not conflict with applicable zoning and other regulations governing scenic quality. (Less than Significant Impact)

As proposed, the project would demolish the existing 218,375 square foot office building and construct two, approximately 338,155 square foot office buildings and a four-level parking structure (with approximately 13,370 square feet of amenity space). The proposed eight-story office buildings would be approximately 129.5 feet tall to the parapet and 138.5 feet tall to the top of the roof screen. The proposed office building façades would incorporate tinted windows and aluminum framing in the exterior design and would have flat roofs. Pedestrian walkways made of glass and aluminum would be located between the two office buildings, on the third and seventh floors. The parking structure would primarily consist of aluminum paneling and concrete. The amenity building would be a one-story concrete building with a wood deck, outdoor seating and landscaping on top of the roof. The proposed development would have landscaping throughout the site, including trees and shrubs and open lawn areas.

The project area is developed with office and commercial land uses that range from one- to eightstories and has a mix of architectural styles. The office and commercial buildings surrounding the site to the north and east of the site primarily consists of concrete, wood, and flat roofs with tinted glass windows constructed in the 1990's. The eight-story office buildings to the south of Tannery Way, constructed in 2015, have facades that consists of tinted glass windows and stone. The proposed project would be comparable in height and architectural style to the development south of Tannery Way.

The final design of the project would be subject to the City's Architectural Review Committee, which will ensure the project conforms to the City's adopted Community Design Guidelines. The Guidelines were developed to support aesthetic values, preserve neighborhood character, and promote a sense of community and place throughout the City. With adherence to the Guidelines and

⁶ California Department of Transportation. "Scenic Highways." Accessed: April 19, 2019. <u>http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm</u>.

through the Committee's review, implementation of the project would not substantially degrade the existing visual character or quality of the site and its surroundings. (Less Than Significant Impact)

Impact AES-4:The project would not create a new source of substantial light or glare which
would adversely affect day or nighttime views in the area. (Less than
Significant Impact)

The project would include outdoor security lighting on-site, along walkways, driveways, entrance areas, and within the parking structure and surface lots. The outside lighting would be comparable in brightness to the existing ambient lighting on the site and in the surrounding area. The proposed office buildings and parking structure with an attached amenity building would also include interior lighting. As mentioned previously, the project would undergo architectural and site design review by the Community Development staff and the City's Architectural Review Committee prior to issuance of building permits to ensure the project would not adversely affect the visual quality of the area or create a substantial new source of light and glare for adjacent development or persons traveling on the local roadways. **(Less Than Significant Impact)**

3.1.2.2 *Consistency with Plans*

Santa Clara General Plan

The General Plan includes the following aesthetics policies applicable to the proposed project.

General Land Use Policies

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

<u>Consistency</u>: The final design of the proposed project will be subject to the City's architectural review process. Therefore, the project is consistent with Policy 5.3.1-P3.

Policy 5.3.1-P10: Provide opportunities for increased landscaping and trees in the community, including requirements for new development to provide street trees and a minimum 2:1 on- or off-site replacement for trees removed as part of the proposal to help increase the urban forest and minimize the heat island effect.

Consistency: The project would remove 182 trees on-site and, as a result, the project would be required to comply with the City's tree replacement ratio. Additionally, Sections 12.35.020 and 12.35.030 of the Santa Clara City Code, serve to protect all trees (native and non-native) planted or growing in the streets or public places of the City from removal without a permit from the City and prohibits the attaching of anything to a tree in the City, unless it is necessary and proper to the growth and care of the tree. As a result, the project would be consistent with Policy 5.3.1-P10.

3.1.2.3 *Cumulative Impacts*

Impact AES-C:	The project would not result in a cumulatively considerable contribution to a
	significant cumulative aesthetics impact. (Less than Significant Cumulative
	Impact)

The geographic area for cumulative aesthetic impacts is limited to the project site and adjacent properties in which the project site would be visible. The project site is adjacent to an approved hotel under construction (located at 2950 Lakeside Drive). Neither the project site or the adjacent hotel site is located along or visible from a designated state scenic highway or a scenic vista. Although both projects would be visible from the surrounding roadways and buildings, the proposed developments would be comparable in height and architectural style to adjacent development. Additionally, the final design of the projects would be reviewed by the City's Architectural Committee, which will ensure the project conforms to the City's adopted Community Design Guidelines. For these reasons, the projects would not result in a significant cumulative aesthetic impact.

3.2 AGRICULTURE AND FORESTRY RESOURCES

3.2.1.1 *Regulatory Framework*

State

Farmland Mapping and Monitoring Program

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural land and conversion of these lands over time. Agricultural land is rated according to soil quality and irrigation status. The best quality land is called Prime Farmland. In CEQA analyses, the FMMP classifications and published county maps are used, in part, to identify whether agricultural resources that could be affected are present on-site or in the project area.⁷

California Land Conservation Act

The California Land Conservation Act (Williamson Act) enables local governments to enter into contracts with private landowners to restrict parcels of land to agricultural or related open space uses. In return, landowners receive lower property tax assessments. In CEQA analyses, identification of properties that are under a Williamson Act contract is used to also identify sites that may contain agricultural resources or are zoned for agricultural uses.⁸

Fire and Resource Assessment Program

The California Department of Forestry and Fire Protection (CAL FIRE) identifies forest land, timberland, and lands zoned for timberland production that can (or do) support forestry resources.⁹ Programs such as CAL FIRE's Fire and Resource Assessment Program and are used to identify whether forest land, timberland, or timberland production areas that could be affected are located on or adjacent to a project site.¹⁰

3.2.1.2 Existing Conditions

The project site is located in a developed, urban area of Santa Clara and is surrounded by office R&D and hotel uses. The project site is within the Light Industrial (ML) zoning district. The Santa Clara County Important Farmland 2016 Map designates the project site as "Urban and Built-Up Land."¹¹ Urban and Built-up Land is defined as land with at least six structures per 10 acres. Common

⁷ California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed April 26, 2019. <u>http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx</u>.

⁸ California Department of Conservation. "Williamson Act." <u>http://www.conservation.ca.gov/dlrp/lca</u>.

⁹ Forest Land is land that can support 10 percent native tree cover and allows for management of forest resources (California Public Resources Code Section 12220(g)); Timberland is land not owned by the federal government or designated as experimental forest land that is available for, and capable of, growing trees to produce lumber and other products, including Christmas trees (California Public Resources Code Section 4526); and Timberland Production is land used for growing and harvesting timber and compatible uses (Government Code Section 51104(g)).

¹⁰ California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed April 26, 2019. <u>http://frap.fire.ca.gov/</u>.

¹¹ California Natural Resources Agency. *Santa Clara County Important Farmland 2016*. September 2018. Accessed July 10, 2019. <u>https://www.conservation.ca.gov/dlrp/fmmp/Pages/SantaClara.aspx</u>.

examples of "Urban and Built-Up Land" are residential, institutional, industrial, commercial, landfill, golf course, airports, and other utility uses. The site is not subject to a Williamson Act contract.

The project site and surrounding area do not meet the definition of forest land or timberland.¹²

3.2.2 Impact Discussion

For the purpose of determining the significance of the project's impact on agriculture and forestry resources, would the project:

- 1) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- 2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?
- 3) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?
- 4) Result in a loss of forest land or conversion of forest land to non-forest use?
- 5) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

3.2.2.1 Project Impacts

Impact AG-1:	The project would not convert Prime Farmland, Unique Farmland, or
	Farmland of Statewide Importance, as shown on the maps prepared pursuant
	to the Farmland Mapping and Monitoring Program of the California
	Resources Agency, to non-agricultural use. (No Impact)

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

¹² According to California Public Resources Code Section 12220(g), Forest Land is land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. According to California Public Resources Code Section 4526, "Timberland" means land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees.

Impact AG-2:The project would not conflict with existing zoning for agricultural use, or a
Williamson Act contract. (No Impact)

The project site is zoned as Light Industrial and is not zoned for agricultural use. The project would not use or conflict with a Williamson Act contract. **(No Impact)**

Impact AG-3:	The project would not conflict with existing zoning for, or cause rezoning of,
	forest land, timberland, or timberland zoned Timberland Production. (No
	Impact)

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

Impact AG-4:	The project would not result in a loss of forest land or conversion of forest
	land to non-forest use. (No Impact)

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

Impact AG-5:	The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland,
	to non-agricultural use or conversion of forest land to non-forest use. (No Impact)

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

3.2.2.2 *Consistency with Plans*

The project would have no impact on agricultural or forestry resources and would not conflict with any plans or policies related these resources.

3.2.2.3 *Cumulative Impacts*

Impact AG-C:	The project would not result in a cumulatively considerable contribution to a significant agricultural and forestry resources impact. (No Cumulative Impact)
	- <i>i</i>

The geographic area for cumulative agricultural and forestry resource impacts is the County of Santa Clara. The project would have no impact on agricultural and forestry resources and, therefore, the project has no potential to combine with other projects to result in cumulative impacts to these resources. **(No Cumulative Impact)**

3.3 AIR QUALITY

The following analysis is based, in part, on an air quality and GHG assessment prepared by *Illingworth & Rodkin, Inc.* in July 2019. A copy of this report can be found in Appendix A of this EIR.

3.3.1 <u>Environmental Setting</u>

3.3.1.1 Background Information

Criteria Pollutants

Air quality in the Bay Area is assessed related to six common air pollutants (referred to as criteria pollutants), including ground-level ozone (O_3) , nitrogen oxides (NO_x) , particulate matter (PM), carbon monoxide (CO), sulfur oxides (SO_x) , and lead.¹³ Criteria pollutants are regulated because they result in health effects. An overview of the sources of criteria pollutants and their associated health are summarized in Table 3.3-1. The most commonly regulated criteria pollutants in the Bay Area are discussed further below.

Table 3.3-1: Health Effects of Air Pollutants		
Pollutants	Sources	Primary Effects
O ₃	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	 Aggravation of respiratory and cardiovascular diseases Irritation of eyes Cardiopulmonary function impairment
Nitrogen Dioxide (NO ₂)	Motor vehicle exhaust, high temperature stationary combustion, atmospheric reactions	Aggravation of respiratory illnessReduced visibility
Fine Particulate Matter (PM _{2.5}) and Coarse Particulate Matter (PM ₁₀)	Stationary combustion of solid fuels, construction activities, industrial processes, atmospheric chemical reactions	 Reduced lung function, especially in children Aggravation of respiratory and cardiorespiratory diseases Increased cough and chest discomfort Reduced visibility
Toxic Air Contaminants (TACs)	Cars and trucks, especially diesel- fueled; industrial sources, such as chrome platers; dry cleaners and service stations; building materials and products	 Cancer Chronic eye, lung, or skin irritation Neurological and reproductive disorders

High O_3 levels are caused by the cumulative emissions of reactive organic gases (ROG) and NO_x . These precursor pollutants react under certain meteorological conditions to form high O_3 levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to

¹³ The area has attained both state and federal ambient air quality standards for CO. The project does not include substantial new emissions of sulfur dioxide or lead. These criteria pollutants are not discussed further.

reduce O₃ levels. The highest O₃ levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources.

PM is a problematic air pollutant of the Bay Area. PM is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$). Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide emissions and localized emissions.

Toxic Air Contaminants

TACs are a broad class of compounds known to have health effects. They include but are not limited to criteria pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, diesel fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway).

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust is a complex mixture of gases, vapors, and fine particles. Medium- and heavy-duty diesel trucks represent the bulk of DPM emissions from California highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are subsequently exhaled, but some deposit on the lung surface or are deposited in the deepest regions of the lungs (most susceptible to injury).¹⁴ Chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the California Air Resources Board (CARB).

Sensitive Receptors

Some groups of people are more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools.

3.3.1.2 Regulatory Framework

Federal and State

Clean Air Act

At the federal level, the United States Environmental Protection Agency (EPA) is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The federal Clean Air Act requires the EPA to set national ambient air quality standards for the six common criteria pollutants (discussed previously), including PM, O₃, CO, SO_x, NO_x, and lead.

¹⁴ California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed June 16, 2018. <u>https://www.arb.ca.gov/research/diesel/diesel-health.htm</u>.

CARB is the state agency that regulates mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act. The EPA and the CARB have adopted ambient air quality standards establishing permissible levels of these pollutants to protect public health and the climate. Violations of ambient air quality standards are based on air pollutant monitoring data and are determined for each air pollutant. Attainment status for a pollutant means that a given air district meets the standard set by the EPA and/or CARB.

Risk Reduction Plan

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, the plan involves application of emission control strategies to existing diesel vehicles and equipment to reduce DPM (in additional to other pollutants). Implementation of this plan, in conjunction with stringent federal and CARB-adopted emission limits for diesel fueled vehicles and equipment (including off-road equipment), will significantly reduce emissions of DPM and NO_X.

Regional

2017 Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how BAAQMD will continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-greenhouse gases (GHGs) that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.¹⁵

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. Jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing air quality impacts developed by BAAQMD within their CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

¹⁵ BAAQMD. *Final 2017 Clean Air Plan*. April 19, 2017. <u>http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans</u>.

3.3.1.3 *Existing Conditions*

Climate and Topography

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

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

Existing Air Pollutant Levels

BAAQMD monitors air pollution at various sites within the Bay Area. The nearest official monitoring station to the City of Santa Clara is located at 158 East Jackson Street in San José, approximately five miles southeast of the site. Pollutant monitoring results for the years 2015 to 2017 at the San José monitoring station are shown in Table 3.3-2

Table 3.3-2: Ambient Air Quality Standards Violations and Highest Concentrations				
Dollutont	Standard	Days Exceeding Standard		
Tonutant	Stanuaru	2016	2017	2018
SAN JOSÉ STATI	ON			
Ozona	State 1-hour	0	3	0
Ozone	Federal 8-hour	0	4	0
Carbon Monovide	Federal 8-hour	0	0	0
Carbon Monoxide	State 8-hour	0	0	0
Nitrogen Dioxide	State 1-hour	0	0	0
PM ₁₀	Federal 24-hour	0	0	0
	State 24-hour	0	6	4
PM _{2.5}	Federal 24-hour	0	6	15
Source: BAAQMD. A	Air Pollution Summari ality-summaries.	ies (2016-2018). Ava	ailable at: <u>http://www.b</u>	aaqmd.gov/about-air-

The Bay Area, as a whole, does not meet state or federal ambient air quality standards for ground level O_3 and $PM_{2.5}$, nor does it meet state standards for PM_{10} . The Bay Area is considered in attainment or unclassified for all other pollutants.

Local Community Risks/Toxic Air Contaminants

The project area includes both mobile and TAC sources. The primary mobile TAC source within 1,000 feet of the site is U.S. 101, located approximately 350 feet north of the site. The existing office building is considered a BAAMQD-permitted stationary TAC source.¹⁶ There are three other stationary TAC sources within 1,000 feet of the site, two of which are east of Peterson Way and one of which is east of Garrett Drive.

Sensitive Receptors

There are no sensitive receptors within 1,000 feet of the project site. The nearest sensitive receptors are residences north of U.S. 101, approximately 1,400 feet northwest of the site.

Odors

Common sources of odors and odor complaints include wastewater treatment plants, transfer stations, coffee roasters, painting/coating operations, and landfills. Significant sources of offending odors are typically identified based on complaint histories received and compiled by BAAQMD. Typical large sources of odors that result in complaints are wastewater treatment facilities, landfills including composting operations, food processing facilities, and chemical plants. Other sources, such as restaurants, paint or body shops, and coffee roasters typically result in localized sources of odors.

The project site is in an office R&D and commercial area and is not surrounded by facilities that produce substantial odors.

3.3.2 Impact Discussion

For the purpose of determining the significance of the project's impact on air quality, would the project:

- 1) Conflict with or obstruct implementation of the applicable air quality plan?
- 2) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
- 3) Expose sensitive receptors to substantial pollutant concentrations?
- 4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

3.3.2.1 *Project Impacts*

Thresholds of Significance

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. The City of Santa Clara has

¹⁶ Based on information provided by BAAQMD's stationary source screening analysis tool, the project site is listed as a stationary TAC source. <u>http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools</u>. Accessed July 9, 2019.

considered the air quality thresholds updated by BAAQMD in May 2017 and regards these thresholds to be based on the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and PM_{2.5}. The BAAQMD CEQA Air Quality thresholds used in this analysis are identified in 3.3-3.

Table 3.3-3: BAAQMD Air Quality Significance Thresholds			
	Construction Thresholds	Construction Thresholds Operational Threshold	
Pollutant	Average Daily Emissions (pounds/day)	Average Daily Emissions (pounds/day)	Annual Average Emissions (tons/year)
	Criteria Air Polluta	ints	•
ROG	54	54	10
NO _x	54	54	10
PM_{10}	82 (Exhaust)	82	15
PM _{2.5}	54 (Exhaust)	54	10
СО	Not Applicable9.0 ppm (8-hour average) or 20.0 pp (1-hour average)		verage) or 20.0 ppm average)
Fugitive Dust	Best Management Practices Not Applicable		
Health Risks and Hazards for Single Sources			
Excess Cancer Risk	>10 per one million		
Hazard Index	>1.0		
Incremental annual PM _{2.5}	>0.3 µg/m ³		
Н	ealth Risks and Hazards for Co	ombined Sources	
(Cumulative from all sources within 1,000-foot zone of influence)			
Excess Cancer Risk	>100 per one million		
Hazard Index	>10.0		
Annual Average $PM_{2.5}$ >0.8 μ g/m ³			
Notes: ROG = reactive organ with an aerodynamic of particulates with an ae	tic gases, $NO_x = nitrogen oxides$, PM liameter of 10 micrometers (μ m) or rodynamic diameter of 2.5 μ m or les	$I_{10} =$ course particulate n less, PM _{2.5} = fine particu s, μ m/m ³ = micrograms	natter or particulates late matter or per cubic meter.

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

2017 BAAQMD Clean Air Plan

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

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

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

Impact AIR-2:	The project would not result in a cumulatively considerable net increase of
	any criteria pollutant for which the project region is in non-attainment under
	an applicable federal or state ambient air quality standard. (Less than
	Significant Impact)

Construction Criteria Pollutant Emissions

Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM_{10} and $PM_{2.5}$. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit dirt/mud on local streets, which could be an additional source of airborne dust after it dries. BAAQMD considers construction emission impacts that are below the thresholds of significance (such as those of the project) less than significant if BMPs are implemented.

The California Emissions Estimator Model (CalEEMod) was used to predict criteria pollutant emissions from project construction and operation at full build-out. The project land use types and size, and anticipated construction schedule were input to CalEEMod. Construction period emissions were modeled based on an equipment list and schedule information provided by the project applicant. Refer to Appendix A for details about the modeling, data inputs, and assumptions. Table 3.3-4 summarizes the average daily construction emissions of ROG, NO_X, PM₁₀ exhaust, and PM_{2.5} exhaust that would occur during construction of the project.

Table 3.3-4: Summary of Daily Criteria Pollutant Construction Emissions				
	ROG	NO _X	PM ₁₀ Exhaust	PM _{2.5} Exhaust
		(poun	ds per day)	
Average Daily Emissions	23.4	46.1	1.1	1.0
BAAQMD Thresholds	54	54	82	54
Exceeds Threshold?	No	No	No	No
Note: It is estimated that the cons	truction duration of	of the project would	l be 400 workdays.	

Construction activities on-site would generate dust and other particulate matter which would temporarily increase dust in the project area. The project site is not located close to sensitive receptors that could be adversely impacted by construction dust; however, there are office building occupants in proximity to the site that would be exposed to construction dust. The following measures are included in the project, consistent with BAAQMD BMPs, to reduce construction dust generation and other particulate matter.

Project Specific Avoidance Measures/Best Management Practices

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the construction firm regarding dust complaints. This person shall respond and take corrective

action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

With implementation of the identified BMPs to reduce dust and other particulate matter emissions, construction of the proposed project would not generate criteria pollutant emissions in excess of the adopted thresholds. Therefore, the project would not result in a cumulatively considerable net increase in construction criteria pollutants in the region. (Less than Significant Impact)

Operational Criteria Pollutant Emissions

Operational criteria pollutant emissions from the project would be generated primarily from vehicles driven by future employees and customers. Evaporative emissions from architectural coatings and maintenance products (classified as consumer products) are also typical emissions from this type of land use. CalEEMod was used to estimate criteria pollutant emissions from operation of the proposed project assuming the project would be built in one phase. Refer to Appendix A for more details about the modeling, data inputs, and assumptions.

Table 3.3-5 summarizes the project's estimated operational emissions for the proposed project and shows that emissions of ROG, NO_x , PM_{10} , and $PM_{2.5}$ would be below BAAQMD significance thresholds.

Table 3.3-5: Summary of Project Operational Criteria Pollutant Emissions				
Scenario	ROG	NOx	PM ₁₀	PM _{2.5}
2023 Project Operational Emissions (<i>tons/year</i>)	4.35	4.87	4.75	1.26
2023 Project Operational Emissions (<i>tons/year</i>) with TDM Plan implementation (-10 percent of mobile emissions)	4.24	4.44	4.28	1.20
Existing Uses operating in 2023	1.09	0.94	0.84	0.24
Net Increase	3.15	3.47	3.44	0.95
BAAQMD Thresholds (tons /year)	10	10	15	10
Exceed Threshold?	No	No	No	No
2023 Project Operational Emissions (<i>pounds/day</i>)	17.3.	19.0	18.8.	5.2
BAAQMD Thresholds (pounds/day)	54	54	82	54
Exceed Threshold?	No	No	No	No

As shown in Table 3.3-5, project operational criteria pollutant emissions would not exceed BAAQMD thresholds; therefore, the project would not result in a cumulatively considerable net increase in operational criteria pollutants in the region.¹⁷ (Less than Significant Impact)

Carbon Monoxide Emissions

CO emissions from traffic generated by the project would be the pollutant of greatest concern at the local level. Congested intersections with a large volume of traffic have the greatest potential to cause high-localized concentrations of CO. Air pollutant monitoring data indicate that carbon monoxide levels have been at healthy levels (i.e., below state and federal standards) in the Bay Area since the early 1990s. As a result, the region has been designated as in attainment for the standard. The highest measured level over any 8-hour averaging period during the last three years in the Bay Area is less than 3.0 parts per million (ppm), compared to the ambient air quality standard of 9.0 ppm. Intersections affected by the project would have traffic volumes less than the BAAQMD screening criteria and, thus, would not cause a violation of an ambient air quality standard.¹⁸ The project would not cause the violation of an air quality standard or worsen an existing violation of an air quality standard. **(Less Than Significant Impact)**

Impact AIR-3:	The project would not expose sensitive receptors to substantial pollutant
	concentrations. (No Impact)

The project would construct an office development with two emergency diesel-operated generators, which would be considered stationary TAC sources. Diesel-operated construction equipment would also be a TAC source at the site. Based on BAAQMD CEQA Air Quality Guidelines, TAC sources have the potential to impact off-site sensitive receptors located within 1,000 feet of a project site. Given the nearest sensitive receptors are residences north of U.S. 101, approximately 1,400 feet northwest of the project site, the project would not result in TAC impacts to off-site sensitive receptors. **(No Impact)**

Impact AIR-4:The project would not result in other emissions (such as those leading to
odors) adversely affecting a substantial number of people. (Less than
Significant Impact)

No new stationary odor sources, such as food processing, would be a part of the proposed office R&D operations. The project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. The odor emissions may be noticeable from time to time by adjacent receptors; however, the odors would be localized and temporary (Less Than Significant Impact)

¹⁷ Operational criteria pollutant emissions results provide a conservative estimate since air quality modeling assumed that there were 370 more parking spaces than what is proposed (therefore actual mobile emissions generated by the project vehicle trips would be slightly lower). The proposed number of parking spaces is 2,281 spaces.

¹⁸ For a land-use project type, the BAAQMD CEQA Air Quality Guidelines state that a proposed project would result in a less than significant impact to localized CO concentrations if the project would not increase traffic at affected intersections with more than 44,000 vehicles per hour. This project would generate up to 641 AM and 677 PM vehicular peak hour trips.

3.3.2.2 *Consistency with Plans*

Santa Clara General Plan

The General Plan includes the following air quality policies applicable to the proposed project.

Transportation Demand Management

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

<u>Consistency</u>: The proposed project would implement a TDM Plan to reduce vehicle miles traveled (including single-occupant vehicle trips) by at least 10 percent. The project is, therefore, consistent with TDM Policy 5.8.5-P1.

Air Quality Policies

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

<u>Consistency:</u> The proposed project would implement BAAQMD's standard construction BMPs to control dust and other particulate matter during construction. Therefore, the project is consistent with Policy 5.10.2-P6.

3.3.2.3 *Cumulative Impacts*

Impact AIR-C:The project would not result in a cumulatively considerable contribution to a
significant air quality impact. (Less than Cumulatively Considerable
Contribution to a Significant Cumulative Impact)

By its very nature, air pollution is largely a cumulative impact. The geographic area for cumulative air quality impacts is the San Francisco Bay Area Air Basin. Past, present, and future development projects contribute to the region's adverse air quality impacts. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts.

Cumulative Air Pollutant Emissions

In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified project-level criteria pollutant significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. The project's criteria air pollutant emissions would be below BAAQMD thresholds and would, therefore, not result in a cumulatively considerable net increase in criteria pollutants (refer to Sections 3.2.2.2 and 3.2.2.3). The project would not contribute substantially to existing or projected violations of BAAQMD standards for these regional air pollutants or local

carbon monoxide emissions. (Less Than Cumulatively Considerable Contribution to a Significant Cumulative Impact)

There are no sensitive receptors within 1,000 feet of the site. Therefore, the project would not contribute to cumulative impacts (from construction and operational TAC emissions) to sensitive receptors. (No Cumulative Impact)

3.4 BIOLOGICAL RESOURCES

The following discussion is based, in part, on an arborist report prepared by *McClenahan Consulting*, *LLC* in June 2018. A copy of this report can be found in Appendix B of this EIR.

3.4.1 <u>Environmental Setting</u>

3.4.1.1 *Regulatory Framework*

Federal and State

Special-Status Species

Individual plant and animal species listed as rare, threatened or endangered under state and federal Endangered Species Acts are considered 'special-status species.' Federal and state "endangered species" legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project would result in the "take" of a species listed as threatened or endangered. To "take" a listed species, as defined by the State of California, is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" said species. "Take" is more broadly defined by the federal Endangered Species Act to include "harm" of a listed species.

In addition to species listed under state and federal Endangered Species Acts, 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".

Migratory Bird and Birds of Prey Protections

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, capture, possession, or trade in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Hunting and poaching are also prohibited. The taking and killing of birds resulting from an activity is not prohibited by the MBTA when the underlying purpose of that activity is not to take birds.¹⁹ Nesting birds are considered special-status species and are protected by the USFWS. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

Sensitive Habitats

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to regulation, protection, or consideration by the U.S. Army Corps of Engineers (USACE), Regional

¹⁹ U.S. Department of the Interior. M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take. <u>https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf</u>.

Water Quality Control Board (RWQCB), CDFW, and/or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

Regional and Local

Conservation Plan

The project site is not located within an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP) or other approved local, regional, or state HCP.

3.4.1.2 *Existing Conditions*

Currently, the project site is developed with an approximately 218,375 square foot, two-story office building and paved surface parking lot located within a developed area in the City of Santa Clara. Vegetation on and adjacent to the site includes grass and a total of 239 trees. Special status plant and wildlife species are not present on the project site, although raptors (birds of prey) and other birds may use the trees on-site for nesting or foraging.

Mature trees (both native and non-native) are valuable to the human environment as they reduce the impacts of global climate change through carbon dioxide absorption, reduce urban heat island effect, provide nesting and foraging habitat for raptors and other migratory birds, and provide visual enhancement. The goal of the City's General Plan Policy 5.10.1-P4 is to protect all healthy cedars, redwoods, oaks, olives, bay laurel, and pepper trees of any size, and all trees over 36 inches in circumference (approximately 11 inches or more in diameter) as measured from 48 inches above the ground surface. A total of 239 trees were surveyed²⁰, 29 of which are located off-site (tree numbers 195-223). Of the 239 trees surveyed, 101 trees are classified as protected by the City including 69 native trees (Coast redwood). The remaining trees have a diameter less than 11 inches. The location of the trees is shown on Figure 3.4-1.

Table 3.4-1: Tree Survey				
Species	0-12.0 inches	12.1-18 inches	Greater than 18 inches	Total No. of Trees
American sweet gum	12	0	0	12
Carolina cherry**	18	0	0	18
Chinese hackberry	33	8	0	41
Chinese pistache	1	1	0	2
Coast redwood*	3	15	51	69
Crape Myrtle	6	0	0	6

²⁰ The Carolina cherries, which are shrubs, were included in the tree survey.



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Table 3.4-2: Tree Survey				
Species	Diameter			
	0-12.0 inches	12.1-18 inches	Greater than 18 inches	Total No. of Trees
Evergreen ash	7	0	0	7
Flowering plum	57	2	0	59
Japanese maple	10	0	0	10
London plane	5	1	0	6
Melaleuca	2	0	0	2
Mexican fan palm	0	0	5	5
Peppermint gum	0	0	2	2
			Total No	of Trees: 239
Notes: * denotes native trees ** The Carolina cherr	ies (tree numbers 177-19	94) are shrubs, not trees	s, as noted in the arborist repo	rt.

3.4.2 <u>Impact Discussion</u>

For the purposes of determining the significance of the project's impact on biological resources, 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 (CDFW) or United States Fish and Wildlife Service (USFWS)?
- 2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?
- 3) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- 4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
- 5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- 6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

3.4.2.1 *Project Impacts*

Impact BIO-1:	The project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or
	regulations, or by the CDFW or USFWS. (Less than Significant Impact with Mitigation Incorporated)

Existing development on-site consists of a two-story, 218,375 square foot office building and paved surface parking. As discussed previously, vegetation on and adjacent to the site include trees and grass. Due to the history of development in the project area, no natural or sensitive habitats such as riparian, wetland or aquatic exist on or adjacent to the site that would support endangered, threatened, or special status wildlife species. The proposed project would not result in significant impacts to natural plant communities or special-status or endangered species. **(Less Than Significant Impact)**

Nesting Raptors and Migratory Birds

Migratory birds, like nesting raptors, are protected under provisions of the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines "taking" as causing abandonment and/or loss of reproductive efforts through disturbance. Any loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment would constitute a significant impact.

<u>Mitigation Measures</u>: The following mitigation measures would be implemented during all demolition and construction activities to avoid abandonment of raptor and other protected migratory bird nests:

MM BIO-1.1:	Construction shall be scheduled to avoid the nesting season to the extent feasible. The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February 1 st through August 31 st .
MM BIO-1.2:	If it is not possible to schedule construction and tree removal between September and January, then pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests shall be disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of grading, tree removal, or other demolition or construction activities during the corple part of the broading
	season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August)

During this survey, the ornithologist shall inspect all trees and other possible nesting habitats within and immediately adjacent to the construction area for nests. If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist, in consultation with CDFW, shall determine the extent of a construction-free buffer zone to be established around the nest to ensure that nests of bird species protected by the MBTA or Fish and Game Code shall not be disturbed during project construction.

A final report of nesting birds, including any protection measures, shall be submitted to the Director of Community Development prior to issuance of grading or tree removal permits.

Implementation of the identified mitigation measures would reduce construction impacts to migratory birds to a less than significant level. (Less Than Significant Impact with Mitigation Incorporated)

Impact BIO-2:	The project would not have a substantial adverse effect on any riparian habitat
	or other sensitive natural community identified in local or regional plans,
	policies, regulations or by the CDFW or USFWS. (No Impact)

The project site is located approximately 800 feet west of Calabazas Creek and is located within an area developed with office/R&D and hotel buildings. No riparian habitat or sensitive natural communities exist on or adjacent to the site. (No Impact)

Impact BIO-3:	The project would not have a substantial adverse effect on state or federally
	protected wetlands through direct removal, filling, hydrological interruption,
	or other means. (No Impact)

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

Impact BIO-4:	The project would not interfere substantially with the movement of any native
	resident or migratory fish or wildlife species or with established native
	resident or migratory wildlife corridors or impede the use of native wildlife
	nursery sites. (No Impact)

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

Impact BIO-5:The project would not conflict with any local policies or ordinances protecting
biological resources, such as a tree preservation policy or ordinance. (Less
than Significant Impact)

There are 239 trees on- and adjacent to the site. Of the 239, 182 on-site trees would be removed as part of the project. Twenty-eight on-site trees would remain, and no off-site trees are proposed to be

removed. The City's General Plan (Policy 5.3.1-P10) requires new development to provide street trees and a minimum 2:1 on- or off-site replacement for removal of existing trees. The Santa Clara City Code, Sections 12.35.020 and 12.35.030, serve to protect all trees (native and non-native) planted or growing in the streets or public places of the City from removal without a permit from the City and prohibits the attaching of anything to a tree in the City, unless it is necessary and proper to the growth and care of the tree. As a result, the proposed project would be required to plant a minimum of 364 trees.

Of the 182 trees to be removed on-site, 27 Coast redwood trees are classified as protected by the City. The removal of these trees would be inconsistent with General Plan Policy 5.10.1-P4 to protect healthy redwood trees. Although 27 City-protected trees would be removed as part of the project, the project would be required to comply with the City's tree replacement policy and, as a result, the overall loss of these trees would be less than significant. (Less Than Significant Impact)

Conservation Plan

The project site is not located within an adopted HCP, NCCP, or other approved local, regional, or state HCP. (No Impact)

3.4.2.2 Consistency with Plans

City of Santa Clara General Plan

The General Plan includes the following biological resources policies applicable to the proposed project.

General Land Use Policies

Policy 5.3.1-P10: Provide opportunities for increased landscaping and trees in the community, including requirements for new development to provide street trees and a minimum 2:1 on- or off-site replacement for trees removed as part of the proposal to help increase the urban forest and minimize the heat island effect.

Consistency: Of the 239 trees located on and adjacent to the site, 182 trees would be removed as part of the project. The project would be required to provide street trees and a minimum 2:1 on- or off-site replacement for removal of existing trees and to acquire necessary permits. As a result, the project would be consistent with Policy 5.3.1-P10.

Conservation Policies

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

Consistency: Of the 69 redwood trees surveyed, 27 would be removed as part of the project. Therefore, the project would be inconsistent with Policy 5.10.1-P4.

3.4.2.3 *Cumulative Impacts*

Impact BIO-C:	The project would not result in a cumulatively considerable contribution to a
	significant biological resources impact. (Less than Significant Cumulative
	Impact)

The geographic area for cumulative biological resources impacts includes the project site and adjacent parcels (i.e., 2950 Lakeside Drive Hotel, under construction). The project site does not contain sensitive, wetland, or riparian habitat and, therefore, the project has no potential to combine with other projects to result in cumulative impacts to these resources. **(No Cumulative Impact)**

Implementation of the proposed project and adjacent hotel project could result in combined impacts to nesting raptors, migratory birds, and trees. Both projects, however, would be subject to federal and state regulations that protect nesting birds and the City's General Plan Policy requiring the replacement of trees removed would avoid and/or reduce the cumulative impact to nesting birds and trees. For these reasons, the proposed office project and adjacent hotel project would not result in a significant cumulative impact to biological resources. **(Less than Significant Cumulative Impact)**

3.5 CULTURAL RESOURCES

3.5.1 <u>Environmental Setting</u>

3.5.1.1 *Regulatory Framework*

Federal and State

National Historic Preservation Act

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

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic Preservation and encourages protection of resources of architectural, historical, archeological, and cultural significance. The CRHR identifies historic resources for state and local planning purposes and affords protections under CEQA. Under Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria.²¹

Historical resources eligible for listing in the CRHR must meet the significance criteria described previously and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.

California Native American Historical, Cultural, and Sacred Sites Act

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

Public Resources Code Sections 5097 and 5097.98

Section 15064.5 of the CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American human remains on non-federal land. These procedures are outlined in Public Resources Code Sections 5097 and 5097.98. These codes protect such remains from disturbance, vandalism, and inadvertent destruction; establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establish the Native American Heritage Commission (NAHC) as the authority to resolve disputes regarding disposition of such remains.

²¹ California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." March 14, 2006.

Pursuant to Public Resources Code Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the county coroner has made the necessary findings regarding the origin and disposition of the remains. If the remains are of a Native American, the county coroner must notify the NAHC. The NAHC then notifies those persons most likely to be related to the Native American remains. The code section also stipulates the procedures that the descendants may follow for treating or disposing of the remains and associated grave goods.

3.5.1.2 *Existing Conditions*

Historic Resources

The project site has been developed with the existing office building since 1979. Buildings surrounding the site were constructed in the 1970s or subsequent to this period. Prior to construction of the existing building, the site was used for agricultural purposes from 1939 to 1953 and re-graded in 1956. The project site has been disturbed since at least the 1950s and no evidence of subsurface resources, such as buried archaeological resources, has been documented on the site.

Based on General Plan Policy 5.6.1-P6, projects in the City are required to evaluate structures/potential resources over 50 years old to determine their eligibility for the City's list of Architecturally or Historically Significant Properties. The existing building on-site is approximately 40 years old (less than 50 years of age) and would not be eligible for listing under the CRHR, National Register of Historic Places (NRHP), or the City of Santa Clara Historic Architecturally or Historically Significant Properties list.

The site is located within an area of modern office/R&D and commercial development, and there are no known historic resources located on or adjacent to the project site.

Archaeological/Prehistoric Resources

Although there are no existing conditions or immediate evidence that would suggest the presence of subsurface cultural resources, the project site is located in a culturally sensitive area due to known prehistoric and historic occupation of Santa Clara and proximity to the nearby creek. Native American settlements are commonly associated with the abundant food supply in the Santa Clara Valley. The project site is located approximately 800 feet west of Calabazas Creek, which increases the likelihood that historic artifacts may be located on the project site. Aside from the sites already identified within the City of Santa Clara, there may be other undiscovered archaeological sites. In addition, historic occupation of Santa Clara has been well documented, and the City has a strong record reflecting early settlement by Spanish missionaries.

3.5.2 Impact Discussion

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

- 1) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?
- 2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?
- 3) Disturb any human remains, including those interred outside of dedicated cemeteries?

3.5.2.1 *Project Impacts*

Impact CUL-1:	The project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEOA Guidelines Section 15064.5. (No
	Impact)

The existing office building was constructed in 1979 and is not classified as a historic resource nor is it eligible to be listed on the CRHR, NRHP, or local register.

The buildings directly adjacent to the project site and in the immediate project area are not classified as historic by the City of Santa Clara and are not currently eligible for inclusion on the CRHR given they are less than 50 years of age and are of a common of modern architectural style. None of the adjacent buildings are listed on the City's list of Architecturally or Historically Significant Properties.²² Development of the project site would not physically damage or materially impair the integrity of any historic building. Implementation of the proposed project would, therefore, have no impact on any designated or eligible historic structures. (No Impact)

Impact CUL-2:	The project would not cause a substantial adverse change in the significance
	of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.
	(Less than Significant Impact with Mitigation Incorporated)

Although there are no known prehistoric archaeological deposits on the site, construction on-site could result in the exposure or destruction of as yet undiscovered subsurface prehistoric archaeological resources. If the exposure or destruction of subsurface prehistoric resources were to occur, it would be considered a significant impact.

<u>Mitigation Measures</u>: The following project-specific mitigation measures will be implemented during construction to avoid significant impacts to unknown subsurface archaeological resources:

MM CUL-2.1: A qualified archaeologist will be on-site to monitor the initial excavation of native soil once all pavement and engineered soil is removed from the project site. After monitoring the initial excavation, the archaeologist will make

²² City of Santa Clara. 2010 -2035 General Plan, Table 8.9-1: Architecturally or Historically Significant Properties. Updated 2014.

recommendations for further monitoring if it is determined that the site has cultural resources. If the archaeologist determines that no resources are likely to be found on-site, no additional monitoring will be required.

MM CUL-2.2: In the event that prehistoric or historic resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped, the Director of Community Development will be notified, and the archaeologist will examine the find and make appropriate recommendations prior to issuance of building permits. Recommendations could include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery during monitoring would be submitted to the Director of Community Development.

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

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

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

<u>Mitigation Measure</u>: The following project-specific mitigation measures will be implemented during construction to avoid significant impacts to unknown human remains:

MM CUL-3.1: In the event that human remains are discovered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped. The Santa Clara County Coroner will be notified and shall make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC) immediately. Once the NAHC identifies the most likely descendants, the descendants will make recommendations regarding proper burial, which will be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.

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

3.5.2.2 Consistency with Plans

City of Santa Clara General Plan

The project would demolish the existing office building and surface parking lot, and remove 182 onsite trees, to construct two, approximately 338,155 square foot office buildings totaling 676,310 square feet; a four-level, above-grade parking structure with an attached 13,370 square foot one-story amenity building; and a surface parking lot for a site total of 2,281 parking spaces. The project is consistent with the General Plan's archaeological and cultural resource policies. Since the project would not impact historic buildings, General Plan policies pertaining to historic structures are not applicable. The General Plan includes the following cultural resources policies applicable to the proposed project.

Archaeological and Cultural Resources Policies

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

5.6.3-P2: Encourage salvage and preservation of scientifically valuable paleontological or archaeological materials.

5.6.3-P5: In the event that archaeological/paleontological resources are discovered, require that work be suspended until the significance of the find and recommended actions are determined by a qualified archaeologist/paleontologist.

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

<u>Consistency</u>: Mitigation measure MM CUL-3.1 is consistent with the above General Plan policies pertaining to cultural resources. The project would comply with the above mitigation measures and General Plan policies to reduce or avoid impacts to archaeological resources. These measures and policies would be implemented during project construction or excavation. In the event that archaeological resources are discovered, work would be suspended until the significance of the find and recommended actions are determined by a qualified archaeologist/paleontologist.

3.5.2.3 *Cumulative Impacts*

Impact CUL-C:The project would not result in a cumulatively considerable contribution to a
significant cultural resources impact. (Less than Significant Cumulative
Impact)

The geographic area for cumulative cultural resources impacts is the project site and adjacent parcels. The proposed project would not result in an impact to any historic structure, and, therefore, would not contribute to a cumulative impact to historic resources. (No Cumulative Impact)

The proposed office project and adjacent hotel project under construction (located at 2950 Lakeside Drive) require excavation, grading, and other construction activities that may affect unknown subsurface historic and prehistoric archaeological resources. Both projects are or would be required to implement mitigation measures that would avoid impacts to subsurface archaeological resources and human remains and/or reduce them to a less than significant level. For these reasons, the cumulative projects, including the proposed project, would not result in significant cumulative impacts to archaeological resources or human remains. (Less than Significant Cumulative Impact)
3.6 ENERGY

This section was prepared pursuant to CEQA Guidelines Section 15126.4 (a)(1)(C) and Appendix F (Energy Conservation), which require EIRs include a discussion of potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Environmental impacts associated with energy consumption include the depletion of nonrenewable resources (oil, natural gas, coal, etc.) and emissions of pollutants during both the production and consumption phases.

3.6.1 <u>Environmental Setting</u>

3.6.1.1 Regulatory Framework

Federal

At the federal level, energy standards set by the U.S. Environmental Protection Agency (EPA) apply to numerous consumer products and appliances (e.g., the EnergyStarTM program). The EPA also sets fuel efficiency standards for automobiles and other modes of transportation.

State

Renewable Energy Standards

In 2002, California established its Renewables Portfolio Standard (RPS) Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2010. In 2008, Executive Order S-14-08 was signed into law requiring retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. In October 2015, Governor Brown signed Senate Bill 350 (SB 350) to codify California's climate and clean energy goals. A key provision of SB 350 requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030.

Silicon Valley Power (SVP) provides electricity service to the project site. In 2017, renewable energy facilities provided approximately 72 percent of SVP's electricity mix.²³

Building Codes

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6, of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years, and the 2016 Title 24 updates went into effect on January 1, 2017.²⁴

CALGreen establishes mandatory green building standards for buildings in California. The most recent updates to CALGreen went into effect on January 1, 2017, and covers five categories:

²³ Silicon Valley Power. "Renewable Energy FAQ" Accessed November 12, 2018.

http://www.siliconvalleypower.com/svp-and-community/about-svp/power-content-label. ²⁴ California Building Standards Commission. "Welcome to the California Building Standards Commission." Accessed November 12, 2018. <u>http://www.bsc.ca.gov</u>. planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

3.6.1.2 Existing Conditions

Total energy usage in California was approximately 7,830 trillion British thermal units (Btu) in the year 2016, the most recent year for which this data was available. The breakdown by sector was approximately 18 percent (1,384 trillion Btu) for residential uses, 19 percent (1,477 trillion Btu) for commercial uses, 24 percent (1,853 trillion Btu) for industrial uses, and 40 percent (3,116 trillion Btu) for transportation.²⁵ This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Electricity

Electricity in Santa Clara County in 2017 was consumed primarily by the commercial sector (76 percent), followed by the residential sector consuming 24 percent. In 2017, a total of approximately 17,190 GWh of electricity was consumed in Santa Clara County.²⁶

Silicon Valley Power (SVP) is the City of Santa Clara's energy utility and would provide electricity service to the project site. SVP provides commercial customers several options for participation in green-energy programs, including a carbon-free energy option.²⁷

Natural Gas

Pacific Gas and Electric Company (PG&E) provides natural gas for residential, commercial, industrial, and municipal uses for the City of Santa Clara. In 2017, approximately 1.4 percent of California's natural gas supply came from in-state production, while the remaining supply was imported from other western states and Canada.²⁸ In 2016, residential and commercial customers in California used 29 percent, power plants used 32 percent, and the industrial sector used 37 percent. Transportation accounted for one percent of natural gas use in California. Utility providers measure natural gas usage in Btu. In 2017, Santa Clara County used approximately 3.5 percent of the state's total consumption of natural gas.²⁹

Fuel for Motor Vehicles

In 2017, 15 billion gallons of gasoline were sold in California.³⁰ The average fuel economy for lightduty vehicles (autos, pickups, vans, and SUVs) in the United States has steadily increased from about

²⁵ United States Energy Information Administration. *State Profile and Energy Estimates, 2016.* Accessed August 14, 2018. <u>https://www.eia.gov/state/?sid=CA#tabs-2</u>.

²⁶ CEC. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed April 10, 2019. <u>http://ecdms.energy.ca.gov/elecbycounty.aspx</u>.

 ²⁷ Silicon Valley Power. "Did You Know." Accessed April 10, 2019. http://www.siliconvalleypower.com/.
²⁸ California Gas and Electric Utilities. 2017 California Gas Report. Accessed November 12, 2018.

https://www.socalgas.com/regulatory/documents/cgr/2017_California_Gas_Report_Supplement_63017.pdf²⁹ CEC. "Natural Gas Consumption by County." Accessed April 10, 2019.

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

³⁰ California Department of Tax and Fee Administration. Net Taxable Gasoline Gallons. Accessed November 12, 2018. <u>http://www.cdtfa.ca.gov/taxes-and-fees/MVF_10_Year_Report.pdf</u>.

13.1 miles-per-gallon (mpg) in the mid-1970s to 24.9 mpg in 2018.³¹ Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. That standard, which originally mandated a national fuel economy standard of 35 miles per gallon by the year 2020, was subsequently revised to apply to cars and light trucks Model Years 2011 through 2020.^{32,33}

3.6.1.3 Energy Use of Existing Development

The electricity and natural gas used by the existing 218,375 square foot office building is estimated in Table 3.6-1.

Table 3.6-1: Estimated Annual Energy Use of Existing Development				
DevelopmentElectricity Use (kWh)Natural Gas (kBtu)				
200,0001 square foot of General Light Industrial1,886,0005,850,000				
Server III: month & Dedhin Lee 2625 Determent War Office Development Air Ordite and CUC Assessment				

Source: Illingworth & Rodkin, Inc. 3625 Peterson Way Office Development Air Quality and GHG Assessment. July 20, 2019.

¹ Energy use for the existing office building was based on a square footage of 200,000 square feet. The actual building square footage is 218,375, which would not substantially change the energy output.

The existing development on-site uses approximately 1,886,000 kWh of electricity and 5,850,000 kBtu of natural gas. The existing development generates an estimated 2,187,131 VMT and consumes approximately 99,415 gallons of gasoline per year.^{34,35}

3.6.2 <u>Impact Discussion</u>

For the purposes of determining the significance of the project's impact on energy, would the project:

- 1) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?
- 2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?
- 3) Result in a substantial increase in demand upon energy resources in relation to projected supplies?

³¹ United States Environmental Protection Agency. "The 2018 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." March 2019.

https://nepis.epa.gov/Exe/ZyPDF.cgi/P100W5C2.PDF?Dockey=P100W5C2.PDF. accessed August 2, 2019. ³² U.S. Department of Energy. Energy Independence & Security Act of 2007. Accessed November 12, 2018. http://www.afdc.energy.gov/laws/eisa.

³³ Public Law 110–140—December 19, 2007. Energy Independence & Security Act of 2007. Accessed November 12, 2018. <u>http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf.</u>

³⁴ 2,187,131 VMT / 22.0 mpg = 99,415 gallons of gasoline

³⁵ Illingworth & Rodkin, Inc. 3625 Peterson Way Office Development Air Quality and GHG Assessment. July 20, 2019.

Impact EN-1:The project would not result in a potentially significant environmental impact
due to wasteful, inefficient, or unnecessary consumption of energy, or
wasteful use of energy resources, during project construction or operation.
(Less than Significant Impact)

Estimated Energy Use of the Proposed Project

As proposed, the project would construct two approximately 338,155 square foot office/R&D buildings for a combined total of 676,310 square feet. In addition, the project proposes a four-level, above-grade parking structure with an attached 13,370 square foot amenity building. Energy would be consumed during the construction and operational phases of the project. Construction activities at the project site would take approximately 24 months and would consist of demolition, grading, excavation, and site preparation. Operation of the project would consume energy (in the form of electricity and natural gas) primarily for building heating and cooling, lighting, and water heating. Table 3.6-2 below summarizes the estimated energy use of the proposed project.

Table 3.6-2: Estimated Annual Energy Use of Proposed Development			
Development	Electricity Use (kWh)	Natural Gas Use (kBtu)	
General Office Building	11,750,200	11,278,900	
Parking Lot	41,440	0	
Unenclosed Parking with Elevator	1,450,720	0	
Total	13,242,360	11,278,900	

Source: Illingworth & Rodkin, Inc. 3625 Peterson Way Office Development Air Quality and GHG Assessment. March 15, 2018.

The proposed project would result in a net increase of 5,477 net new daily trips (refer to *Section 3.17, Transportation*). The total annual VMT for the project would be approximately 12,546,532 miles.³⁶ It is estimated that the proposed development would consume approximately 570,301 gallons of gasoline per year.³⁷

Construction

The anticipated construction schedule assumes that the project would be built over a period of up to 24 months, starting in April 2021 and finishing in March 2023. The project would require demolition, site preparation, grading, trenching, building construction, architectural coating, and paving. The overall construction schedule and process is already designed to be efficient in order to

³⁶ Illingworth & Rodkin, Inc. *3625 Peterson Way Office Development Air Quality and GHG Assessment*. July 20, 2019.

 $^{^{37}}$ 12,546,632 VMT / 22.0 mpg = 570,301 gallons of gasoline.

avoid excess monetary costs. That is, equipment and fuel would not be used wastefully on the site because of the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, the opportunities for future efficiency gains during construction are limited. The proposed project, however, does include several measures that would improve the efficiency of the construction process. Implementation of BAAQMD BMPs (BAAQMD construction BMPs are detailed in Section 3.3, Air Quality) would restrict equipment idling times to five minutes or less and would require the applicant to post signs on the project site reminding workers to shut off idle equipment.

Energy is consumed during construction because the use of fuels and building materials are fundamental to construction of new buildings. However, energy would not be wasted or used inefficiently by construction equipment and waste from idling would be further reduced with implementation of the identified BMPs in *Section 3.3, Air Quality.* (Less Than Significant Impact)

Operation

The proposed project would be required to be built in accordance to CALGreen requirements, which includes insulation and design provisions to minimize wasteful energy consumption. Though the proposed project does not include on-site renewable energy resources, the proposed project would be built to achieve a minimum of 50 points through the GreenPoint Rated certification system or the equivalent of LEED Gold standards.

The nearest bus stops are located along Scott Boulevard at Garrett Drive, Oakmead Village Drive, and Lakeside Drive and at the intersection of Bowers Avenue/Scott Boulevard, approximately a halfmile walking distance from the project site. The proposed project would be required to provide a total of 115 bicycle parking spaces (86 long-term and 29 short-term spaces), consistent with the City's bicycle parking requirement. The project proposes 60 short-term bicycle parking spaces and 180 long-term bicycle parking spaces, which exceeds the City's requirement. The inclusion of bicycle parking and proximity to transit would incentivize the use of alternative methods of transportation to and from the site. Based on the requirements to meet LEED Gold standards, the proposed project would comply with Title 24 and CALGreen standards. **(Less Than Significant Impact)**

Impact EN-2:The project would not conflict with or obstruct a state or local plan for
renewable energy or energy efficiency. (Less than Significant Impact)

The project would be consistent with the policies described in Section 3.6.3. In addition, project would comply with Title 24 and CalGreen and, therefore, would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (Less Than Significant Impact)

Impact EN-3:The project would not result in a substantial increase in demand upon energy
resources in relation to projected supplies. (Less than Significant Impact)

Operation of the project would consume energy for multiple purposes including building heating and cooling, lighting, and appliance use. Additionally, operational energy would be consumed by employee vehicle use to and from the site. The table below compares the energy use under project conditions with the energy use under existing conditions.

Table 3.6-1: Estimated Annual Energy Use of Proposed Development					
Proposed DevelopmentElectricity Use (kWh)Natural Gas Use (kBtu)Gasoline (gallons)					
Existing Development	1,886,000	5,850,000	99,415		
Proposed Development 13,242,360 11,278,900 570		570,301			
Net Increase: 11,356,360 5,428,900 470,886					
Source: Illingworth & Rodkin Inc. 3625 Peterson Way Office Development Air Quality and GHG Assessment					

Source: Illingworth & Rodkin, Inc. *3625 Peterson Way Office Development Air Quality and GHG Assessment*. July 20, 2019.

As shown in the table above, implementation of the development would increase electricity use by approximately 11,356,360 kWh per year, natural gas usage by approximately 5,428,900 kBtu and gas consumption by approximately 470,886 gallons.

The project would be built to the most recent CALGreen requirements and Title 24 energy efficient standards, which would improve the efficiency of the overall project. Due to population increases, it is estimated that future demand in California (for electricity) will increase by approximately one percent each year through 2027. Efficiency and production capabilities would help meet increased electricity demand in the future, such as improving energy efficiency in existing and future buildings, establishing energy efficiency targets, inclusion of microgrids and zero-net energy buildings, and integrating renewable technologies.³⁸ As a result, the project's increase in electricity use would not result in a significant increase in demand on electrical energy resources in relation to projected supplies statewide.

In 2016, California consumed approximately 2.2 billion MBtu of natural gas. Based on the relatively small increase in natural gas demand (approximately 5,970,200 kBtu annually) compared to the growth trends in natural gas supply and the existing available supply in California, the proposed project would not result in a substantial increase in natural gas demand relative to projected supply. **(Less Than Significant Impact)**

Project trips would increase gasoline use by 470,886 gallons per year compared to existing conditions. This increase is small when compared to the 15 billion gallons of gasoline consumed in California in 2017. The project's gasoline use would likely be reduced given its proximity to existing transit and implementation of requisite the TDM Plan. Therefore, implementation of the project would not result in a substantial increase on transportation-related energy uses. (Less Than Significant Impact)

³⁸ California Energy Commission. "2016 Integrated Energy Policy Report." Accessed November 12, 2018. <u>http://www.energy.ca.gov/2016_energypolicy/</u>.

3.6.3 <u>Consistency with Plans</u>

Santa Clara General Plan

The General Plan includes the following energy policies applicable to the proposed project.

Energy

Policy 5.10.3-P4: Encourage new development to incorporate sustainable building design, site planning and construction, including encouraging solar opportunities.

<u>Consistency</u>: The project would be constructed consistent with the CALGreen building code and Title 24 requirements. Therefore, the proposed project is consistent with Policy 5.10.3-P4.

Policy 5.10.3-P5: Reduce energy consumption through sustainable construction practices, materials, and recycling.

Consistency: The project would salvage or recycle discarded building materials (i.e., existing building and hardscape and remnant materials from construction) to reduce the amount of demolition and construction waste going to the landfill, in accordance with the City's construction and demolition ordinance. The project would achieve a minimum of 50 points through the GreenPoint Rated certification system or the equivalent of LEED Gold standards and would include the following green building measures:

- Provide access (within walking distance) to existing public transit;
- Design and construct buildings in conformance with the Title 24 and CALGreen to promote energy and water efficiency;
- Plant trees to reduce the heat island effect;
- Design and construct buildings with low emitting interior building materials (e.g., flooring, ceilings);
- Plant vegetation that requires low water usage;
- Provide for use of electrical lawn and garden equipment; and
- Institute recycling services on-site to reduce solid waste disposal.

Therefore, the proposed project is consistent with Policy 5.10.3-P5.

3.6.3.1 *Cumulative Impacts*

Impact EN-C:The project would not result in a cumulatively considerable contribution to a
significant energy impact. (Less than Significant Cumulative Impact)

The geographic area for cumulative energy impacts is the State of California. Past, present, and future development projects contribute to the state's energy impacts. If the project is determined to have a significant energy impact, it is concluded that the impact is cumulatively considerable. As discussed under Impact EN-1, EN-2, and EN-3, the project would not result in significant energy

impacts. Therefore, the project would not have a cumulatively considerable contribution to a significant cumulative energy impact. (Less than Significant Cumulative Impact)

3.7 GEOLOGY AND SOILS

The following discussion is based in part upon a Soil Resource Report generated from the Natural Resources Conservation Service's website in February 2018. A copy of the report is attached in Appendix C of this EIR.

3.7.1 <u>Environmental Setting</u>

3.7.1.1 Regulatory Framework

State

Alquist-Priolo Earthquake Fault Zoning Act

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

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed in 1990 following the 1989 Loma Prieta earthquake. The SHMA directs the California Geological Survey 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 requires the inclusion of measures to reduce earthquake-related hazards.

California Building Standards Code

The California Building Standards Code (CBC) contains the regulations that govern the construction of buildings in California and prescribes standards for constructing safer buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires that a site-specific geotechnical investigation report be prepared by a licensed professional for proposed developments to evaluate seismic and geologic conditions that may affect a project, such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years; the current version is the 2016 CBC.

California Division of Occupational Safety and Health Regulations

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

Paleontological Resources Regulations

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

Local

City Code

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

3.7.1.2 Existing Conditions

Regional Geology

The project site is located in the Santa Clara Valley, a relatively flat alluvial basin, bounded by the Santa Cruz Mountains to the southwest and west, the Diablo Mountain Range to the east, and San Francisco Bay to the north. The Santa Clara Valley consists of a large structural basin containing alluvial deposits from the Diablo Range and Santa Cruz Mountains.

Native soil underlying the project site are classified as urban land.³⁹ Expansive near-surface soils are subject to volume changes during seasonal fluctuations in moisture content, which may cause movement and cracking of foundations, pavements, slabs, and below-grade walls. Based on previous studies of nearby properties, soils beneath the project site have moderate to high expansion potential.⁴⁰ Due to the flat topography of the project site, the potential for erosion or landslide to occur on or adjacent to the site is low.

Seismicity

The San Francisco Bay Area is classified as Zone 4 for seismic activity, the most seismically active region in the United States. Based on a 2015 forecast completed by the United States Geological Survey (USGS), there is a 72 percent probability of experiencing at least a magnitude 6.7 earthquake during the next 30 years.⁴¹ The project area is not located within the Alquist-Priolo Earthquake Fault

³⁹ United States Department of Agriculture. "Web Soil Survey." Accessed February 20, 2018. <u>https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm</u>.

⁴⁰ City of Santa Clara. 3535 Garrett Drive Office Initial Study. November 2015.

⁴¹ United States Geological Survey. "UCERF3: A New Earthquake Forecast for California's Complex Fault System." Accessed February 20, 2018. <u>https://pubs.usgs.gov/fs/2015/3009/pdf/fs2015-3009.pdf</u>.

Zone⁴² or the Santa Clara County Geologic Hazard Zone⁴³. There are no active faults within the City; therefore, fault rupture is very low. Active faults near the project site are shown in Table 3.7-1 below.

Table 3.7-1: Active Faults Near the Project Site		
Fault Distance from Site		
Hayward	8.0 miles north	
Calaveras	10.6 miles east	
San Andreas	10.3 miles west	

Liquefaction

Liquefaction occurs when water-saturated soils lose structural integrity due to seismic activity. Soils that are most susceptible to liquefaction are loose to moderately dense, saturated granular soils with poor drainage. The project site is located within a potential liquefaction zone⁴⁴ and has moderate potential for liquefaction.⁴⁵

Lateral Spreading

Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal ground movement of flat-lying soil deposits towards a free face (i.e., a deep excavation, a river channel, or an open sea). The nearest waterway is Calabazas Creek, located approximately 800 feet west of the project site. At this distance, the potential for lateral spreading is low.

Groundwater

Groundwater levels fluctuate seasonally depending on the variations in rainfall, irrigation from landscaping, and other factors. Groundwater has been encountered at the project site at approximately 7.5 to 10 feet below the ground surface (bgs).

Paleontological Resources

As discussed in Section 3.7.1.1, paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. The project site is underlain by Holocene deposits.⁴⁶ Geologic units of Holocene age are generally not considered sensitive paleontological resources because biological remains younger than 10,000 years are not usually considered fossils; however, these recent sediments overlie sediments of older Pleistocene sediments with high potential

⁴² California Department of Conservation. "CGS Information Warehouse: Regulatory Maps." Accessed February 20, 2018. <u>http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps</u>.

⁴³ Santa Clara County, *Santa Clara County Geologic Hazard Zones. Map 19.* Accessed February 20, 2018. <u>https://www.sccgov.org/sites/dpd/DocsForms/Documents/GEO_GeohazardATLAS.pdf</u>.

⁴⁴ Santa Clara County, *Santa Clara County Geologic Hazard Zones. Map 19.* Accessed February 20, 2018. https://www.sccgov.org/sites/dpd/DocsForms/Documents/GEO_GeohazardATLAS.pdf.

⁴⁵ City of Santa Clara. *3535 Garrett Drive Office Initial Study*. November 2015.

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

to contain paleontological resources.⁴⁷ These older sediments, often found at depths of 10 feet or more below the ground surface, have yielded the fossil remains of plants and extinct terrestrial Pleistocene vertebrates.

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

3.7.2 Impact Discussion

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

- 1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?
 - Strong seismic ground shaking?
 - Seismic-related ground failure, including liquefaction?
 - Landslides?
- 2) Result in substantial soil erosion or the loss of topsoil?
- 3) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
- 4) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?
- 5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?
- 6) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

3.7.2.1 Project Impacts

Impact GEO-1:The project would not directly or indirectly cause potential substantial adverse
effects, including the risk of loss, injury, or death involving rupture of a
known earthquake fault, as delineated on the most recent Alquist-Priolo
Earthquake Fault Zoning Map issued by the State Geologist for the area or
based on other substantial evidence of a known fault; strong seismic ground
shaking; seismic-related ground failure, including liquefaction; or landslides.
(Less than Significant Impact)

⁴⁷ Ibid. City of Santa Clara. Integrated Final EIR for the City of Santa Clara Draft 2010-2035 General Plan. January 20112. Page 323.)

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

The project would be required to adhere to the most recent California Building Code (CBC) and a site-specific geotechnical report, as well as utilize standard engineering techniques to increase the likelihood that the project could withstand minor earthquakes without damage and major earthquakes without collapse. As a result, the proposed project would not expose people or property to significant impacts associated with seismically induced ground failures or other geologic conditions on-site. **(Less Than Significant Impact)**

Impact GEO-2:	The project would not result in substantial erosion or the loss of topsoil (Less
	than Significant Impact with Mitigation Incorporated)

The project would require ground disturbance due to demolition/removal of the existing buildings, grading, and trenching for utilities. Ground disturbance would expose soils and increase the potential for wind or water-related erosion and sedimentation until construction is complete.

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

MM GEO-2.1:	All excavation and grading work would be scheduled in dry weather months or construction sites would be weatherized ⁴⁸ to withstand or avoid erosion.
MM GEO-2.2:	Stockpiles and excavated soils would be covered with secured tarps or plastic sheeting.
MM GEO-2.3:	Vegetation in disturbed areas would be replanted as quickly as possible.

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

Impact GEO-3:	The project would not be located on a geologic unit or soil that is unstable, or
	that would become unstable as a result of the project, and potentially result in
	on- or off-site landslide, lateral spreading, subsidence, liquefaction or
	collapse. (Less than Significant Impact)

The project is not located near any cliffs or mountains and would not result in a significant impact from on- or off-site landslides. The site is not subject to lateral spreading and would not result in significant geological impacts due to lateral spreading. Refer to the response to Impact GEO-1 regarding other geologic conditions. (Less than Significant Impact)

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

Impact GEO-4: The project would not be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property. **(Less than Significant Impact)**

As discussed in Section 3.6.1.2, Existing Conditions, soils on-site have a moderate to high expansion potential. Hazards associated with expansive soils would be reduced and managed with City adopted regulations and policies, in combination with the state building requirements. As a result, development of the proposed project would not expose future occupants of the site or nearby properties to hazards related to expansive soils. (Less Than Significant Impact)

Impact GEO-5:	The project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not
	available for the disposal of wastewater. (No Impact)

The project site is located within a developed urban area of Santa Clara where sewers are available to dispose of wastewater from the project site. Therefore, the project site would not need to support septic tanks or alternative wastewater disposal systems. (No Impact)

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

The project would include trenching/grading for utilities but would not include substantial excavations to 10 feet bgs or greater. It is unlikely that paleontological resources would be discovered on-site given that the site is currently developed, the proposed shallow excavation, and that no paleontological resources have been discovered in this area of Santa Clara. (Less Than Significant Impact)

3.7.2.2 Consistency with Plans

City of Santa Clara General Plan

The General Plan includes the following geology and soils policies applicable to the proposed project.

Safety Policies

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

Consistency: The proposed project would be required to be built in conformance with a sitespecific geotechnical report and the most recent California Building Code standards to address all geologic and seismic related issues on-site. Implementation of MM GEO-2.1, MM GEO-2.2, and MM GEO-2.3 would reduce erosion impacts. Therefore, the project would be consistent with Policy 5.10.5-P5. **Policy 5.10.5-P6:** Require that new development is designed to meet current safety standards and implement appropriate building code to reduce risks associated with geologic conditions.

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

Consistency: The proposed project would be required to be built in conformance with a sitespecific geotechnical report and the most recent California Building Code standards to address all geologic and seismic related issues on-site. Therefore, the project would be consistent with Policies 5.10.5-P6 and 5.10.5-P7.

3.7.2.3 *Cumulative Impacts*

Impact GEO-C:	The project would not result in a cumulatively considerable contribution to	
	significant geology and soils impact. (Less than Significant Cumulative	
	Impact)	

The geographic area for cumulative geological impacts would be locations adjacent to the site, since geological impacts are limited to the project site and adjacent properties. The 2950 Lakeside Drive Hotel (under construction) is adjacent (immediately to the east) of the project site. The proposed office project and adjacent hotel under construction are required to comply with mitigation measures to reduce construction-related erosion impacts. The projects will comply with the California Building Code to reduce seismic-related impacts on people and/or property. Therefore, implementation of the cumulative projects would not result in significant cumulative impact (related to geology and soils) to people and/or property. **(Less Than Significant Cumulative Impact)**

3.8 GREENHOUSE GAS EMISSIONS

The following analysis is based, in part, on an air quality and GHG assessment prepared by *Illingworth & Rodkin, Inc.* in July 2019. A copy of this report can be found in Appendix A of this EIR.

3.8.1 <u>Environmental Setting</u>

3.8.1.1 Background Information

GHG emissions worldwide contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. No single land use project could generate sufficient GHG gas emissions on its own to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects in Santa Clara, the entire state of California, and across the nation and around the world, contribute cumulatively to the phenomenon of global climate change and its associated environmental impacts.

3.8.1.2 *Regulatory Framework*

State

Global Warming Solutions Act

Under the California Global Warming Solution Act, also known as Assembly Bill (AB) 32, the California Air Resources Board (CARB) established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHG, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources.

In 2016, Senate Bill (SB) 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to express the 2030 statewide target in terms of million metric tons of carbon dioxide equivalent (MMTCO2e). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 MMTCO₂e.

Senate Bill 375

SB 375, known as the Sustainable Communities Strategy (SCS) and Climate Protection Act, was signed into law in September 2008. SB 375 builds upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035, as compared to 2005 emissions levels. The per-capita GHG emissions reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission (MTC) partnered with the Association of Bay Area Governments (ABAG), BAAQMD, and Bay Conservation and Development Commission (BCDC) to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is

referred to as Plan Bay Area. Plan Bay Area establishes a course for reducing per-capita GHG emissions through the promotion of compact, high-density, mixed-use neighborhoods near transit, particularly within identified Priority Development Areas (PDAs). The project site is not located within a PDA.⁴⁹

Regional

Bay Area 2017 Clean Air Plan

Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards would be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The City of Santa Clara and other jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing GHG impacts developed by BAAQMD within the CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Local

Santa Clara General Plan

The Santa Clara 2010-2035 General Plan includes policies that address the reduction of GHG emissions. Goals and policies that address sustainability (See Appendix 8.13: Sustainability Goals and Policies Matrix in the General Plan) are aimed at reducing the City's contribution to GHG emissions. As described below, the development of a comprehensive GHG emissions reduction strategy for the City is also included in the General Plan. GHG General Plan policies are listed in *Section 3.7.2.2, Consistency with Plans.*

3.8.1.3 Existing Conditions

The site is currently developed with an office/R&D building. GHG emissions from the site's existing operations are primarily generated from vehicles traveling to and from the site and energy consumption from the building. GHG emissions from the existing site operations is 1,453 metric tons of CO₂ equivalent per year (MT CO₂e/year).

⁴⁹ Association of Bay Area Governments. *Bay Area Plan: Priority Development Area Showcase.* <u>http://gis.abag.ca.gov/website/PDAShowcase/</u>. Accessed October 15, 2018.

3.8.2 Impact Discussion

For the purpose of determining the significance of the project's impact on GHG emissions, would the project:

- 1) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- 2) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

3.8.2.1 Thresholds of Significance

BAAQMD adopted thresholds of significance to assist the review of projects under CEQA. These thresholds were designed to establish the level at which BAAQMD reports GHG emissions would cause significant environmental impacts. The significance thresholds identified by BAAQMD are 1,100 MT of CO₂e per year or 4.6 MT CO₂e per service population per year. In addition, a project that is in compliance with the City's Climate Action Plan (a qualified GHG Reduction Strategy) is considered to have a less than significant GHG impact. The numeric thresholds, however, were to achieve the state's 2020 target of 1990 GHG levels. The project is anticipated to take approximately 24 months to construct, starting in 2021 and completing in 2023. The project, therefore, would be built-out post 2020. Although BAAQMD has yet to publish a threshold for 2030, for the purposes of this EIR, the efficiency metric of 2.6 MT CO₂e per service population per year is utilized. The efficiency threshold of 2.6 MT CO₂e per service population per year needed to meet the 2030 target is based on the GHG reduction goals of SB32/EO B-30-15, and the projected 2030 statewide population and employment levels.⁵⁰

3.8.2.2 Project Impacts

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

GHG emissions associated with development of the proposed project would occur over the shortterm from construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. There would also be long-term operational GHG emissions associated with project traffic, energy and water usage, and solid waste disposal. Emissions for the proposed project are discussed below and were analyzed using the methodology recommended in the BAAQMD CEQA Air Quality Guidelines.

⁵⁰ Sources: 1) Association of Environmental Professionals. "Final White Paper Beyond 2020 and Newhall: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." October 18, 2016. <u>https://www.califaep.org/images/climate-change/AEP-2016_Final_White_Paper.pdf</u>. 2) California

Department of Finance, Demographic Research Unit. "Total Estimated and Projected Population for California and Counties: July 1, 2010 to July 1, 2060 in 5-year Increments." February 2017.

http://www.dof.ca.gov/Forecasting/Demographics/Projections/. 3) Caltrans. "California County-Level Economic Forecast 2017-2050." September 2017.

http://www.dot.ca.gov/hq/tpp/offices/eab/socio_economic_files/2017/FullReport2017.pdf.

Construction Emissions

GHG emissions associated with project construction were computed to be 2,327 MT of CO₂e for the total construction period. These emissions are from on-site operation of construction equipment, vendor and hauling truck trips, and worker trips. Neither the City nor BAAQMD have an adopted threshold of significance for construction related GHG emissions; however, BAAQMD recommends quantifying emissions and disclosing that GHG emissions would occur during construction. Because construction would be temporary (approximately 24 months) and would not result in a permanent increase in emissions, the project would not interfere with the implementation of AB 32 or SB 32.

Operational Emissions

The CalEEMod model and project vehicle trip generation rates were used to predict annual GHG emissions associated with operation of the proposed project. The project would implement a TDM Plan which would reduce emissions resulting from VMT.

The project site is in Transportation District 1 in the Climate Action Plan, which requires that the project reduce VMT by 25 percent. Part of this obligation is to implement TDM measures to reduce VMT by 10 percent (two fifths of the overall VMT reduction requirement), and as a result, would reduce GHG emissions. The project would include the following TDM measures, which would reduce VMT by 10 percent:

- Carpool and vanpool programs;
- Clean air and electric vehicle parking and charging stations;
- Bicycle parking facilities;
- Incentives for alternative modes for transportation (e.g., pre-tax clipper card benefit for transit);
- Emergency ride home program;
- Program monitoring and reporting to determine the success of the TDM program (e.g., annual count of vehicles entering the site and annual reporting to the City); and
- Provide Transportation Coordinator, for the proposed office buildings, who will be responsible for implementing and managing the TDM Plan. The Transportation Coordinator will be a point of contact and will be responsible for ensuring that the employees are aware of transportation options. The Transportation Coordinator will provide the following services:
 - Provide information to employees about the emergency ride home program, the pretax transit benefit;
 - Managing the annual employee survey and driveway counts; and
 - Providing trip planning assistance and/or ride-matching assistance to employees who are considering an alternative mode of transportation.

The project's operational GHG emissions were calculated based on estimates of emissions from several sources, including energy consumption, vehicle trips, solid waste generation, and water usage. As shown in Table 3.8-1, with the implementation of the TDM Plan, the annual emissions resulting from operation of the proposed project was estimated to be 6,553 MT of CO₂e assuming

operations would begin in 2023.⁵¹ Based on the proposed project's service population of 2,705 employees,⁵² the project is estimated to result in a GHG emissions of 2.42 MT CO₂e/year/service population.

Table 3.8-1: Annual Project GHG Emissions			
Source Category	Existing Office (CO ₂ e in Metric Tons)	Proposed Project in 2023 (CO ₂ e in Metric Tons)	
		No TDM	With TDM
Area	<1	1	1
Energy Consumption	506	2,042	2,042
Mobile	769	4,466 ª	4,019ª
Solid Waste Generation	125	322	322
Water Usage	54	169	169
Total	1,453	7,000	6,553
Service Population Emissions		2.59 MTCO ₂ e/Yr./SP	2.42 MTCO ₂ e/Yr./SP
Notes: Yr. = year. MT = metric tons. CO_{2e} = carbon dioxide equivalent. SP = service population			

Notes: Yr. = year, M1 = metric tons, CO_2e = carbon dioxide equivalent, SP = service population ^a The reduction in mobile emissions is based on a 10 percent VMT reduction from TDM Plan implementation.

The project would also include the following features to further reduce GHG emissions:

- Provide access (within walking distance) to existing public transit;
- Design and construct buildings in conformance with the Title 24 and CALGreen to promote energy and water efficiency;
- Plant trees to reduce the heat island effect;
- Design and construct buildings with low emitting interior building materials (e.g., flooring, ceilings);
- Plant vegetation that requires low water usage;
- Provide for use of electrical lawn and garden equipment; and
- Institute recycling services on-site to reduce solid waste disposal.

With or without the implementation of the TDM Plan, the project's operational service population emissions would be below the 2030 "Substantial Progress" efficiency metric of 2.6 MTCO₂e/Yr./service population. Therefore, operation of the proposed project would not result in a significant GHG impact. (Less Than Significant Impact)

⁵¹ Operational GHG emissions results provide a conservative estimate since GHG modeling assumed that there were 370 more parking spaces than what is proposed (therefore, actual mobile emissions generated by the project vehicle trips would be slightly lower).

⁵² Assuming that the project would accommodate a maximum one employee per 250 square feet, the proposed office/R&D development would accommodate approximately 2,705 employees. Illingworth & Rodkin, Inc. *3625 Peterson Way Office Development Air Quality and GHG Assessment*. March 2018, updated July 2019.

Impact GHG-2:The project would not conflict with an applicable plan, policy or regulation
adopted for the purpose of reducing the emissions of GHGs. (Less than
Significant Impact)

2017 BAAQMD Clean Air Plan

As discussed in *Section 3.3 Air Quality*, the project supports the goals of the 2017 CAP for protecting public health and the climate and is consistent with 2017 BAAQMD CAP control measures of reducing exposure to TACs and reducing DPM emissions by:

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

In addition, the project, as proposed, would not disrupt or hinder the implementation of applicable control measures in the 2017 BAAQMD CAP. (Less than Significant Impact)

Santa Clara General Plan

The project is consistent with applicable General Plan policies to reduce GHG emissions by developing an office/R&D development near existing transit, proposing a TDM program, and complying with Title 24 and CALGreen. The General Plan includes the following GHG emissions policies applicable to the proposed project.

General Mobility and Transportation Policies

Policy 5.8.1-P4: Expand transportation options and improve alternate modes that reduce greenhouse gas emissions.

Consistency: The project is within walking distance of public transit and provides bicycle parking spaces. The project would implement a TDM Plan that would include carpool and vanpool programs such as providing preferential parking near the building entrances, passenger loading zone for drop-off and pick-up and on-site ride-matching assistance. The TDM Plan would also include an emergency ride home program that would reimburse employee cost of emergency taxi rides for ridesharing and transit users. The project is, therefore, consistent with Policy 5.8.1-P4.

Policy 5.3.1-P10: Provide opportunities for increased landscaping and trees in the community, including requirements for new development to provide street trees and a minimum 2:1 on- or off-site replacement for trees removed as part of the proposal to help increase the urban forest and minimize the heat island effect.

Consistency: The proposed project would remove approximately 182 trees on-site. The project would plant new trees in accordance with the City's tree replacement policy (refer to Section 3.3, *Biological Resources*) to reduce the urban heat island effect. The project is consistent with Policy 5.3.1-P10.

5.10.3-P4: Encourage new development to incorporate sustainable building design, site planning and construction, including encouraging solar opportunities.

<u>**Consistency</u>**: The project would be constructed consistent with the CALGreen building code and Title 24 requirements. Therefore, the proposed project is consistent with Policy 5.10.3-P4.</u>

5.10.3-P5: Reduce energy consumption through sustainable construction practices, materials and recycling.

Consistency: The project would salvage or recycle discarded building materials (i.e., existing building and hardscape and remnant materials from construction) to reduce the amount of demolition and construction waste going to the landfill, in accordance with the City's construction and demolition ordinance. The project would achieve minimum of 50 points through the GreenPoint Rated certification system of the equivalent of LEED Gold standards and would include the following green building measures:

- Provide access (within walking distance) to existing public transit;
- Design and construct buildings in conformance with the Title 24 and CALGreen to promote energy and water efficiency;
- Plant trees to reduce the heat island effect;
- Design and construct buildings with low emitting interior building materials (e.g., flooring, ceilings);
- Plant vegetation that requires low water usage;
- Provide for use of electrical lawn and garden equipment; and
- Institute recycling services on-site to reduce solid waste disposal.

Therefore, the proposed project is consistent with Policy 5.10.3-P5.

5.10.3-P6: Promote sustainable buildings and land planning for all new development, including programs that reduce energy and water consumption in new development.

<u>**Consistency**</u>: The project will comply with applicable regulations that would result in energy and water efficiency including Title 24 and CALGreen. The project is, therefore, consistent with Policy 5.10.3-P6.

Transportation Demand Management Policies

Policy 5.3.1-P14: Encourage Transportation Demand Management strategies and the provision of bicycle and pedestrian amenities in all new development in order to decrease use of the single-occupant automobile and reduce vehicle miles traveled.

Consistency: The proposed project will implement a TDM Plan which would include measures such as bicycle parking, carpool and vanpool programs, incentives for alternative modes for transportation (e.g., a pre-tax clipper car benefit for transit), and an emergency ride program to decrease VMT and single-occupant vehicle use. The project is consistent with Policy 5.3.1-P14.

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

<u>**Consistency</u>**: The proposed project will implement a TDM Plan to reduce VMT by 10 percent and single-occupant vehicle use. Site measures include carpool and vanpool parking, bicycle storage, and recreational/amenity space. The project is, therefore, consistent with Policy 5.8.5-P1.</u>

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

<u>Consistency</u>: The proposed project will provide on-site bicycle parking and pedestrian paths. The project is, therefore, consistent with Policy 5.8.5-P3.

City of Santa Clara Climate Action Plan

A summary of the project's consistency with applicable Climate Action Plan measures is provided in Table 3.8-1. In accordance with the City's Climate Action Plan, a 25 percent VMT reduction is required for the project. Two-fifths of the VMT reduction (a 10 percent reduction compared to business as usual) is required through implementation of the TDM Plan, and the other 15 percent is required through site design. The project would implement a TDM Plan and the following measures to ensure consistency with the Climate Action Plan.

Table 3.8-1: Summary of Applicable Climate Action Plan Measures and Project Consistency				
A	applicable Climate Action Plan Measures	Notes/Comments		
	Energy Effi	ciency		
2.4	Customer Installed Solar Photovoltaic Systems on Customer-Owned Residential and Nonresidential Projects	Not proposed.		
	Water Conse	ervation		
3.1	Water Conservation: Reduce GHG-Intensive Water Use Practices	The project proposes to integrate water conservation practices, such as installing energy star dishwashers, showerheads, bathroom faucets, toilets, urinals, resource efficient landscapes, and high-efficiency irrigation systems.		
	Waste Reduction			
4.2	Increase Waste Diversion: Recycle, Food Waste Pickup, Construction, and Demolition Waste Programs to Increase Solid Waste Diversion to 80 percent	The proposed project would include recycling services and participate in the City's Construction and Demolition Debris Recycling Program.		
	Off-Road Eq	uipment		
5.1	Provide for Use of Lawn and Garden Equipment Powered by Electricity (Lawn Mowers and Leaf Blowers; Outdoor Outlets)	The project proposes to provide for use of electrical lawn and garden equipment.		
5.2	Use Cleaner Alternative Technologies for Construction Vehicles and Equipment (BAAQMD BMPs)	As discussed in <i>Section 3.3</i> , the project proposes to implement BAAQMD construction BMPs.		
	Transportation a	nd Land Use		
6.1	Transportation Demand Management Programs for Residential Projects More Than 25 Units and Nonresidential Projects More Than 10,000 square feet in Transportation Districts	The project proposes a TDM Plan that would achieve a 10 percent reduction in VMT.		
6.3	Electric Vehicle Parking and Charging Station(s) for Multi-Family Residential or Nonresidential Projects	The project would provide clean air and electric vehicle parking stations.		
	Urban Heat Isl	and Effect		
7.1	Urban Forestry: Shade trees on new developments near south- or west- facing windows.	Per the site plan, the project proposes to have shade trees for south- and west- facing windows.		

Table 3.8-1: Summary of Applicable Climate Action Plan Measures and Project Consistency			
Applicable Climate Action Plan Measures		Notes/Comments	
7.2	Urban Cooling: New parking lots to be surfaced with low-albedo materials to reduce heat gain	While the project would comply with CALGreen, there is currently no specific proposal for cool paving. The project would be inconsistent with Measure 7.2 Urban Cooling.	

3.8.2.3 *Cumulative Impacts*

Impact GHG-C:The project would not result in a cumulatively considerable contribution to a
GHG emissions impact. (Less than Cumulatively Considerable
Contribution to a Significant Cumulative Impact)

Past, present, and future development projects (including the cumulative projects) worldwide contribute to global climate change. No single project is sufficient in size to, by itself, change the global average temperature. Therefore, due to the nature of GHG impacts, a significant project impact is a significant cumulative impact. As discussed under Impacts GHG-1 and GHG-2, the project would not result in significant GHG impact. The project, therefore, would not result in a cumulatively considerable contribution to a GHG impact. (Less than Cumulatively Considerable Contribution to a Significant Cumulative Impact)

3.9 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based in part upon a Phase I Environmental Site Assessment (ESA) completed by *Haley & Aldrich, Inc.* in March 2018. A copy of this report can be found in Appendix D of this EIR.

3.9.1 <u>Environmental Setting</u>

3.9.1.1 Regulatory Framework

Federal and State

Hazardous Materials Overview

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. Federal regulations and policies related to development include the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, and the Resource Conservation and Recovery Act (RCRA). In California, the United States Environmental Protection Agency (U.S. EPA) has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies including the City of Santa Clara Fire Department have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program.

Worker health and safety and public safety are key issues when dealing with hazardous materials. Proper handling and disposal of hazardous material is vital if it is disturbed during project construction. The California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) enforces state worker health and safety regulations related to construction activities. Regulations include exposure limits, requirements for protective clothing, and training requirements to prevent exposure to hazardous materials. Cal/OSHA also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement.

Asbestos-Containing Material and Lead Paint Regulations

Friable asbestos is any asbestos containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl asbestos floor tiles, and transite siding made with cement. Use of friable asbestos products was banned in 1978. National Emission Standards for Hazardous Air Pollutants (NESHAP) guidelines require that potentially friable ACMs be removed prior to building demolition or remodel that may disturb the ACMs.

The U.S. Consumer Product Safety Commission banned the use of lead-based paint in 1978. Removal of older structures with lead-based paint is subject to requirements outlined by Cal/OSHA Lead in Construction Standard, Title 8, California Code of Regulations 1532.1 during demolition activities. Requirements include employee training, employee air monitoring, and dust control. If lead-based paint is peeling, flaking, or blistered, it is required to be removed prior to demolition.

California Accidental Release Prevention Program (CalARP)

The California Accidental Release Prevention (CalARP) Program aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond the boundaries of property. Facilities that are required to participate in the CalARP program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released. The City of Santa Clara Fire Department reviews CalARP risk management plans as the Certified Unified Program Agency (CUPA).

Local

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

The Norman Y. Mineta San José International Airport (Airport) is located approximately 2.2 miles southeast of the project site. Given this distance, the project site is not located within the Airport Influence Area (AIA) of the Airport, as defined by the Comprehensive Land Use Plan (CLUP).

Federal Aviation Administration Regulations

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

Santa Clara Emergency Operations Plan

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

3.9.1.2 *Existing Conditions*

Project Site

The 14.5-acre project site is approximately 33 feet above mean sea level (amsl) with a topographic gradient sloping northwest. Groundwater in the project area flows in the northeast direction. Based on previous groundwater monitoring activities, groundwater has been encountered at the site at approximately 7.5 to 10 feet bgs. Fluctuations in groundwater levels may occur seasonally and over a period of years due to precipitation, temperature, and irrigation.

The site is currently developed with a two-story, 218,375 square foot office building and paved surface parking. The ground floor of the office building is used for office space and manufacturing. The second floor contains some office space and a large area occupied by duct work and utilities in

support of the manufacturing processes. A loading dock is located at the northeast corner of the building; and a large equipment pad, containing mechanical and electrical infrastructure, is located at the southeast corner of the building. Spectra-Physics currently occupies 139,480 square feet of space in the building; Cephea Valve Technologies currently occupies 6,200 square feet of space. The remainder of the building is currently vacant.

A variety of chemicals are used by tenants for manufacturing processes. Chemicals and chemical wastes are stored in small quantities in clean rooms and in the manufacturing areas; bulk chemicals and chemical wastes are stored in metal bunkers in a loading dock area. Based on a site reconnaissance, a drum that contained epoxy, isopropanol and toluene was placed in a chemical storage bunker. Solid wastes (e.g., discarded pieces of electronic/mechanical equipment) were stored in drums in a fenced area adjacent to the loading dock. A room labeled 'flammables' was located on an equipment pad and contained several metal storage cabinets. The cabinets contain one- and five-gallon containers of paint.

Large above-ground storage tanks, containing liquefied nitrogen and argon, were located next to the equipment pad. An emergency generator with a self-contained 660-gallon diesel fuel tank was located on the equipment pad at the southeast corner of the building.

Surrounding Properties

The project site is in an office/R&D and commercial area and is surrounded by a hotel and commercial office building to the north, Peterson Way and office buildings to the west, an existing office building and a hotel under construction to the east, and Tannery Way, office buildings and parking structures to the south.

3.9.1.3 *Historic Conditions*

As part of the Phase I ESA, a land use history of the site and surrounding uses was compiled based on historical topographic maps, Environmental Data Resources (EDR) City Directory records, historical aerial photographs provided by EDR, available Sanborn Fire Insurance maps, and other available documents.

Project Site

No crops or structures associated with agricultural use were visible in the aerial photographs reviewed as a part of the Phase I ESA. Nevertheless, given the history of agricultural uses in the project area, the project site may have been used for agricultural purposes from 1939 to 1953. The site was re-graded in the 1950s. The project site remained vacant until 1979, when the current building was constructed.

Surrounding Properties

The surrounding properties were used for agricultural purposes from 1939 to 1974. By 1979, commercial buildings surrounded by parking lots had been constructed to the west and south. In 1982, the properties to the east contained an office building and restaurant and properties to west and south were developed with commercial buildings. By 1993, the hotel and commercial office building to the north, and office buildings to the west were constructed. In 1998, the property immediately to

the south of Tannery Way was vacant; the current office buildings were constructed on this property by 2015.

3.9.1.4 *Contamination Sources*

Potential On-site Contamination Sources

A review of environmental databases and records managed by federal, state, and local agencies was completed for the project site and surrounding properties within a mile of the site. The review was completed as a part of the Phase I ESA to identify hazardous materials or chemical concerns on the site and surrounding properties. The project site was listed in numerous environmental databases as shown in Table 3.9-1.

Table 3.9-1: Project Site Listings on Regulatory Databases			
Database Listing	Site Description	Potential Impact	
GeoTracker (RWQCB)	There is an open cleanup program site for Advanced Micro Devices listed on the GeoTracker website. The cleanup status history indicates the case was eligible for closure on January 25, 2016 and has a reported status of "Open-Inactive" as of April 12, 2016.	This case is related to upgradient Freon-113 impacts to groundwater that historically affected the project site (refer to Table 3.9-2 in this EIR). This constitutes a historically recognized environmental condition (HREC).	
The Superfund Enterprise Management System Archive (SEMS- ARCHIVE)	The project site (Signetics Technology) is listed in the SEMS-ARCHIVE database. Archived status indicates that, to the best of the U.S. EEPA's knowledge, assessment at a facility has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL). ⁵³ The list was formerly known as the CERCLIS-NFRAP.	The listing is related to the GeoTracker case above (impacts of site's groundwater from the 3333 Scott Blvd. property upgradient to the site).	
CA SPILLS 90	The Spills 90 database includes spill and release records, including chemical, oil and/or hazardous substance spills, recorded after 1990. The database entry lists the RWQCB as the lead agency and no information related to soil remediation	Because this case is closed, this incident is not considered an environmental concern for the site or project area.	

⁵³ The National Priorities List (NPL) is the list of sites of national priority among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The NPL is intended to guide the U.S. EPA in determining which sites warrant further investigation. U.S. EPA. *Superfund: National Priorities List (NPL)*. Accessed July 24, 2019. https://www.epa.gov/superfund/superfund-national-priorities-list-npl

Table 3.9-1: Project Site Listings on Regulatory Databases			
Database Listing	Site Description	Potential Impact	
	and/or well closures are reported. The case status for the subject site is closed. The last agency update was in 1992.		
RCRA NonGen/NLR	As of June 1993, the tenant occupying the project site (Signetics) was categorized as a non-generator of hazardous waste. No violations were reported.	No indication of a release.	
RCRA-LQG	The project site (Advanced Cardiovascular Systems) was listed as a Large Quantity Generator (LQG) as of January 1994 for ignitable waste, spent nonhalogenated solvents, and methanol or methyl alcohol. No violations were reported.	No indication of a release.	
EMI	The project site is listed in the emissions inventory (EMI) database and entries include emissions data from 1990 to 2015. No violations related to the reported emissions was reported.	No indication of a release.	
HAZNET	The project site is listed in the HAZNET database for waste disposal of inorganic solid waste; organic solid waste, aged, or surplus organics; waste oil and mixed oil; halogenated solvents; asbestos-containing waste and several other waste categories. No violations related to the generation and/or disposal have been reported for the project site.	No indication of a release.	
FINDS	The project site is listed in the FINDS database under the Environmental Interest/Information System, which refers to other environmental databases (i.e. RCRA) for information.	No indication of a release.	
Enforcement & Compliance History Information (ECHO)	The ECHO database indicates Advanced Micro Devices was an "inactive" generator of hazardous waste (3625 Peterson Way) with no compliance violations reported; and Advanced Cardiovascular Systems (3635 Peterson Way) was an "active" LQG of hazardous waste with no compliance violations reported.	No indication of a release.	

Asbestos and Lead-Based Paint

The existing office building was constructed in 1979. Although the existing office building was built a year later than the ban on the use of ACMs and lead-based paint on buildings, it is reasonable to assume that ACMs and/or lead-based paints are still present in the building.

Off-site Potential Contamination Sources

Several sites were listed in the regulatory databases within one mile of the site or identified in regulatory records reviews. Facilities adjacent/near the project site are listed in Table 3.9-2 based on their distance from the site, hydrologic gradient, and/or regulatory status.

Table 3.9-2: Off-Site Hazardous Materials Sites			
Database Listing Site Address and Business Name	Site Description	Potential Impact to Project Site	
GeoTracker SEMS Magnetic Peripherals/Unisys Corp/ Menlo Equities 3333 Scott Boulevard 700 feet south Upgradient	In 1983, volatile organic compounds (VOCs) including trichloroethene (TCE) and Freon-113 were detected in groundwater in the vicinity of a former chemical storage area; 1,1,1- trichloroethane (TCA), TCE, Freon-113, chloroform and methyl-ethyl ketone (MEK) were also detected in groundwater in the vicinity of a former underground storage tank (UST) farm at the facility. In 1985 and 1986, the USTs and piping were removed. No sources of contamination were identified during removal of the USTs.	In 1988, low levels of Freon-113 (5.1, 55, and 92 parts per billion) were identified at three on-site groundwater which were attributed to this upgradient facility. All concentrations were below regulatory drinking water standards, ⁵⁴ state action levels, and/or groundwater protection	
	Historically, three VOC groundwater plumes have been associated with this property (a TCE plume, a cis-1,2- dichloroethene (DCE), and Freon-113 plume). In 1993, the RWQCB issued Order No. 93-163 (1993 Order) for this site. The order notes that a VOC plume underlies the site and continued groundwater monitoring and	facility has impacted the project site in the past, but concentrations have been reduced and no longer impact the project site. Additionally, a plume boundary map from the	
	continued groundwater monitoring and remediation is required. In 2006, the	1993 Order showed Freon-113 concentration	

 $^{^{54}}$ Freon 113 maximum contaminant level = 1,200 parts per billion (ppb) and public health goal = 4,000 ppb for the U.S. EPA's drinking water standards.

U.S. EPA. Drinking Water Standards and Health Advisories Table. November 2009. Accessed July 24, 2019. https://19january2017snapshot.epa.gov/www3/region9/water/drinking/files/dwshat-v09.pdf.

Table 3.9-2: Off-Site Hazardous Materials Sites			
Database Listing Site Address and Business Name	Site Description	Potential Impact to Project Site	
	RWQCB issued a no further action (NFA) letter indicating that VOC concentrations were low, and the groundwater plume was small and stable. Natural degradation processes have further reduced VOC concentrations over time.	remain within the 3333 Scott Boulevard facility boundaries and are not affecting downgradient sites.	
NPL Intel Magnetics 3000 Oakmead Village Drive 2,855 feet south Upgradient	The Intel Magnetics property is a one- acre facility that produced and tested magnetic products and computer memories. Monitoring wells on the property were contaminated with VOCs, which resulted from surface spills and a leak from an underground storage tank. The pumping and treating of contaminated groundwater have reduced contaminant concentrations, minimizing the potential of exposure to contaminated groundwater at the Intel Magnetics site. Monitoring will continue until established cleanup goals are met.	Given that VOCs were not detected in groundwater samples at the project site and that VOC concentrations are declining, it is unlikely that contamination from this NPL site would currently impact the project site.	
NPL Applied Materials 3050 Bowers Avenue 2,213 feet southeast Upgradient	This facility has been used to manufacture equipment for the fabrication of semiconductor wafers from 1974 to present. During the 1970s, VOCs were used as industrial solvents for cleaning and degreasing. Groundwater extraction began in 1985 and continued through December 2002 when the extraction system was discontinued due to declining contaminant concentrations. Since 2002, monitoring of the plume stability and chemical attenuation processes have continued.	Given that VOCs were not detected in groundwater samples at the project site and that VOC concentrations are declining, it is unlikely that contamination from this NPL site would currently impact the project site.	

Table 3.9-2: Off-Site Hazardous Materials Sites			
Database Listing Site Address and Business Name	Site Description	Potential Impact to Project Site	
NPL National Semiconductor Corporation/ Texas Instruments 2900 Semiconductor Drive, Santa Clara 2,364 feet southwest Crossgradient	The corporation manufactures electronic equipment at this 50-acre site. USTs, sumps, and pipes are the suspected sources for contaminated groundwater and soil. Since 1982, the corporation has closed its leaking tanks, instituted a groundwater pump and treat system, and removed contaminated soil from selected areas of the facility. The contaminants of concern are VOCs (primarily chlorinated organic solvents), which, along with other nearby NPL sites, have contaminated a common groundwater area. Although these nearby sites are listed separately on the NPL, the cleanup activities at some of the sites are being coordinated as part of an area-wide cleanup approach.	Given that VOCs were not detected in groundwater samples at the project site and that VOC concentrations are declining, it is unlikely that contamination from this NPL site would currently impact the project site.	
Synertek, Inc. (Building 1) 3050 Coronado Blvd. 2,660 feet southeast Crossgradient NPL	Prior to 1985, Synertek constructed and operated two underground tank systems east of the building. One 200-gallon- capacity solvent tank was used for storing solvents between 1976 and 1982 and three former neutralization system tanks were used between 1974 and 1982 as holding tanks. These tanks stored a variety of chemicals, including chlorinated solvents. The tanks leaked VOCs into the soil. The quantity of solvents released by these tanks and the dates of the releases are unknown. These tanks, along with the affected soils, were removed in 1985. A groundwater pump and treat system was in operation at the site from 1987 to 2000. In 2011, additional groundwater treatment was initiated on-site using	Given that VOCs were not detected in groundwater samples at the project site and that VOC concentrations are declining, it is unlikely that contamination from this NPL site would currently impact the project site.	

Table 3.9-2: Off-Site Hazardous Materials Sites		
Database Listing Site Address and Business Name	Site Description	Potential Impact to Project Site
	enhanced in-situ bioremediation to further reduce VOC concentrations in the groundwater on-site and to enhance natural attenuation processes.	
RCRA-LQG RCRA-SQG Abbott Cardiovascular 3200 Lakeside Drive, Santa Clara, 55 feet Northwest, Downgradient	This facility has been categorized as a small quantity generator and a large quantity generator of hazardous waste, and has received general, written informal violations in 2003 and 2008. No reported releases are noted.	There are no recorded releases from the 3200 Lakeside Drive property. It is unlikely that this property would impact the project site, given the property is downgradient of the project site.

Vapor Encroachment/Migration

Groundwater samples for VOCs, as well as benzene, toluene, ethylbenzene, xylene (collectively referred to as BTEX) and petroleum hydrocarbons were analyzed for the project site in 1996. BTEX and petroleum hydrocarbons were not detected; the only VOC detected was acetone, which had a concentration below the applicable regulatory screening levels for groundwater vapor intrusion human health risk (commercial/industrial).

Additionally, the project site is not within a critical distance to any other known soil or groundwater plumes. The critical distance is 100 feet for non-petroleum hydrocarbon contaminants and 30 feet for petroleum hydrocarbon contaminants. Based on Phase I ESA records review, there is no potential source of vapor migration beneath the project site.

3.9.1.5 *Other Hazards*

Airports

The nearest airport to the site project site the Norman Y. Mineta San José International Airport, approximately 2.2 miles southeast of the site. Development within the AIA could be subject to hazards from aircraft and pose hazards to aircraft traveling to and from the airport. The AIA is a composite of areas surrounding the airport that are affected by noise, height and safety considerations. These hazards are addressed in federal and state regulations as well as in land use

regulations and policies in the CLUP. The project site is not located within the AIA nor the safety zones designated by the CLUP.

Based on Federal Aviation Administration (FAA) FAR Part 77 regulations, any proposed structure of a height greater than approximately 130 feet in height above the ground surface is required to be submitted to the FAA for airspace safety review.⁵⁵ The proposed eight-story office buildings would be approximately 129.5 feet tall to the top of the parapet and 138.5 feet tall to the top of the roof screen. Since the maximum height of the structures is above 130 feet tall, the project applicant would be required to submit the proposed project to the FAA for airspace safety review.

Wildfire Hazards

The project site is located in an urbanized area of Santa Clara. According to the California Department of Forestry and Fire Protection (CAL FIRE), the project site is not located within a moderate, high, or very high fire hazard severity zone.⁵⁶

3.9.2 Impact Discussion

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

- 1) Create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials?
- 2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- 3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- 4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- 5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?
- 6) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- 7) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

⁵⁵ Norman Y. Mineta San José International Airport. *Notice Requirement Criteria for Filing FAA Form 7460-1*. 2013.

⁵⁶ CAL FIRE. "Draft Fire Hazard Severity Zones." Accessed November 12, 2018. <u>http://frap.fire.ca.gov/webdata/maps/statewide/fhszl06_1_map.jpg</u>.

3.9.2.1 *Project Impacts*

Impact HAZ-1: The project would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials. (Less than Significant Impact)

Site Operation

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

Impact HAZ-2:The project would not create a significant hazard to the public or the
environment through reasonably foreseeable upset and accident conditions
involving the release of hazardous materials into the environment. (Less than
Significant Impact with Mitigation Incorporated)

Site Operation

The project site is listed on the State Water Resources Control Board's (SWRCB's) Geotracker database of potentially hazardous materials sites (pursuant to Government Code Section 65962.5). Freon-113 and VOCs (including TCE) were detected in previous groundwater samples collected at the site. The RWQCB established a cleanup program in 1988 and concentrations of Freon and VOCs were reduced to nonhazardous levels. In October 1988, the RWQCB issued a no further action letter and the site became eligible for case closure in January 2016. In March 2019, the SWRCB reviewed previous groundwater sample results and investigations at the site (for Freon and VOCs) and concurred that no further remedial investigation was required. The SWRCB issued a case closure for the project site on March 14, 2019. Since previous sample results show that concentrations of Freon and VOCs in groundwater at the site were not above regulatory standards or background concentrations and the status of the case is closed, construction and operations at the site would not result in a hazard to the public or environment due to hazardous chemicals on-site. **(Less Than Significant Impact)**

Project Construction

Agricultural Chemicals

Given the project site could have been used for agricultural purposes until the 1950's and surrounding properties were used for agricultural purposes until the 1970's, there is potential that agricultural chemicals, such as pesticides, herbicides and fertilizers, were used on site. Soils on-site and groundwater beneath the site could potentially be contaminated with agricultural chemicals, which could be released into the environment and expose construction workers and adjacent land uses to contamination.
Impact HAZ-1: The surface and sub-surface soils on-site could be contaminated due to past agricultural operations. Implementation of the project could expose construction workers and adjacent land uses to residual agricultural soil contamination. (Significant Impact)

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

- MM HAZ-1.1: Prior to demolition and excavation of the project site, a limited Phase II
 Environmental Site Assessment (Phase II ESA) will be completed to
 determine if agricultural chemicals are present in the soil and groundwater at
 the site. The site will be sampled for CAM 17 Metals, pesticides, TPH-G,
 BTEX, and 5-Oxygenates. Phase II ESA sampling activities shall be
 coordinated with the Santa Clara Fire Department.
- **MM HAZ-1.2:** Following demolition and removal of pavement, soil samples will be gathered from the site and sent for laboratory analyses to evaluate appropriate disposal alternatives. The analyses would include but not be limited to organochlorine pesticides, lead, petroleum hydrocarbons, and other metals. Sampling will occur prior to the issuance of grading permits.
- MM HAZ-1.3: In the event that impacted soil is identified on-site, the Director of Community Development shall be notified and the lateral and vertical extent of soil containing contaminant concentrations greater than the San Francisco Bay Regional Water Quality Control Board's (RWQCB's) environmental screening levels (ESLs) will be notified. Sample results shall be submitted to the Santa Clara Fire Department for review.

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

Implementation of the identified mitigation measures would reduce the risk of construction worker and adjacent land use exposure to residual agricultural contaminated soils and/or groundwater. In addition, dust control measures would be implemented during all applicable phases of construction (refer to Section 3.3, Air Quality of this EIR). For these reasons, adjacent land uses and construction workers would not be exposed to contaminated soils and/or groundwater. **(Less Than Significant Impact with Mitigation Incorporated)**

Asbestos Containing Materials/ Lead-based Paint

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

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

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

The project would be required to conform to the following regulatory programs and to implement the following measures to reduce impacts construction works, due to the presence of ACMs and/or lead-based paint, to a less than significant level:

- In conformance with state and local laws, a visual inspection/pre-demolition survey, and possible sampling, shall be conducted prior to the demolition of on-site buildings to determine the presence of asbestos-containing materials and/or lead-based paint.
- Prior to demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal/OSHA Lead in Construction Standard, Title 8, California Code of Regulations 1532.1, including employee training, employee air monitoring, and dust control. Any debris or soil containing lead-based paint or coatings would be disposed of at landfills that meet acceptance criteria for the waste being disposed.
- All potentially friable ACMs shall be removed in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to any building demolition or renovation that may disturb the materials. All demolition activities will be undertaken in accordance with Cal/OSHA standards contained in Title 8 of CCR, Section 1529, to protect workers from exposure to asbestos.
- A registered asbestos abatement contractor shall be retained to remove and dispose of ACMs identified in the asbestos survey performed for the site in accordance with the standards stated above.
- Materials containing more than one percent asbestos are also subject to BAAQMD regulations. Removal of materials containing more than one percent asbestos shall be completed in accordance with BAAQMD requirements.

Conformance with the aforementioned regulatory requirements would ensure project construction would not create a significant hazard to the public or the environment from accident conditions involving the release of hazardous materials (i.e., asbestos and lead) into the environment. (Less Than Significant Impact)

Impact HAZ-3: The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (No Impact)

There are no schools within one quarter mile of the site. The nearest school to the site is Fairwood Elementary School located at 1110 Fairwood Avenue in Sunnyvale, approximately 0.75 miles northwest of the site. Given the distance of the site from the nearest school, the project would not have a hazardous materials impact on nearby schools. (No Impact)

Impact HAZ-4:	The project would not be located on a site which is included on a list of
	hazardous materials sites compiled pursuant to Government Code Section
	65962.5 and, as a result, create a significant hazard to the public or the
	environment. (No Impact)

The project is not included on a list of hazardous materials sites pursuant to Government Code Section 65962.5.⁵⁷ The SWRCB issued a case closure for the project site on March 14, 2019. (**No Impact**)

Impact HAZ-5: The project would not result in a safety hazard or excessive noise for people residing or working in the project area. (Less than Significant Impact)

The nearest airport to the site project site the Norman Y. Mineta San José International Airport, approximately 2.2 miles southeast of the site. Development within the AIA can be subject to hazards from aircraft and pose hazards to aircraft traveling to and from the airport. The project site is not located within the AIA nor the safety zones designated by the CLUP.

For the project site, any proposed structure more than 130 feet in height above the ground surface is required under FAA Part 77 to be submitted for airspace safety review.⁵⁸ With the subsequent FAA issuance of no-hazard determinations, the project would be compatible with aircraft operations and would not result in a significant aircraft safety hazard. (Less Than Significant Impact)

Impact HAZ-6:	The project would not impair implementation of or physically interfere with
	an adopted emergency response plan or emergency evacuation plan. (No
	Impact)

In June 2016, the City adopted an Emergency Response Plan, which addresses the planned response of the City of Santa Clara to emergency situations associated with natural disasters, technological incidents, and chemical, biological, radiological, nuclear and explosive emergencies. The project

 ⁵⁷ CalEPA. Cortese List Data Resources. Accessed July 25, 2019. <u>https://calepa.ca.gov/sitecleanup/corteselist</u>.
 ⁵⁸ Norman Y. Mineta San José International Airport. Notice Requirement Criteria for Filing FAA Form 7460-1.
 2013.

would include construction at a site designated for office uses and would comply with relevant building and fire codes. The proposed project would not, therefore, impair or interfere with the implementation of an adopted emergency response plan or emergency evacuation plan. (No Impact)

Impact HAZ-7:The project would not expose people or structures, either directly or
indirectly, to a significant risk of loss, injury or death involving wildland fires.
(No Impact)

The project site is in a developed urban area and it is not adjacent to any wildland areas that would be susceptible to fire. Therefore, implementation of the proposed project would not expose future site users or the proposed buildings to wildland fires. (No Impact)

3.9.2.2 *Consistency with Plans*

The General Plan includes the following hazards and hazardous materials policies applicable to the proposed project.

Safety Policies

Policy 5.10.5-P22: Regulate development on sites with known or suspected contamination of soil and/or groundwater to ensure that construction workers, the public, future occupants and the environment are adequately protected from hazards associated with contamination, in accordance with applicable regulations.

Consistency: Based on previous sampling and monitoring activities, the project site does not contain contaminated soil/groundwater that would be harmful to the public or environment. Previous remediation activities at the site reduced VOCs to concentrations that are not hazardous. Therefore, the project would be consistent with Policy 5.10.5-P22.

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

Consistency: Operations at the project site would not result in hazardous materials being transported, used, or disposed of in quantities that would result in a significant hazard to the public. Compliance with applicable federal, state, and local regulations would reduce the risk of hazards due to the use, storage and transport of on-site chemicals. Compliance with regulatory measures related to asbestos and lead abatement would prevent the release of asbestos and lead into the environment during demolition. Therefore, the project would be consistent with Policy 5.10.5-P24.

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

<u>Consistency</u>: The project would comply with applicable federal, state, and local regulations for handling, storage, and disposal requirements to avoid significant

hazards to the public or the environment created by the transport of any hazardous substances. Therefore, the project would be consistent with Policy 5.10.5-P25.

Policy 5.10.5-P26: Survey pre-1980 buildings and abate any lead-based paint and asbestos prior to structural renovation and demolition, in compliance with all applicable regulations.

Consistency: The project would comply with applicable regulations (including asbestos and lead surveys) and BMPs to prevent the release of asbestos and lead into the environment during demolition. Therefore, the project would be consistent with Policy 5.10.5-P26.

Policy 5.10.5-P33: Limit the height of structures in accordance with the Federal Aviation Administration Federal Aviation Regulations, FAR Part 77 criteria.

Consistency: Given that the maximum height of the proposed development meets the FAA Part 77 height criteria for noticing, the proposed project will be submitted to the FAA for airspace safety review. With subsequent FAA issuance of a no hazard determination, the project would not result in a significant airspace hazard nor conflict with FAA Part 77 standards. Therefore, the project would be consistent with Policy 5.10.5-P33.

3.9.2.3 *Cumulative Impacts*

Impact HAZ-C:The project would not result in a cumulatively considerable contribution to a
significant hazards and hazardous materials impact. (Less than Significant
Cumulative Impact)

The geographic area for hazards and hazardous materials is the project site and adjacent parcels. The potential for on-site hazardous materials contamination to affect adjacent properties in combination with other development in the project vicinity is limited. Based on previous investigations at the site, there are no VOCs in soil or groundwater with concentrations above regulatory standards. No VOCs on-site are considered to be a risk to receptors at adjacent properties. Given the history of agricultural uses in the project area, the site could be contaminated with agricultural chemicals in the soil and/or groundwater. With the implementation of mitigation measures MM HAZ-1.1 through MM HAZ-1.3, potential soil and/groundwater contamination from agricultural chemicals would not be considered a risk to receptors at adjacent properties. The project, in combination with cumulative projects in the area, therefore, would not result in a cumulative hazardous materials impact. (Less Than Significant Cumulative Impact)

3.9.3 <u>Non-CEQA Effects</u>

3.9.3.1 Existing Hazardous Materials Conditions Affecting the Project

The California Supreme Court in a December 2015 opinion confirmed CEQA is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project; nevertheless, the City has policies that address existing conditions affecting a proposed project, which are discussed below.

General Plan Policy 5.10.5-P22 requires the City to regulate development on sites with known or suspected contamination of soil and/or groundwater to ensure that construction workers, the public, future occupants and the environment are adequately protected from hazards associated with contamination, in accordance with applicable regulations. General Plan Policy 5.10.5-P23 requires appropriate clean-up and remediation of contaminated sites.

Based on the Phase I ESA, there are six facilities within one mile of the project site which have the potential to impact the project site based on the distance of the facilities relative to the site, hydrologic gradient and/or regulatory status (refer to Table 3.8-2). Due to low concentrations of contaminants in the groundwater at the off-site facilities, direction of groundwater flow (upgradient and crossgradient), boundaries of the groundwater plume, and/or no indication of chemical release at these facilities, hazardous chemicals released or stored at these six off-site facilities are not considered an environmental concern for the project site. As discussed under Impact HAZ-2, no further testing or investigation is required for the project site. The project would be consistent with Policies 5.10.5-P22 and 5.10.5-P23.

3.10 HYDROLOGY AND WATER QUALITY

3.10.1 <u>Environmental Setting</u>

3.10.1.1 *Regulatory Framework*

Water Quality Overview

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality in California. Regulations set forth by the U.S. EPA and the SWRCB have been developed to fulfill the requirements of this legislation. U.S. EPA regulations include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into the waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the water quality control boards. The project site is within the jurisdiction of the San Francisco Bay RWQCB.

Federal

National Flood Insurance Program

Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) in order to reduce impacts of flooding on private and public properties. In addition to providing flood insurance, FEMA also publishes Flood Insurance Rate Maps (FIRM) that identify Special Flood Hazard Areas (SFHA). A SFHA is an area that will be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100-year flood. NFIP floodplain management regulations are required in SFHAs.

State

Statewide Construction General Permit

The SWRCB has implemented a NPDES General Construction Permit for the state of California. For projects disturbing one-acre or more of soil, a Notice of Intent (NOI) and Stormwater Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction. The Construction General Permit includes requirements for training, inspections, record keeping, and for projects of certain risk levels, monitoring. The general purpose of the requirements is to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related stormwater discharges.

Regional

San Francisco Bay Basin Plan

The San Francisco Bay RWQCB regulates water quality in accordance with the Water Quality Control Plan or "Basin Plan." The Basin Plan lists the beneficial uses that the RWQCB has identified for local aquifers, streams, marshes, rivers, and the San Francisco Bay, as well as the water quality objectives and criteria that must be met to protect these uses. The RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements, including permits for nonpoint sources such as the urban runoff discharged by a City's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

Municipal Regional Stormwater NPDES Permit (MRP)/C.3 Requirement

The San Francisco Bay RWQCB has issued a Municipal Regional Stormwater NPDES Permit (Permit Number CAS612008)(MRP) that covers the project area. 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 pollutant source control measures and stormwater treatment features 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.

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

Santa Clara Valley Water District

The Santa Clara Valley Water District (Valley Water) operates as the flood control agency for Santa Clara County. Their stewardship also includes creek restoration, pollution prevention efforts, and groundwater recharge. Permits for well construction and destruction work, most exploratory boring for groundwater exploration, and projects within Valley Water property or easements are required under Valley Water's Water Resources Protection Ordinance and District Well Ordinance.

Dam Safety

Dam failure is the uncontrolled release of impounded water behind a dam. Flooding, earthquakes, blockages, landslides, lack of maintenance, improper operation, poor construction, vandalism, and terrorism can all cause a dam to fail.⁵⁹ Because dam failure that results in downstream flooding may affect life and property, dam safety is regulated at both the federal and state level. Dams under the jurisdiction of the California Division of Safety of Dams are identified in California Water Code Sections 6002, 6003, and 6004 and regulations for dams and reservoirs are included in the California Code of Regulations.

As part of its comprehensive dam safety program, the Valley Water routinely monitors and studies the condition of each of its 10 dams. The Valley Water also has its own Emergency Operations Center and a response team that inspects dams after significant earthquakes. These regulatory inspection programs reduce the potential for dam failure.

⁵⁹ State of California. "2013 State Hazards Mitigation Plan." Accessed February 9, 2018. <u>http://www.caloes.ca.gov/for-individuals-families/hazard-mitigation-planning/state-hazard-mitigation-plan</u>.

3.10.1.2 *Existing Conditions*

Flooding

Based on the FEMA FIRMs (Map No. 06085C0063H, dated May 18, 2009), the project site is located in Flood Zone X. Zone X is defined as areas with 0.2 percent chance of flooding annually; areas with one percent chance of flooding annually with average depths of less than one foot or with drainage areas less than one square mile; and areas protected by levees from the one percent annual flood.⁶⁰

Dam Failure

According to the Valley Water dam failure inundation hazard maps, the project site is located within the Lexington Dam failure inundation hazard zone and outside the Anderson Dam failure inundation zone.⁶¹

Seiches and Tsunamis

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

A tsunami is a sea wave generated by an earthquake, landslide, or other large displacement of water in the ocean. There are no bodies of water near the project site that would affect the site in the event of a tsunami.⁶²

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

Storm Drainage System

The City of Santa Clara owns and maintains the municipal storm drainage system which serves the project site. The lines that serve the project site drain into Calabazas Creek, which is located approximately 800 feet west of the site. Calabazas Creek flows north, carrying the effluent from the storm drains into San Francisco Bay. Stormwater from urban uses contain metals, pesticides, herbicides, and other contaminants, including oil, grease, asbestos, lead, and animal wastes. Based on data from the SWRCB, Calabazas Creek is currently listed on the California 303(d) impaired waters list for diazinon.⁶³

⁶⁰ Federal Emergency Management Agency. "FEMA Flood Map Service Center: Welcome!" Accessed: March 2, 2018. Available at: <u>https://msc.fema.gov/portal</u>.

⁶¹ Santa Clara Valley Water District. "Local Dams and Reservoirs." Accessed: March 2, 2018. Available at: <u>https://www.valleywater.org/your-water/local-dams-and-reservoirs</u>.

⁶² Association of Bay Area Governments. "Tsunami Maps and Information." Accessed: March 2, 2018. Available at: <u>http://resilience.abag.ca.gov/tsunamis/</u>.

⁶³ California State Water Boards. "Final California 2010 Integrated Report (303(d) List/305(b) Report)." Accessed: March 14, 2018. Available at:

https://www.waterboards.ca.gov/water_issues/programs/tmdl/2010state_ir_reports/00693.shtml#20291.

Under existing conditions, the project site is approximately 92 percent impervious (i.e., the site consists of 581,982 square feet of impervious surfaces). There are existing storm drain lines that run along Lakeside Drive, Tannery Way, and Peterson Way.

Groundwater

Groundwater levels fluctuate seasonally depending on the variations in rainfall, irrigation from landscaping, and other factors. Groundwater has been encountered at the project site at approximately 7.5 to 10 feet bgs.

NPDES Hydromodification

Based on the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) Watershed Map for the City of Santa Clara, the project site is within a subwatershed that drains into a hardened channel or tidal area. As a result, the project is not subject to the NDPES hydromodification peak runoff requirements.⁶⁴

3.10.2 Impact Discussion

For the purpose of determining the significance of the project's impact on hydrology and water quality, would the project:

- 1) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?
- 2) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
- 3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - result in substantial erosion or siltation on- or off-site;
 - substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
 - create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
 - impede or redirect flood flows?
- 4) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
- 5) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

⁶⁴ Santa Clara Valley Urban Runoff Pollution Prevention Program. "Hydromodification Management Applicability Maps - City of Santa Clara." Accessed: March 14, 2018. Available at: <u>http://www.scvurppp-</u>w2k.com/hmp_maps.htm.

3.10.2.1 *Project Impacts*

Impact HYD-1: The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. **(Less than Significant Impact)**

Operational

The existing and proposed square footages of pervious and impervious surfaces for the project site are shown below in Table 3.9-1. Implementation of the project would result in an approximately 15 percent (96,774 square feet) decrease in impervious surfaces on-site compared to existing conditions.

Table 3.10-1: Pervious and Impervious Surfaces On-Site						
Site Surface	Existing/Pre- Construction (sf)	%	Project/Post- Construction (sf)	⁰ ⁄0	Difference (sf)	%
Impervious						
Building Footprint	190,086	30	249,366	40	59,280	+10
Parking	262,630	41	52,805	8	-209,825	-33
Streets (public)	81,227	13	87,716	14	6,489	+1
Patios, Paths, etc.	48,039	8	95,321	15	47,282	+7
Subtotal	581,982	92	485,208	77	-96,774	-15
Pervious						
Pavement and Landscaping	51,326	8	148,100	23	96,774	+15
Total	633,308	100	633,308	100		

Because the proposed project would replace more than 10,000 square feet of impervious surfaces, the project would be required to comply with the provisions of the NPDES MRP. Plans would be certified by engineers to ensure incorporation of appropriate and effective source control measures to meet LID requirements to prevent discharge of pollutants, reduce impervious surfaces, retain a percentage of runoff on-site for percolation, and treatment control measures to remove pollutants from runoff entering the storm drainage system. Stormwater runoff on-site would flow to bio-filtration swales and would be collected via on-site catch basins. Stormwater would be treated, then directed to the City's stormwater system.

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

Best Management Practices

- When the construction phase is complete, a Notice of Termination (NOT) for the General Permit for Construction will be filed with the RWQCB and the City of Santa Clara. The NOT shall document that all elements of the SWPPP have been executed, construction materials and waste have been properly disposed of, and a post-construction stormwater management plan is in place as described in the SWPPP for the project site.
- All post-construction Treatment Control Measures (TCMs) shall be installed, operated, and maintained by qualified personnel. On-site inlets will be cleaned out at a minimum of once per year, prior to the wet season.
- The property owner/site manager shall keep a maintenance and inspection schedule and record to ensure the TCMs continue to operate effectively for the life of the project. Copies of the schedule and record must be provided to the City upon request and must be made available for inspection on-site at all times.

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

Construction

Construction activities on-site include demolition of the existing building, grading, and trenching for utilities. Implementation of the project would temporarily increase the amount of debris on-site and could increase erosion and sedimentation that could be carried by runoff into natural waterways.

Because the proposed project would disturb one or more acres of land, the project would be required to comply with the NDPES General Construction Permit. Under the General Construction Permit, the proposed project would be required to develop and implement a SWPPP which would contain erosion and sediment controls designed to minimize stormwater pollution by reducing sediment loads in runoff from the site.

In addition, the following measures would be required by the City as conditions of project approval to further reduce potential construction-related water quality impacts:

- Burlap bags filled with drain rock shall be installed around storm drains to route sediment and other debris away from the drains;
- Earthmoving or other dust-producing activities would be suspended during periods of high winds;
- All exposed or disturbed soil surfaces would be watered at least twice daily to control dust as necessary;
- Stockpiles of soil or other materials that can be blown by the wind would be watered or covered;

- All trucks hauling soil, sand, and other loose materials shall be covered;
- All paved access roads, parking areas, staging areas and residential streets adjacent to the construction sites would be swept daily (with water sweepers); and
- Vegetation in disturbed areas would be replanted as quickly as possible.

With implementation of the identified conditions of approval and implementation of the SWPPP, the proposed project's construction stormwater pollution impacts would be reduced to a less than significant level. (Less Than Significant Impact)

Impact HYD-2:	The project would not substantially decrease groundwater supplies or interfere
	substantially with groundwater recharge such that the project may impede
	sustainable groundwater management of the basin. (Less than Significant
	Impact)

As mentioned previously, groundwater has been encountered at the project site at approximately 7.5 to 10 feet bgs. Development of the proposed project would include trenching/grading for utilities but would not have any substantial excavations. The project would not use groundwater, deplete groundwater supply, or interfere with groundwater recharge. Therefore, the impact to groundwater would be less than significant. (Less than Significant Impact)

Impact HYD-3:	The project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood
	flows. (Less than Significant Impact)

The proposed project would not substantially alter the existing drainage pattern of the site or area through the alteration of any waterway. As a result, the project would not substantially increase erosion or increase the rate or amount of stormwater runoff. (Less than Significant Impact)

Under existing conditions, the storm drainage system has sufficient capacity to convey runoff from the site. Implementation of the project would result in an approximately 15 percent (96,774 square feet) decrease in impervious surfaces compared to existing conditions, which would reduce the volume of stormwater runoff. In addition, the project would be required to comply with the NPDES MRP requirements; therefore, runoff from the project site would not exceed the capacity of the local drainage system. With the implementation of the conditions of approval to reduce construction-related water quality impacts discussed in the response to Impact HYD-1 and compliance with the post-construction NPDES MRP requirements to reduce or prevent discharge of pollutants from stormwater runoff, the project would not provide substantial additional sources of polluted runoff to the City's storm drainage systems. The project site is not in a flood hazard area, and, therefore, the project would not impede or redirect flood flows. **(Less Than Significant Impact)**

Impact HYD-4: The project would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. (Less than Significant Impact)

The project site is outside the 100-year flood hazard zone and, therefore, would not expose people or structures to 100-year flood hazards. As discussed previously, given there are no bodies of water that would impact the site and project area from a seiche or tsunami, the project site and adjacent properties are not subject to a seiche or tsunami. The project site is located within the Lexington Dam failure inundation zone. As discussed previously in Section 3.10.1, the Valley Water routinely monitors and studies the condition of Lexington Dam. The regulatory inspection programs currently in place reduces the potential for dam failure and inundation. Therefore, the project would not risk release of pollutants due to inundation in flood hazard, tsunami, or seiche zones. **(Less Than Significant Impact)**

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

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

3.10.2.2 *Consistency with Plans*

City of Santa Clara General Plan

The General Plan includes the following hydrology and water quality policies applicable to the proposed project.

Safety Policies

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

<u>Consistency</u>: The proposed project would comply with the provisions of the NPDES MRP and General Construction Permit, consistent with Policy 5.10.5-P11.

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

Consistency: The project would be required to implement the identified Best Management Practices to reduce runoff from the site. Therefore, the project is consistent with Policy 5.10.5-P15.

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

Consistency: The proposed development would be required to implement a SWPPP to control discharge associated with construction activities, consistent with the requirements of the NPDES General Construction Permit. Therefore, the project is consistent with Policy 5.10.5-P16.

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

Consistency: The proposed project would implement the identified Best Management Practices based on RWQCB and City requirements. In addition, the proposed development would be required to implement a SWPPP to control discharge associated with construction activities, consistent with the requirements of the NPDES General Construction Permit. Therefore, the project is consistent with Policy 5.10.5-P17.

Policy 5.10.5-P18: Implement the Santa Clara Valley Nonpoint Source Pollution Control Program, Santa Clara Valley Urban Runoff Pollution Prevention Program and the Urban Runoff Management Plan.

<u>**Consistency:**</u> The project would comply with the Santa Clara Valley Nonpoint Source Pollution Control Program, Santa Clara Valley Urban Runoff Pollution Prevention Program and the Urban Runoff Management Plan, consistent with Policy 5.10.5-P18.

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

Consistency: The proposed project would not exceed the storm drain capacity and would adhere to the NDPES permit that governs stormwater discharges from the site. Therefore, the project is consistent with Policy 5.10.5-P21.

3.10.2.3 *Cumulative Impacts*

Impact HYD-C:The project would not result in a cumulatively considerable contribution to a
significant hydrology and water quality impact. (Less than Significant
Cumulative Impact)

The geographic area for cumulative hydrology and water quality impacts is the Calabazas watershed. With the implementation of best management practices to reduce impacts to water quality discussed and applicable regulations discussed in Section 3.10.1, development projects that could impact this watershed (including the proposed project) are required to undertake steps to avoid, minimize, and/or

mitigate flooding and water quality impacts. For these reasons, the cumulative projects in compliance with applicable regulations would not result in significant cumulative hydrology or water quality impacts. (Less than Significant Cumulative Impact)

3.11 LAND USE AND PLANNING

3.11.1 <u>Environmental Setting</u>

3.11.1.1 *Regulatory Framework*

Local

Farmland Mapping and Monitoring Program

The California Resources Agency's Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural land and conversion of these lands over time. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. In CEQA analyses, the FMMP classifications and published County maps are used, in part, to identify whether agricultural resources that could be affected are present on-site or in the project area.

Zoning Ordinance

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

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

3.11.1.2 *Existing Conditions*

The 14.5-acre project site is comprised of one parcel (APN 216-30-049) located at the southwest corner of Peterson Way and Tannery Way in the City of Santa Clara. The property is currently developed with a two-story office R&D building (approximately 218,375 square feet). The ground

floor of the office R&D building is used for office space and manufacturing. The second floor contains some office space and a large area occupied by duct work and utilities in support of the manufacturing processes. The building is surrounded by a large paved surface parking lot and landscaping.

As discussed in *Section 3.4 Biological Resources*, the City of Santa Clara is not covered by a Habitat Plan, and, therefore, the site is not located within a Habitat Plan area.

Based on the Santa Clara County Important Farmlands 2014 Map, the project site is designated as "Urban and Built-Up Land."^{65,66} There is no forest land uses on or adjacent to the project site and the site is not subject to a Williamson Act contract.

General Plan Land Use Designation

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

Zoning District

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

3.11.1.3 Surrounding Land Uses

The project site is in a commercial and office/R&D area and is bordered by a two-story office building and seven-story hotel development to the north, an existing two-story office building and seven-story hotel under construction to the east, Tannery Way and two eight-story office buildings and a five-story parking structure to the south, and Peterson Way and office buildings to the west.

3.11.2 Impact Discussion

For the purpose of determining the significance of the project's impact on land use and planning, would the project:

- 1) Physically divide an established community?
- 2) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

⁶⁵ California Natural Resources Agency. "Santa Clara County Important Farmlands 2014." Accessed: September 18, 2018. Available at: <u>ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2014/scl14.pdf</u>.

⁶⁶ Urban and Built-up Land is defined as land with at least six structures per 10 acres. Common examples of "Urban and Built-Up Land" are residential, institutional, industrial, commercial, landfill, golf course, airports, and other utility uses.

3.11.2.1 *Project Impacts*

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

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

Impact LU-2:	The project would not cause a significant environmental impact due to a
	of avoiding or mitigating an environmental effect. (Less than Significant
	Impact)

General Plan

The project proposes a FAR of 1.1. The proposed office R&D project is consistent with the General Plan with the exception of the maximum 1.00 FAR requirement. The project's exceedance of the General Plan's maximum FAR requirement is, however, minimal and the FAR limitation is not a policy adopted for the purpose of avoiding an environmental effect. Consequently, the 1.1 FAR would not cause a significant land use impact. The proposed project, therefore, would not require a GPA as it is generally consistent with the General Plan.

The proposed project is consistent with surrounding land uses and would be compatible with the existing land uses in the project area. As a result, the proposed project would not conflict with the office/R&D and commercial uses that surround the site.

The General Plan includes the following land use policies applicable to the proposed project.

General Land Use Policies

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

<u>Consistency</u>: The final design of the proposed project will be subject to the City's architectural review process. Therefore, the project is consistent with Policy 5.3.1-P3.

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

Consistency: The proposed project would not exceed the capacity of existing infrastructure and can be adequately served by existing public facilities and services. Therefore, the proposed project is consistent with Policy 5.3.1-P9.

Office and Industrial Land Use Policies

Policy 5.3.5-P5: Allow the development of Office/Research and Development uses in varied configurations and intensities to meet the needs of existing and new businesses.

Consistency: The design of the project would allow the project to have one or more occupants which allows for a range of businesses within an area designated for office/R&D development. Therefore, the proposed project is consistent with Policy 5.3.5-P5.

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

<u>Consistency:</u> The proposed project would not result in the loss of job lands or place incompatible land uses in an industrial area. Therefore, the proposed project is consistent with Policy 5.3.5-P16.

Zoning Ordinance

The project is zoned ML – *Light Industrial*. The ML – *Light Industrial* zoning designation limits building coverage to 75 percent and building height to 70 feet. The proposed building coverage is approximately 38 percent which is consistent with the zoning district's limits for building coverage. The maximum height of the proposed buildings would be eight stories tall (approximately 129.5 feet to the parapet and 138.5 feet to the top of the roof screen). The project would require a variance application to increase the maximum building height for the proposed development. In accordance with City Code Section 18.108.030, in order to grant any variance, the findings of the Planning Commission shall be:

- 1. That there are unusual conditions applying to the land or building which do not apply generally in the same district.
- 2. That the granting of the variance is necessary for the preservation and enjoyment of substantial property rights of the petitioner.
- 3. That the granting of such variance shall not, under the circumstances of the particular case, materially affect adversely the health, safety, peace, comfort or general welfare of persons residing or working in the neighborhood of the applicant's property, and will not be materially detrimental to the public welfare or injurious to property or improvements in said neighborhood.
- 4. That the granting of the variance is in keeping with the purpose and intent of the Zoning Ordinance.

Because the project would either be granted the variance or the design and/or size of the project would be modified to fit within the existing zoning regulations, the proposed project would be compatible with the existing General Plan and zoning designations. (Less Than Significant Impact)

3.11.2.2 *Cumulative Impacts*

Impact LU-C:	The project would not result in a cumulatively considerable contribution to a
	significant land use and planning impact. (Less than Significant Cumulative
	Impact)

The geographic area for cumulative land use impacts is the City of Santa Clara. Construction of the cumulative projects within the City would consist of redevelopment of currently (or previously) developed sites. Development on a number of these sites would result in a change of uses and/or an intensification of development.

The compatibility of new development with adjacent land uses, and the general character of surrounding areas are considered as a part of the City of Santa Clara's architectural and environmental review processes.

All Santa Clara projects listed in Table 3.0-1 and the proposed project are subject to conformance with applicable land use plans (including the General Plan) for the purposes of avoiding or mitigating environmental effects. In addition, the setback, design, and operational requirements of the City Code minimize land use compatibility issues. The cumulative projects, in conformance with the applicable General Plan goals and policies, would not result in significant cumulative land use compatibility impacts or conflict with a policies or regulation adopted for the purpose of avoiding or mitigating an environmental impact. For these reasons, the cumulative projects, combined with the proposed project, would not result in significant cumulative Impacts. **(Less Than Significant Cumulative Impact)**

3.12 MINERAL RESOURCES

3.12.1 <u>Environmental Setting</u>

3.12.1.1 *Regulatory Framework*

State

Surface Mining and Reclamation Act

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

3.12.1.2 *Existing Conditions*

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

3.12.2 Impact Discussion

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

- 1) Result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state?
- 2) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

3.12.2.1 Project Impacts

Impact MIN-1:The project would not result in the loss of availability of a known mineral
resource that would be of value to the region and residents of the state. (No
Impact)

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

Impact MIN-2: The project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. (No Impact)

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

3.12.2.2 Consistency with Plans

There are no known mineral resources within the City and, therefore, the project would not conflict with any plans or policies related to these resources.

3.12.2.3 *Cumulative Impacts*

Impact MIN-C:	The project would not result in a cumulatively considerable contribution to a
	significant mineral resources impact. (No Cumulative Impact)

As mentioned in Section 3.12.2.1, no mineral resources have been identified within the City. Since the project would not result in impacts to mineral resources, the project has no potential to combine with other projects to result in cumulative impacts to these resources. (No Cumulative Impact)

3.13 NOISE AND VIBRATION

3.13.1 <u>Environmental Setting</u>

3.13.1.1 Background Information

Several factors influence sound as it is perceived by the human ear, including the actual level of sound, the period of exposure to the sound, the frequencies involved, and the fluctuation in the noise level during exposure. Noise is measured on a "decibel" (dB) scale which serves as an index of loudness. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the A-weighted decibel, or dBA.

Since excessive noise levels can adversely affect human activities and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. Noise guidelines are almost always expressed using one of several noise averaging methods, such as L_{eq} , DNL, or CNEL.⁶⁷ Using one of these descriptors is a way for a location's overall noise exposure to be measured, given that there are specific moments when noise levels are higher (e.g., when a jet is taking off from an airport or when a leaf blower is operating) and specific moments when noise levels are lower (e.g., during lulls in traffic flows on freeways or in the middle of the night). L_{max} is the maximum A-weighted noise level during a measurement period.

3.13.1.2 *Vibration Overview*

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Vibration amplitude can be quantified using Peak Particle Velocity (PPV), which is defined as the maximum instantaneous positive or negative peak of the vibration wave. Because of the impulsive nature of construction activities, the use of the PPV descriptor has been routinely used to measure and assess ground-borne vibration. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 in/sec PPV.

3.13.1.3 *Regulatory Framework*

State

California Building Standards Code

The CALGreen Code requires that wall and roof-ceiling assemblies exposed to the adjacent roadways have a composite Sound Transmission Class (STC) rating of at least 50 or a composite Outdoor-Indoor Transmission Class (OITC) rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when the commercial property falls within the 65 dBA day-night average sound level (L_{dn}) noise contour for a freeway or expressway, railroad, industrial source or

 $^{^{67}}$ L_{eq} is a measurement of average energy level intensity of noise over a given period of time. Day-Night Level (DNL) is a 24-hour average of noise levels, with a 10 dB penalty applied to noise occurring between 10:00 p.m. and 7:00 a.m. Community Noise Equivalent Level (CNEL) includes an additional five dB applied to noise occurring between 7:00 p.m. and 10:00 p.m. As a general rule of thumb where traffic noise predominates, the CNEL and DNL are typically within two dBA of the peak hour L_{eq}.

fixed-guideway noise source. The state also requires interior noise levels to be maintained at 50 dBA $L_{eq(1-hr)}$ or less during hours of operation at a proposed office building.

State CEQA Guidelines

CEQA contains guidelines to evaluate the significance of effects resulting from a proposed project. These guidelines have been used in this EIR as thresholds for establishing potentially significant noise impacts and are listed under Thresholds of Significance.

California Department of Transportation – Construction Vibration

California Department of Transportation (Caltrans) has adopted guidance for construction vibrations and this guidance is used in this analysis to address construction vibrations. Caltrans uses a vibration limit of 12.7 mm/sec (0.5 inches/sec), PPV for buildings structurally sound and designed to modern engineering standards. A conservative vibration limit of 5 mm/sec (0.2 inches/sec), PPV has been used for buildings that are found to be structurally sound but structural damage is a major concern. For historic buildings or buildings that are documented to be structurally weakened, a conservative limit of 2 mm/sec (0.08 inches/sec), PPV is often used to provide the highest level of protection.

Local

Santa Clara City Code

Section 9.10.040 of the Santa Clara City Code Schedule A shows the noise levels considered consistent with specific zoning designations. For office land uses, outdoor noise levels of up to 65 decibels are considered acceptable during the daytime, and up to 60 decibels at night.

3.13.1.4 Existing Noise Environment

The project site is located at the southwest corner of Peterson Way and Tannery Way in the City of Santa Clara. Noise in the project area is generated primarily from vehicular traffic along the surrounding roadways. Based on Figure 5.10-4 of the City's General Plan, existing noise levels at the project site ranges from 65 to 75 dBA.⁶⁸ Based on the Norman Y. Mineta San José International Airport Master Plan, the project site is located outside the 60 dbA CNEL noise contour for the airport.

There are no sensitive receptors located within proximity to the site. The nearest sensitive receptors are located approximately 1,400 feet northwest of the project site.

⁶⁸ Figure 5.10-4 in the General Plan shows existing (2010) noise level contours (from roadway traffic) within the City of Santa Clara.

3.13.2 Impact Discussion

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

- 1) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- 2) Generation of excessive groundborne vibration or groundborne noise levels?
- 3) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

3.13.2.1 Thresholds of Significance

The CEQA Guidelines state that a project would normally be considered to have a significant impact if noise levels conflict with adopted environmental standards or plans, or if noise levels generated by the project would substantially increase existing noise levels at noise-sensitive receivers on a permanent or temporary basis. CEQA does not define what noise level increase would be substantial. The General Plan defines a change of three dBA CNEL as noticeable, five dBA CNEL as distinct in noise level.⁶⁹ Typically, project generated noise level increases of three dBA CNEL or greater are considered significant where resulting exterior noise levels would exceed the normally acceptable noise level standard. Where noise levels would remain at or below the normally acceptable noise level standard with the project, a noise level increase of five dBA CNEL or greater is considered significant.

Impact NOI-1: The project would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Less than Significant Impact)

Operational Noise Impacts

Project-Generated Traffic Noise

Based upon the traffic study prepared by *Hexagon Transportation Consultants*, the proposed project would generate approximately 5,477 net new daily traffic trips. The increase in traffic would result in traffic noise increases. A traffic noise increase is considered substantial if it increases the ambient noise level by three decibels or more in sensitive noise areas, equivalent to a doubling of traffic on local roadways.

The proposed project is located approximately 1,400 feet southeast of the nearest sensitive receptors and, based on the traffic data, would not double the amount of traffic on local roadways. As a result,

⁶⁹ City of Santa Clara. 2010. City of Santa Clara 2010-2035 General Plan, Section 8.14.1 Noise Measurement.

traffic generated by the project would result in a less than significant noise impact. (Less Than Significant Impact)

Project-Generated Rooftop Equipment Noise Impacts

The proposed project would include various mechanical equipment such as ventilation systems, air conditioning, exhaust fans, etc. The City Code limits noise levels from building equipment to 55 dBA L_{eq} during the daytime (7:00 AM to 10:00 PM) and 50 dBA L_{eq} during the evening (10:00 PM to 7:00 AM) in residential land use areas. As mentioned previously, the nearest noise-sensitive receptors are located approximately 1,400 feet northwest of the project site. Given the distance of the project site from the nearest sensitive receptors, operation of the project's mechanical equipment would not result in a significant noise impact to off-site receptors.

Per Section 9.10.040 of the City of Santa Clara City Code, the project would be required to comply with the City Code, which limits noise levels from building equipment to 65 dBA L_{eq} during the daytime (7:00 AM to 10:00 PM) and 60 dBA L_{eq} during the evening (10:00 PM to 7:00 AM) at adjacent office land uses. The proposed project would be required to comply with City Code requirements.

As a result, the noise produced by mechanical equipment during project operations would not impact any sensitive receptors and adjacent businesses. (Less Than Significant Impact)

Impact NOI-2:The project would not result in generation of excessive groundborne vibration
or groundborne noise levels. (Less than Significant Impact)

Construction Noise and Vibration Impacts

There are no noise-sensitive land uses in the immediate vicinity of the project. Construction of the proposed project would temporarily increase noise levels in the immediate area of the project site. Construction activities generate considerable amounts of noise, especially during building demolition and construction of project infrastructure when heavy equipment is used.

Construction activities would include site preparation, excavation, grading, trenching, building construction, paving, and architectural coating. Construction activities for individual projects are typically carried out in stages. During each stage of construction, there would be a different mix of equipment operating, and noise levels would vary by stage and vary within stages, based on the amount of equipment in operation and the location at which the equipment is operating. Typical construction noise levels at a distance of 50 feet, based on the Federal Highway Administration's Roadway Construction Noise Model, are shown on Table 3.13-1. The maximum noise level (Lmax) and average noise level (Leq) is shown for each type of equipment. ranges for different construction equipment are also shown. Most demolition and construction noise falls with the range of 80 to 90 dBA at a distance of 50 feet from the source.⁷⁰

⁷⁰ Illingworth & Rodkin, Inc. Gateway Crossings Project Noise and Vibration Assessment, Santa Clara, California. January 22, 2018. Little Portugal Gateway Mixed Use Development Noise and Vibration Assessment, San José, California. December 18, 2019. P

Ta	ble 3.13-1: Construction Nois	Table 3.13-1: Construction Noise Levels Calculated at 50 Feet (dBA)			
Construction Phase	Equipment Type	Equipment L _{max}	Equipment L _{eq}	Construction Phase L _{eq}	
	Concrete/Industrial Saws	90	83		
Demolition	Excavators	80	77	96	
Demonuon	Rubber-Tired Dozers	82	78	80	
	Tractors/Loaders/Backhoes	84	80		
	Graders	85	81		
Site Preparation	Rubber Tired Dozers	82	78	85	
riepurution	Tractors/Loaders/Backhoes	84	80		
	Scrapers	84	80		
	Excavators	81	77		
Grading / Excavation	Graders	85	81	86	
Executation	Rubber Tired Dozers	82	78		
	Tractors/Loaders/Backhoes	84	80		
T 1.	Tractor/Loader/Backhoe	84	80	02	
Irenching	Excavators	81	77	82	
	Cranes	81	73		
	Forklifts	75	68		
Building Exterior	Generator Sets	81	78	83	
LACTO	Tractors/Loaders/Backhoes	84	80		
	Welders	74	70		
Building	Air Compressors	78	74	75	
Interior	Aerial Lift	75	68		
	Cement and Mortar Mixers	80	77		
Paving	Pavers	77	74		
	Paving Equipment	90	83	86	
	Rollers	80	73		
	Tractors/Loaders/Backhoes	84	80		

 L_{eq} = The average A-weighted noise level during the measurement period.

The following measures, consistent with City Code requirements, would reduce impacts from construction activities on-site:

- Construction crews will be required to use available noise suppression devices and properly maintain and muffle internal combustion engine-driven construction equipment.
- The applicant shall designate a disturbance coordinator and post the name and phone number of this person at easy reference points for the surrounding land uses. The disturbance coordinator shall respond to and address all complaints about noise.

Compliance with the City Code requirements during construction activities on the project site would result in a less than significant construction noise impact.

The project site is located adjacent to buildings that were constructed in the 1980's and 1990s and one hotel to the east (under construction). The adjacent buildings are in good condition and there are no historic buildings or buildings that are structurally weakened adjacent to the project site. The project would comply with Caltrans' construction-related vibration noise standards and, therefore, the project would not cause structural damage to adjacent buildings due to construction-related vibration.

For the above reasons, the project would not result in a significant groundborne construction noiseor vibration-relation impacts. (Less Than Significant Impact)

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

Based on the Norman Y. Mineta San José International Airport (Airport) Master Plan, the project site is located outside the 60 dbA CNEL noise contour for the airport. The project site is outside of the AIA, a composite of areas surrounding the Airport that are affected by noise, height, and safety considerations. The project is not located within the vicinity of a private airstrip. Therefore, the project would not expose people residing or working in the project area to excessive noise levels. **(Less Than Significant Impact)**

3.13.2.2 Consistency with Plans

City of Santa Clara General Plan

The General Plan includes the following noise policies applicable to the proposed project.

Noise Policies

Policy 5.10.6-P1: Review all land use and development proposals for consistency with the General Plan compatibility standards and acceptable noise exposure levels. Residential land uses are considered compatible in noise environments of 55 dBA CNEL or less, where the exterior noise levels are greater than 55 dBA CNEL and less than 70 dBA CNEL, the design of the project should include measures to reduce noise levels to acceptable levels. Noise levels exceeding 70 dBA CNEL at residential land uses are considered incompatible. Residential land uses proposed in noise

environments exceeding 70 dBA CNEL should generally be avoided, except when the residential use is entirely indoors and where interior noise levels can be maintained at 45 dBA CNEL or less. Commercial land uses are considered compatible in noise environments of 65 dBA CNEL or less.

Consistency: As mentioned previously, a typical commercial building envelope provides at least 30 dBA reduction in exterior ambient noise. With future exterior noise levels up to 75 dBA, the interior noise levels would be up to 45 dBA with standard construction techniques. Therefore, the proposed development would be consistent with Policy 5.10.6-P1.

Policy 5.10.6-P2: Incorporate noise attenuation measures for all projects that have noise exposure levels greater than General Plan "normally acceptable" levels (as defined above).

Consistency: As mentioned previously, a typical commercial building envelope provides at least 30 dBA reduction in exterior ambient noise. With future exterior noise levels up to 75 dBA, the interior noise levels would be up to 45 dBA with standard construction techniques. The project's interior noise levels would be below the 50 dB CNEL standard for the office buildings. Therefore, the proposed development would be consistent with Policy 5.10.6-P2.

Policy 5.10.6-P3: New development should include noise control techniques to reduce noise to acceptable levels, including site layout (setbacks, separation and shielding), building treatments (mechanical ventilation system, sound-rated windows, solid core doors and baffling) and structural measures (earthen berms and sound walls).

Consistency: As mentioned previously, a typical commercial building envelope provides at least 30 dBA reduction in exterior ambient noise. Based on the General Plan (5.10.6 Noise Goals and Policies), it is estimated that future office employees would be exposed to exterior noise levels ranging from 65 to 75 dBA.⁷¹ With future exterior noise levels up to 75 dBA, the interior noise levels would be 45 dBA with standard construction techniques, which is below the 50 dB CNEL standard for offices (refer to Section 3.13.3.1, Existing Noise Conditions Affecting the Project for a discussion of future exterior and interior noise levels at the project site). Therefore, the proposed development would be consistent with Policy 5.10.6-P3.

Policy 5.10.6-P8: Continue to encourage safe and compatible land uses within the Norman Y. Mineta International Airport land use restrictions.

<u>Consistency</u>: As mentioned previously, the project site is located outside of the 60 dBA CNEL noise contour line, based on the Norman Y. Mineta San José International Airport's master plan. Future employees would, therefore, not be exposed to excessive airport noise. The project would be consistent with the airport's land use noise policies and Policy 5.10.6-P8.

⁷¹ City of Santa Clara. 2010-2035 General Plan FEIR, Volume I EIR Text. Figure 4.14-2, Year 2035 Ground Transportation Noise Contours for Major Roadways and Railroads. January 2011.

3.13.2.3 *Cumulative Impacts*

Impact NOI-C: The project would not result in a cumulatively considerable contribution to a significant noise impact. (Less than Significant Cumulative Impact)

The project's noise and vibration impacts are localized; therefore, the geographic study area is the project site and surrounding area (within 1,000 feet of the project site). The nearest pending/approved project is located at 2950 Lakeside Drive, approximately 10 feet northeast of the project site. While construction of the approved project could overlap with construction of the proposed project, construction noise would be temporary and construction measures (required by the City Code) would be implemented to reduce construction noise. Therefore, construction of the projects would not result in a significant cumulative construction noise impact. (Less Than Significant Cumulative Impact)

3.13.3 Non-CEQA Effects

3.13.3.1 Existing Noise Conditions Affecting the Project

As previously discussed, the California Supreme Court issued an opinion in *CBIA vs. BAAQMD* holding that CEQA is primarily concerned with the impacts of a project on the environment and generally does not require agencies to analyze the impact of existing conditions on a project's future users or residents. Nevertheless, the City has policies and that address existing conditions affecting the proposed project, which are discussed in the following section.

Based on the California Building Code, the interior noise levels for offices should not exceed 50 dB CNEL. Standard commercial construction provides at least 30 dBA of outdoor to indoor noise reduction assuming that the building includes adequate forced-air mechanical ventilation systems so that the windows and doors may remain closed to control noise. The project proposes to construct the office buildings using standard construction methods and the windows of the buildings would be fixed. Based on the General Plan (5.10.6 Noise Goals and Policies), it is estimated that future office employees would be exposed to exterior noise levels ranging from 65 to 75 dBA.⁷² Given the 30 dBA outdoor to indoor reduction, the interior noise levels for the proposed office buildings would not exceed 45 dBA. As a result, the proposed project would be consistent with California Building Code requirements and General Plan Policies 5.10.6-P1, 5.10.6-P2, and 5.10.6-P3.

⁷² City of Santa Clara. 2010-2035 General Plan FEIR, Volume I EIR Text. Figure 4.14-2, Year 2035 Ground Transportation Noise Contours for Major Roadways and Railroads. January 2011.

3.14 POPULATION AND HOUSING

3.14.1.1 *Regulatory Framework*

Regional and Local

Plan Bay Area 2040

Plan Bay Area 2040 is a long-range transportation, land-use, and housing plan intended support a growing economy, provide more housing and transportation choices, and reduce transportation-related pollution and GHG emissions in the Bay Area. Plan Bay Area 2040 promotes compact, mixed-use residential and commercial neighborhoods near transit, particularly within identified Priority Development Areas (PDAs).⁷³

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

3.14.1.2 Existing Conditions

According to the California Department of Finance, the City had a population of approximately 129,600 residents in 48,145 households as of January 2018.⁷⁴ Of the 129,600 residents, approximately 50 percent are employed residents.⁷⁵ There are approximately 137,000 jobs in the City (estimated by ABAG for 2020). In 2035, it is estimated that the City will have approximately 154,825 residents, 54,830 households, 154,300 jobs and 72,080 employed residents.⁷⁶

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

The City of Santa Clara had an estimated 2.50 jobs for every employed resident in 2010.⁷⁷ The General Plan focuses on increased housing and the placement of housing near employment. As a result, the jobs to housing ratio is projected to slightly decrease to 2.48 by 2040⁷⁸ Some employees who work within the City are, and still would be, required to seek housing outside the community with full implementation of the General Plan.

⁷³ Association of Bay Area Governments and Metropolitan Transportation Commission. "Project Mapper." <u>http://projectmapper.planbayarea.org/</u>.

⁷⁴ California Department of Finance. "E-5 City/County Population and Housing Estimates." May 2018. Accessed: August 8, 2018. Available at: <<u>http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/</u>>.

⁷⁵ Association of Bay Area Governments. *Plan Bay Area: Projections 2013*. December 2013.

⁷⁶ Ibid.

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

 ⁷⁷ City of Santa Clara 2010-2035 General Plan. December 2014. Appendix 8.12 (Housing Element). Page 8.12-25.
 ⁷⁸ City of Santa Clara 2010-2035 General Plan Final Environmental Impact Report. 2011

3.14.2 Impact Discussion

For the purpose of determining the significance of the project's impact on population and housing, would the project:

- 1) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- 2) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

3.14.2.1 Project Impacts

Impact POP-1:	The project would not induce substantial unplanned population growth in an
	area, either directly (for example, by proposing new homes and businesses) or
	indirectly (for example, through extension of roads or other infrastructure).
	(Less than Significant Impact)

The project site is currently developed with a 218,375 square foot office/R&D building. The project proposes to demolish the existing building and construct two approximately 338,155 square foot office buildings, for a total of 676,310 square feet. The project would result in a net increase of approximately 457,935 square feet of office space on the site.

Development of the proposed project would increase jobs citywide. Assuming that the project would accommodate a maximum one employee per 250 square feet, the proposed office development would accommodate approximately 2,705 employees. The existing office/R&D development accommodates approximately 800 employees. The increase in jobs would incrementally increase the overall jobs/housing imbalance within the City. The project would add approximately 44,095 square feet of office space (with a FAR of 1.1) and 176 more employees than projected in the General Plan. The additional workers on-site, however, would not substantially exceed the job growth projections or induce population growth. The project would not extend roads or other infrastructure that would indirectly induce growth. As a result, the project would have a less than significant impact on population and housing in Santa Clara. (Less Than Significant Impact)

Impact POP-2:	The project would not displace substantial numbers of existing people or
	housing, necessitating the construction of replacement housing elsewhere. (No
	Impact)

The project site is not currently used for residential purposes; therefore, the proposed project would not displace existing housing or people or require replacement housing to be constructed. (No Impact)

3.14.2.2 Consistency with Plans

General Plan

The project would add approximately 44,095 square feet of office space (with a FAR of 1.1) and 176 more employees than projected in the General Plan. The project would be inconsistent with the General Plan goal to reduce the job/housing ratio. However, the project's addition of office space beyond what was assumed in the General Plan would not substantially increase job/housing ratio.

3.14.2.3 *Cumulative Impacts*

Impact POP-C:	The project would not result in a cumulatively considerable contribution to a
	significant population and housing impact. (Less than Significant
	Cumulatively Considerable Contribution to a Significant Cumulative
	Impact)

The geographic area for cumulative population and housing impacts is the City of Santa Clara. The cumulative job-producing projects in the City would be inconsistent with applicable land use policies aimed at improving the City's jobs/housing balance and related assumptions in the existing General Plan. Worsening the City's jobs-housing imbalance results in secondary impacts of traffic, air quality and GHG emissions. The new jobs proposed would be a minor increment of the overall jobs represented by the cumulative projects. For this reason, the jobs added by the project would not make a cumulatively considerable contribution to a worsening of the jobs/housing imbalance. (Less Cumulatively Considerable Contribution to a Significant Cumulative Impact)

3.15 PUBLIC SERVICES

3.15.1 <u>Environmental Setting</u>

3.15.1.1 *Existing Conditions*

Fire Protection Services

Fire protection services are provided by the City of Santa Clara Fire Department (SCFD). The SCFD is comprised of 137 sworn firefighters and 38 volunteer/reserve firefighters.⁷⁹ Currently, the SCFD has 10 fire stations. The nearest station to the project is Station #7 located at 3495 Benton Street, located approximately 0.4 miles south of the site.

Police Protection Services

Police protection services are provided by the Santa Clara Police Department (SCPD). The SCPD is divided into four divisions: Services, Field Operations, Investigations, and Special Operations, and has approximately 149 sworn officers and 67 civilians.⁸⁰ There are currently two police stations, the headquarters located at 601 El Camino Real and a substation located at 3992 Rivermark Parkway. The distance between the project site and the police headquarters is approximately three miles. The distance between the project site and substation is approximately four miles.

Schools

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

Parks

The City of Santa Clara Parks and Recreation Department (Department) provides parks and recreational services in the City. The Department is responsible for maintaining and programming the various parks and recreational facilities and works cooperatively with public agencies in coordinating all recreational activities with the City. As of November 2017, the Department maintains and operates Central Park, a 45-acre community park, 28 neighborhood parks (122.7 acres), five mini parks (2.6 acres), public open space (16.1 acres improved and 40 acres unimproved resulting in 56.2 acres), recreational facilities (14.8 acres improved, 9.0 acres unimproved, and excluding a Bicycle Moto-Cross [BMX] track resulting in 23.8 acres), recreational trails (7.6 acres), and joint use facilities (48.5 acres) throughout the City, totaling approximately 257.3 improved acres. Community parks are over 15 acres, neighborhood parks are one to fifteen acres and mini parks are typically less than one-acre in size.

 ⁷⁹ Personal Communication with Steve Le, Assistant Planner with City of Santa Clara (Information Source: Frederick Chun, SCFD). December 11, 2017. City of Santa Clara, Fire Department. *History of the Fire Department*. Accessed September 1, 2017. <u>http://santaclaraca.gov/government/departments/fire/about-us/history</u>
 ⁸⁰ City of Santa Clara, Police Department. *Divisions*. Accessed November 14, 2018. http://santaclaraca.gov/government/departments/police-department/about-us/divisions.

The nearest park to the project site is Bracher Park, a 3.5-acre neighborhood park, located at 2560 Alhambra Drive, approximately one mile south of the project site. The park includes a picnic/barbeque area, basketball courts, and a playground. There are no City Parks within walking distance (approximately one third mile or a 15-minute walk) of the project site.

Libraries

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

3.15.2 <u>Impact Discussion</u>

For the purpose of determining the significance of the project's impact on public services, would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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?

3.15.2.1 Project Impacts

Impact PS-1: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 fire protection services. (Less than Significant Impact)

The project site is developed with an office/R&D building and is currently served by the SCFD. The project proposes to construct two, approximately 338,155 square foot office buildings, and a four-level parking structure with 13,370 square feet of amenity space. The proposed development would increase the total population of Santa Clara during regular business hours but would not permanently increase the resident population because there is no housing proposed as part of the project. The project would add approximately 44,095 square feet of office space (with a FAR of 1.1) and 176 more employees than projected in the General Plan. The project only slightly exceeds the growth projections of the certified General Plan FEIR, which concluded that additional SCFD officers, if needed to serve the build-out of the General Plan, would be housed in existing facilities and no new
or expanded facilities would be necessary. Consequently, the additional workers on-site would not require new facilities or expansion of current facilities to provide adequate fire protection services to serve the project and meet the City's overall service goals. Any fire service equipment necessary to serve the site would be provided by the City and project applicant.⁸¹ The proposed project would be reviewed by the SCFD and be built to applicable Fire Code standards in use when construction permits are issued, including sprinklers and smoke detectors, and would include features that would reduce potential fire hazards. (Less Than Significant Impact)

Impact PS-2:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 police protection services. (Less than Significant Impact)

The existing office/R&D development is currently served by the SCPD. The proposed project would increase the total population of Santa Clara during standard business hours but would not permanently increase the resident population because no housing is proposed as part of the project. New resident population is based upon the number of new housing units proposed for a project. The project does not propose new housing units and future employees of the proposed project would occupy existing housing in the City or elsewhere. The project would be constructed in conformance with current codes and the project design would be reviewed by the SCPD to ensure that it incorporates appropriate safety features to minimize criminal activity. The project only slightly exceeds the growth projections of the certified General Plan EIR, which concluded that additional officers, if needed to serve the buildout of the General Plan, would utilize the existing facilities and no new or expanded facilities would be necessary.⁸² The additional 176 employees (referenced in the response to Impact PS-1) would not require expansion of existing police facilities. Consequently, new facilities or expansion of existing facilities would not be required to provide adequate police services to serve the proposed project and meet the City's overall service goals. **(Less Than Significant Impact)**

Impact PS-3: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 schools. (**No Impact**)

The proposed project would construct a new office building and would not include any residential uses. New students are generated by a project when new housing units are proposed. As stated in the response to Impact PS-2, future employees of the project would occupy existing housing in the City

⁸¹ Personal Communications: Tomlin, Jake, Santa Clara Fire Department. *RE: 3625 Peterson Office Project - Fire & Police Department Service Goals*. November 5, 2019.

⁸² Personal Communications: McDowell, Carolyn, Santa Clara Police Department. RE: 3625 Peterson Office Project - Fire & Police Department Service Goals. October 30, 2019

or elsewhere. Implementation of the proposed office development would not generate new students, and, therefore, would not increase the student population within the City of Santa Clara. Therefore, the proposed project would have no impact on school facilities or capacities in the City. (No Impact)

Impact PS-4: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 parks. (Less than Significant Impact)

The project proposes to construct two new office buildings and would not include any residential uses. An increase in the daily employee population in the City would not result in a substantial increase in usage of local recreational facilities. The proposed office development would include recreational areas available for the tenants including a private patio with a barbeque area and seating, a bocce court, sport court and a beach/play area. The amenity space attached to the parking structure would include a barbeque area and outdoor seating. The proposed on-site recreational facilities would offset the use of off-site recreational facilities by future employees of the site.

No City parks or trails are within walking distance of the proposed development and, therefore, the number of future employees that would use these facilities would not be substantive. Although future employees might use City parks or trails, weekday employees would not place a substantial physical burden on these facilities. Therefore, the proposed project would not have a significant impact on park facilities in the City of Santa Clara. (Less Than Significant Impact)

Impact PS-5:	The project would not result in substantial adverse physical impacts associated
	with the provision of new or physically altered governmental facilities, the
	need for new or physically altered governmental facilities, the construction of
	which could cause significant environmental impacts, in order to maintain
	other public facilities. (No Impact)

The proposed project would construct two new office buildings and would not include any residential uses. Therefore, the proposed project would have no impact on library facilities in the City of Santa Clara. (No Impact)

3.15.2.2 *Consistency with Plans*

City of Santa Clara General Plan

The project would demolish the existing office building and parking lot and construct two new office buildings. Given the project would be an office development, General Plan policies pertaining schools, parks and recreational facilities are not applicable to the project. The General Plan includes the following public services policies applicable to the proposed project.

Safety Policies

Policy 5.9.3-P1: Encourage design techniques that promote public and property safety in the new development of public spaces.

Consistency: The project is designed to promote safety of the future employees of the project and property safety. Security lighting would be provided throughout the outdoor recreational and parking areas and around the perimeter of the site to promote safety. The project would also comply with the City's Fire Code provisions.

Policy 5.10.5-P28: Continue to require all new development and subdivisions to meet or exceed the City's adopted Fire Code provisions.

Consistency: The project would comply with the City's Fire Code provisions; therefore, the project would be consistent with Policy 5.10.5-P28.

3.15.2.3 *Cumulative Impacts*

Impact PS-C:The project would not result in a cumulatively considerable contribution to a
significant public services impact. (Less than Significant Cumulative
Impact)

The geographic area for cumulative public services impacts is the City of Santa Clara. All cumulative projects would be built in conformance with current codes and public safety requirements in the General Plan. The project would not develop residences, and therefore, would not result in a cumulatively considerable contribution to a cumulative park and recreational facility impacts. For this reason, the cumulative projects would result in a less than significant cumulative impact to police, fire, and recreational facilities. **(Less than Significant Cumulative Impact)**

The project does not propose construction of residences, and therefore, would not contribute to cumulative school or library impacts. (No Cumulative Impact)

3.16 **RECREATION**

3.16.1 <u>Environmental Setting</u>

3.16.1.1 *Existing Conditions*

The City of Santa Clara Parks and Recreation Department (Department) provides parks and recreational services in the City. The Department is responsible for maintaining and programming the various parks and recreational facilities and works cooperatively with public agencies in coordinating all recreational activities with the City. As of November 2017, the Department maintains and operates Central Park, a 45-acre community park, 28 neighborhood parks (122.7 acres), five mini parks (2.6 acres), public open space (16.1 acres improved and 40 acres unimproved resulting in 56.2 acres), recreational facilities (14.8 acres improved, 9.0 acres unimproved, and excluding a BMX track resulting in 23.8 acres), recreational trails (7.6 acres), and joint use facilities (48.5 acres) throughout the City, totaling approximately 257.3 improved acres. Community parks are over 15 acres, neighborhood parks are one to fifteen acres and mini parks are typically less than one-acre in size.

3.16.2 <u>Impact Discussion</u>

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

- 1) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- 2) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

3.16.2.1 *Project Impacts*

Impact REC-1:	The project would not increase the use of existing neighborhood and regional
	parks or other recreational facilities such that substantial physical
	deterioration of the facility would occur or be accelerated. (Less than
	Significant Impact)

The proposed project is an office development and does not include any residential uses. A net increase of 1,905 daily employees in the City and the 176 additional employees beyond what's projected in the General Plan would not result in a substantial increase in usage of local recreational facilities.⁸³

The proposed office development would include recreational areas for the tenants including a private patio with a barbeque area and seating, a bocce court, sport court and a beach/play area. The amenity space attached to the parking structure would include a barbeque area and outdoor seating. The

 $^{^{83}}$ 2,705 employees estimated for the proposed office development – 800 employees assumed for existing office development = 1,905 employees (net increase of employees).

proposed on-site recreational facilities would offset the use of off-site recreational facilities by future employees of the site.

No City parks or trails are within walking distance of the proposed development and, therefore, the number of future employees that would use these facilities would not be substantive. Although future employees might use City parks or trails, weekday employees would not place a major physical burden on these facilities. Therefore, the proposed project would not have a significant impact on park facilities in the City of Santa Clara. (Less Than Significant Impact)

Impact REC-2:	The project would not include recreational facilities or require the
	construction or expansion of recreational facilities which might have an
	adverse physical effect on the environment. (No Impact)

The project would include an amenity building and recreational areas. The proposed outdoors areas would not result in an adverse physical effect on the environment. The project would not require the expansion of existing recreational facilities. (No Impact)

3.16.2.2 *Consistency with Plans*

General Plan

The General Plan includes policies to maintain a standard of 2.4 acres of parkland per 1,000 residents (e.g., Policy 5.9.P20) as the City grows. Given the project does not propose housing, the project would not impact the City's parkland standard. The project would include recreational areas to serve the needs of the future employees. The project would, therefore, not conflict with the General Plan goals for park and recreational facilities

3.16.2.3 *Cumulative Impacts*

Impact REC-C:	The project would not result in a cumulatively considerable contribution to a
	significant recreation impact. (Less than Significant Cumulative Impact)

The geographic area for cumulative park/recreational facility impacts is the City of Santa Clara. The proposed project would be an office development and would not include new residences. While employees of the office development may use nearby parks and trails during lunch breaks, the project would not result in permanent new residents that would substantially increase park use such that physical deterioration would occur. The project would not substantially contribute to the cumulative impacts to parks in the area. For these reasons, cumulative impacts to recreational facilities would be less than significant. (Less Than Significant Cumulative Impact)

3.17 TRANSPORTATION/TRAFFIC

The following discussion is based on a Transportation Impact Analysis (TIA) prepared by *Hexagon Transportation Consultants, Inc.* in February 2020. The report can be found in Appendix E of this EIR.

3.17.1 <u>Environmental Setting</u>

3.17.1.1 *Regulatory Framework*

State

Regional Transportation Planning

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 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).

Congestion Management Program

The Santa Clara Valley Transportation Authority (VTA) oversees the Congestion Management Program (CMP), which is aimed at reducing regional traffic congestion. The relevant state legislation requires that all urbanized counties in California prepare a CMP in order to obtain each county's share of gas tax revenues. State legislation requires that each CMP define traffic level of service (LOS) standards, transit service standards, a trip reduction and transportation demand management, a land use impact analysis program, and a capital improvement element. VTA has review responsibility for proposed development projects that are expected to affect CMP designated intersections.

3.17.1.2 Existing Conditions

Roadway Network

Regional access to the project site is provided by US 101 and State Route (SR) 237, as described below.

- US 101 is an eight-lane (three mixed-flow lanes and one high-occupancy vehicle (HOV) lane in each direction) freeway in the vicinity of the site. The highway extends north through San Francisco and south through Gilroy. Regional access to the project site is provided via its interchanges with Lawrence Expressway and Great America Parkway/Bowers Avenue.
- *SR 237* is a six-lane freeway and extends in an east/west direction between Sunnyvale and Milpitas, providing access to Interstate-880 (I-880) and US 101. Two of the six lanes (one in

each direction) are designated as HOV lanes between Zanker Road and US 101. Access to the project site is provided via its interchanges with Great America Parkway and Lawrence Expressway.

Local access to the site is provided by Scott Boulevard, Arques Avenue, Central Expressway, Lawrence Expressway, Bowers Avenue, Great America Parkway, San Tomas Expressway, Garrett Drive, Tannery Way, Lakeside Drive, and Peterson Way.

- *Scott Boulevard* is a divided four-lane east-west arterial in the vicinity of the project. It extends from the Sunnyvale/Santa Clara border near Oakmead Parkway eastward and southward to Saratoga Avenue. West of Oakmead Parkway it becomes Arques Avenue, and south of Saratoga Avenue, it becomes Newhall Street.
- *Arques Avenue* is a four-lane east-west roadway that extends from the Sunnyvale/Santa Clara border near Oakmead Parkway as it transitions from Scott Boulevard westward to San Bernardino Way where it terminates. West of North Fair Oaks Avenue, Arques Avenue provides access to westbound and from eastbound Central Expressway via two ramps.
- *Central Expressway* is a six-lane east-west expressway with carpool (HOV) lanes east of San Tomas Expressway. West of San Tomas Expressway, Central Expressway has four mixed-flow lanes and no HOV lanes. Central Expressway begins at its junction with De la Cruz Boulevard and extends westward into Palo Alto, where it transitions into Alma Street at San Antonio Road.
- *Lawrence Expressway* is a north-south expressway that begins at Saratoga Avenue in West San José and extends northward to SR 237, in Sunnyvale, where it transitions to Caribbean Drive. South of Arques Avenue, both sides of the expressway have an HOV lane. Full interchanges are located at SR 237, US 101, and I-280. Lawrence Expressway provides access to and from the project site via Arques Avenue/Scott Boulevard.
- *Great America Parkway* is a six- to eight-lane north-south arterial that begins at US 101 and extends northward to SR 237 where it terminates at an office park as America Center Drive. Great America Parkway provides regional access to the project site via its full interchanges with US 101 and SR 237.
- *Bowers Avenue* is the southern extension of Great America Parkway. It begins at US 101 as a six-lane arterial and extends southward to Kifer Road/Walsh Avenue, where it transitions into a four-lane roadway. Bowers Avenue continues south to its intersection with El Camino Real (SR 82), where it transitions to Kiely Boulevard. A full interchange is located at US 101. Bowers Avenue provides access to and from the project site via Scott Boulevard and Augustine Drive.
- San Tomas Expressway is a north-south expressway that begins at US 101 and extends southward through Santa Clara and San José and into Campbell, where it transitions into Camden Avenue at SR 17. Full interchanges are located at US 101 and SR 17. North of Homestead Road, San Tomas Expressway is an eight-lane roadway including HOV lanes.

Currently, the HOV lane designation is in effect in both directions of travel during both the AM and PM peak commute hours.

South of Homestead Road, San Tomas narrows to a six-lane facility including HOV lanes. .⁸⁴ San Tomas Expressway provides access to and from the project site via Scott Boulevard.

- *Garrett Drive* is a two-lane north-south undivided roadway that extends from its T-intersections with Scott Boulevard northward to Tannery Way.
- *Tannery Way* is a two-lane east-west undivided roadway that extends from Garrett Drive to Lakeside Drive. Tannery Way is the southern project site boundary and would provide direct access to the project site via two full-access driveways.
- *Lakeside Drive* is a three-lane roadway with one lane in each direction and a center turn lane that forms a half-loop from Arques Avenue to Scott Boulevard. Lakeside Drive is the northern project site boundary and would provide direct access to the project site via one driveway located at the northeast corner of the project site.
- *Peterson Way* is a two-lane north-south undivided roadway that extends from Tannery Way to Lakeside Drive. Peterson Way is the western project site boundary and would provide direct access to the project site via two full-access driveways.

Existing Bicycle and Pedestrian Facilities

Bicycle Facilities

Bicycle facilities are comprised of paths (Class I), lanes (Class II), and routes (Class III). Bicycle paths are paved trails that are separate from roadways. There is a Class I bicycle path adjacent to San Tomas Aquino Creek/San Tomas Expressway (approximately 0.7 miles east of the site) that extends from El Camino Real to Great America Parkway and Sunnyvale Baylands Park. The bicycle path can be accessed via the bike lanes on Scott Boulevard.

Other Class I bicycle paths within two miles of the site include a path within the John W. Christian Greenbelt, approximately 0.8 miles northwest of the project site, and the Calabazas Creek Trail approximately 0.25 miles north of the site. The greenbelt extends from the Calabazas Creek Trail to Duncan Avenue in Sunnyvale and can be accessed via the bike facilities along Lawrence Expressway. The Calabazas Creek Trail consists of a 1.5-mile pedestrian and bicycle trail between U.S. 101 and SR 237. This paved trail connects Mission College, the John W. Christian Greenbelt at Fairwood Park, VTA's Reamwood Light Rail Station, and the San Tomas Aquino and Bay Trails via Old Mountain View-Alviso Road.

Class II bicycle lanes in the project vicinity, which are preferential use areas within a roadway designated for bicycles, are present along the following roadways:

⁸⁴ At the time the Notice of Preparation was circulated, the segment north of Homestead Road and south of El Camino Real was under construction to be widened from three to four lanes in each direction. Construction is now complete, but the analysis was based on the original lane configuration.

- Scott Boulevard/Arques Avenue, from Monroe Street to North Fair Oaks Avenue in Sunnyvale,
- Bowers Avenue/Great America Parkway, from Chromite Drive to SR 237
- Oakmead Parkway from Central Expressway to Duane Avenue in Sunnyvale, and
- Lakeside Drive, along the entire length of the road.

Class III bicycle routes are assigned bicycle routes that provide a connection through residential, downtown, and rural/hillside areas, to Class I and Class II facilities. Although none of the local commercial streets near the project site (e.g., Garrett Drive/Tannery Way and Peterson Way) are designated as bicycle routes, due to their low traffic volumes, many of these streets are conducive to bicycle usage. Existing bicycle facilities are shown on Figure 3.13-1. Bicycles are also allowed on Central Expressway, Lawrence Expressway, and San Tomas Expressway.

Pedestrian Facilities

Pedestrian facilities consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections. In the project vicinity, sidewalks are provided on both sides of Peterson Way and Tannery Way, as well as along the project site frontage on Lakeside Drive. Scott Boulevard has fragmented sidewalks along the south side of the street between Oakmead Parkway and Oakmead Village Drive in the vicinity of the project site.

Crosswalks are provided at all signalized study intersections in the vicinity of the project site, with the exception of the following locations:

- Garrett Drive and Scott Boulevard, west leg of the intersection,
- Lakeside Drive and Arques Avenue, west leg of the intersection, and
- Oakmead Parkway/Corvin Drive, east leg of the intersection.

All of the crosswalks at the signalized study intersections include pedestrian signal heads and push buttons. Sidewalks in the project vicinity provide adequate access to the local pedestrian network and the nearby transit facilities.

Existing Transit Facilities

Existing transit service in the project vicinity is provided by the VTA. The nearest bus stops to the project site are located along Scott Boulevard at Garrett Drive, Oakmead Village Drive, and Lakeside Drive (approximately a half-mile walking distance from the project site), at the intersection of Bowers Avenue and Scott Boulevard (approximately a half-mile walking distance from the project site), and at the intersection of Lawrence Expressway and Arques Avenue (approximately a one mile walking distance from the project site). Transit facilities in the vicinity of the site are shown on Figure 3.17-2. The nearest VTA bus services are described in Table 3.17-1.





Table 3.17-1: VTA Bus Service in the Project Area				
Route	OuteRoute DescriptionLocation of Nearest Bus Stops			
Local Route 57	Old Ironsides/Great America Parkway to West Valley College in Saratoga	Bowers/Scott Blvd	30	
Local Route 58	Alviso to West Valley College in Saratoga	Bowers/Scott Blvd	30	
Local Route 304	Sunnyvale Transit Center to Santa Teresa Light Rail Station in San José	Scott Boulevard at its intersections with Garrett Drive and Oakmead Village Drive	30-50	
Local Route 328	Almaden Expressway to the Lockheed Martin Transit Center	Lawrence Expressway and Arques Avenue	60-90	
ACE Gray (822) Shuttle	Great America Station to Kifer Road	Scott Boulevard at its intersections with Garrett Drive, Lakeside Drive, and Bowers Avenue	60	

3.17.1.3 *Methodology*

The impacts of the proposed development were evaluated following the methodologies established by the City of Santa Clara and the CMP. Intersections were selected for study if project traffic would add at least 10 trips per lane per hour during one or more peak hours, consistent with adopted CMP methodology. Traffic conditions were evaluated for the weekday AM and PM Peak Hours. The AM Peak Hour is generally between 7:00 AM and 9:00 AM, and the PM Peak Hour is generally between 4:00 PM and 6:00 PM. The following scenarios were studied to determine if the level of service (LOS) of the local intersections in the project area would be adversely affected by project generated traffic:

- **Scenario 1:** Existing Existing traffic conditions.
- Scenario 2: Existing Plus Project Scenario 1 plus traffic generated by the project.
- Scenario 3: Background Scenario 1 plus approved but not yet constructed development.
- Scenario 4: Background Plus Project Scenario 3 plus traffic generated by the project.

Traffic conditions at the study intersections were evaluated using level of service (LOS). Level of service is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or congested conditions with excessive delays. The various analysis methods are described below.

Cities of Santa Clara and San José Intersections

The cities of Santa Clara and San José level of service methodology is TRAFFIX, which is based on the Highway Capacity Manual (HCM) 2000 method for signalized intersections. This methodology evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. Since TRAFFIX is also the CMP-designated intersection level of service methodology, each of the cities' methodologies employs the CMP defaults values for the analysis parameters. The City of Santa Clara has LOS D as the minimum standard, except on CMP and expressway facilities within Santa Clara and roadways considered "regionally significant," which have a standard of LOS E consistent with County of Santa Clara standards. The City of San José's level of service standard is LOS D or better for all signalized intersections, including CMP intersections. The correlation between average delay and level of service is shown in Table 3.17-2.

CMP Intersections

Since TRAFFIX is the designated level of service methodology for both the CMP and local municipalities, the CMP study intersections are not analyzed separately, but rather are among the local municipalities' signalized intersections analyzed using TRAFFIX. The only difference between the local municipalities' and CMP analyses is that project impacts are determined on the basis of a different level of service standard – the CMP level of service standard for signalized intersections is LOS E or better.

	Table 3.17-2: Signalized Intersection Level of Service Definitions			
Level of Service	Level of Service Description of Operations			
A	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low vehicle delay.	Up to 10.0		
В	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average vehicle delay.	10.1 to 20.0		
С	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though may still pass through the intersection without stopping.	20.1 to 35.0		
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lengths, or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0		
Е	This is considered to be the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Individual cycle failures occur frequently.	55.1 to 80.0		
F	This level of delay is considered unacceptable by most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes of such delay levels.	Greater than 80.0		

Freeway Segments

The level of service for freeway segment is estimated based on vehicle density, considering vehicles per mile per lane, peak hour volume in vehicles per hour (vph), number of travel lanes, and average travel speed in miles per hour (mph). The CMP requires that mixed-flow lanes and auxiliary lanes be analyzed separately from high-occupancy vehicle (HOV) lanes (otherwise known as carpool lanes). Freeway LOS criteria are summarized in Table 3.17-3.

	Table 3.17-3: Freeway Level of Service Based on Density				
Level of Service	Level of Description				
А	Average operating speeds at the free-flow speed generally prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	0-11			
В	Speeds at the free-flow speed are generally maintained. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high.	>11-18			
С	Speeds at or near the free-flow speed of the freeway prevail. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more vigilance on the part of the driver.	>18-26			
D	Speeds begin to decline slightly with increased flows at this level. Freedom to maneuver within the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort levels.	>26-46			
Е	At this level, the freeway operates at or near capacity. Operations in this level are volatile, because there are virtually no usable gaps in the traffic stream, leaving little room to maneuver within the traffic stream.	>46-58			
F	Vehicular flow breakdowns occur. Large queues form behind breakdown points.	> 58.0			

3.17.1.4 Impact Criteria

City of Santa Clara – Local Signalized Intersections

Based on the Santa Clara criteria, a project would cause a significant impact at a signalized intersection if the additional project traffic caused one of the following:

- Cause the level of service at any local intersection to degrade from an acceptable LOS D or better under background conditions to an unacceptable LOS E or F under background plus project conditions; or
- At any local intersection that is already an unacceptable LOS E or F under background conditions, cause the critical-movement delay at the intersection to increase by four or more seconds and volume-to-capacity ratio (V/C) to increase by .01 or more.

City of San José – Local Signalized Intersections

City of San José's impact criteria applies the same significance criteria as City of Santa Clara except that the LOS D standard applies to all signalized intersections including CMP intersections.

City of Sunnyvale – Local Signalized Intersections

City of Sunnyvale's impact criteria is equivalent to City of Santa Clara criteria. The Cities of Santa Clara and Sunnyvale have set forth LOS D as the minimum standard, except on CMP and expressway facilities within Santa Clara and roadways considered regionally significant (major transportation corridors) within Sunnyvale, which have a standard of LOS E. In the study area, the Sunnyvale intersections along Lawrence Expressway are considered regionally significant.

CMP and Santa Clara County Expressway Intersections

Based on CMP criteria, a project would cause a significant impact at a CMP or County Expressway intersection if the additional project traffic caused one of the following:

- Cause the level of service at any local intersection to degrade from an acceptable LOS E or better under existing or background conditions to an unacceptable LOS F under existing plus project or background plus project conditions; or
- At any CMP/County intersection that is already an unacceptable LOS F under existing or background conditions, cause the critical-movement delay at the intersection to increase by four or more seconds and volume-to-capacity ratio (V/C) to increase by .01 or more.

CMP Definition of Significant Freeway Segment Impacts

The CMP defines an acceptable level of service for freeway segments as LOS E or better. A project is considered to create a significant impact on traffic conditions on a freeway segment if for either peak hour:

- The level of service on the freeway segment degrades from an acceptable LOS E or better under existing conditions to an unacceptable LOS F under existing plus project conditions, or
- The level of service on the freeway segment is LOS F under existing plus project conditions and the number of project trips on that segment constitutes at least one percent of capacity on that segment.

3.17.1.5 Existing Intersection Operations

Existing LOS of Study Intersections

Analysis of existing intersection operations found three of the study intersections currently operating at an unacceptable level of service during one of the peak hours. All other study intersections currently operate at an acceptable LOS. The results of the existing conditions analysis are summarized in Table 3.17-4.



	Table 3.17-4: Study Intersections Level of Service – Existing Conditions ⁸⁵					
No.	Intersection	Peak Hour	LOS			
1	Lawrence Expressway and Kifer Road (SC)	AM PM	35.1 83.9	D+ F		
2	Lawrence Expressway and Monroe Street/Reed Avenue (SC)*	AM PM	89.2 74.1	F E		
3	Lawrence Expressway and Cabrillo Avenue (SC)	AM PM	40.6 41.4	D D		
4	Lawrence Expressway and El Camino Real (SC)*	AM PM	31.9 29.9	C C		
5	Garrett Drive and Scott Boulevard (SC)	AM PM	7.9 7.8	A A		
6	Lakeside Drive and Scott Boulevard (SC)	AM PM	12.5 10.9	B B+		
7	Great America Parkway and Great America Way (SC)	AM PM	22.7 15.5	C+ B		
8	Great America Parkway and Old Mountain View – Alviso Road (SC)	AM PM	20.9 49.3	C+ D		
9	Great America Parkway and Bunker Hill Lane (SC)	AM PM	18.6 32.2	В- С-		
10	Great America Parkway and Tasman Drive (SC)*	AM PM	42.0 29.5	D C		
11	Great America Parkway and Old Glory Lane (SC)	AM PM	10.0 14.5	A B		
12	Great America Parkway and Patrick Henry Drive (SC)	AM PM	26.7 41.2	C D		
13	Great America Parkway and Mission College Boulevard (SC)*	AM PM	42.9 49.0	D D		
14	Great America Parkway and US 101 Northbound Ramps (SC)*	AM PM	5.8 8.1	A A		
15	Bowers Avenue and US Southbound Ramps (SC)*	AM PM	15.7 5.6	B A		
16	Bowers Avenue and Augustine Drive (SC)	AM PM	18.7 26.2	B- C		
17	Bowers Avenue and Scott Boulevard (SC)*	AM PM	39.5 34.2	D C-		

⁸⁵ Please note since March 2018, the City of San José evaluates project impacts based on VMT, and no longer utilizes intersection LOS to identify project impacts. However, this project is located in the City of Santa Clara and the two San José study intersections (39 and 40) are CMP intersections. CMP intersections must be in conformance with the CMP, which includes an intersection analysis based on LOS.

	Table 3.17-4: Study Intersections Level of Service – Existing Conditions ⁸⁵					
No.	Intersection	Peak Hour	Delay	LOS		
18	Bowers Avenue and Central Expressway (SC)*	AM PM	58.9 57.3	E+ E+		
19	Mission College Boulevard/Thomas Road and Bowers Avenue (SC)*	AM PM	80.7 62.9	F E		
20	Agnew Road/Freedom Circle and Mission College Boulevard (SC)	AM PM	30.2 32.7	C C-		
21	San Tomas Expressway and Scott Boulevard (SC)*	AM PM	30.5 55.5	C E+		
22	San Tomas Expressway and Walsh Avenue (SC)	AM PM	45.5 70.1	D E		
23	San Tomas Expressway and Monroe Street (SC)*	AM PM	37.0 45.4	D+ D		
24	San Tomas Expressway and Cabrillo Avenue (SC)	AM PM	29.4 35.0	C C-		
25	San Tomas Expressway and El Camino Real (SC)*	AM PM	70.0 78.3	E E-		
26	Scott Boulevard and Central Expressway (SC)*	AM PM	40.5 69.7	D E		
27	Lafayette Street and Central Expressway (SC) *	AM PM	54.3 68.5	D- E		
28	Lakeside Drive and Augustine Drive (SC)	AM PM	27.8 36.5	C D+		
31	Lawrence Expressway and US 101 Northbound Ramps (SV)	AM PM	10.0 12.3	A B		
32	Lawrence Expressway and US 101 Southbound Ramps (SV)	AM PM	21.6 45.7	C+ D		
33	Lawrence Expressway and Oakmead Parkway (SV)	AM PM	36.2 45.8	D+ D		
34	Lawrence Expressway and Arques Avenue (SV)*	AM PM	41.3 68.1	D E		
35	Lakeside Drive and Oakmead Parkway (SV)	AM PM	20.1 20.1	C+ C+		
36	Lakeside Drive and Arques Avenue (SV)	AM PM	23.7 19.5	C B-		
37	Oakmead Parkway and Arques Avenue/Scott Boulevard (SV)	AM PM	21.9 25.8	C+ C		
38	Oakmead Parkway/Corvin Drive and Central Expressway (SV)*	AM PM	43.1 48.5	D D		

	Table 3.17-4: Study Intersections Level of Service – Existing Conditions ⁸⁵						
No.	Intersection	Peak Hour	Delay	LOS			
39	Great America Parkway and SR 237 Westbound Ramps (SJ)*	AM PM	17.8 17.8	B B			
40	40Great America Parkway and SR 237 Eastbound RampsAM12.6(SJ)*PM10.3						
 Notes: * = A VTA Congestion Management Program (CMP) intersection (SC) City of Santa Clara, (SJ) City of San José, (SV) City of Sunnyvale Bold indicates unacceptable LOS. Intersections 29. Peterson Way and Lakeside Drive and 30. Peterson Way and Tannery Way in Santa Clara are unsignalized and do not require a LOS evaluation. Please note since March 2018, the City of San José evaluates project impacts based on VMT, and no longer utilizes intersection LOS to identify project impacts. However, this project is located in the City of Santa Clara and these the two San José study intersections (39 and 40) are CMP intersections. CMP intersections must be in conformance with the CMP, which includes intersection analysis based on LOS. LOS E is the minimum standard for CMP intersections and expressways, as well regionally significant 							

3.17.1.6 Existing Freeway Operations

The VTA CMP Traffic Analysis guidelines require that CMP freeway segments be evaluated to determine the impact of added traffic for projects that generate trips equal to or greater than one percent of the freeway segment's capacity. The ratio between the existing volumes using the freeway on-ramps and the future traffic volumes was used to estimate the number of vehicles that would be added to the existing queue under background and project conditions.

Traffic volumes for the study freeway segments were obtained from the 2016 CMP Annual Monitoring Report, which contains the most recent data collected for freeway segments located in Santa Clara County. The traffic study includes an analysis of AM and PM peak hour traffic conditions for 15 freeway segments (30 directional segments) in the vicinity of the project site. The results show that of the 30 directional freeway segments analyzed mixed-flow lanes on 26 directional study freeway segments currently operate at an unacceptable LOS F during one of the peak hours of traffic. The results also show that 25 directional HOV lane segments analyzed currently operate at an unacceptable LOS F during one of the peak hours, as noted in bold in Table 3.17-5 below. All other study freeway segments operate at an acceptable LOS under existing conditions. The existing conditions are summarized in Table 3.17-5 below.

	Table 3.17-5: Study Freeway Segments Level of Service – Existing Conditions						
No.	Freeway	Segment	Direction	Peak Hour	LC	DS	
					Mixed	HOV	
1	US 101	I-880 to Old Bayshore Highway	NB	AM PM	F B	F B	
2	US 101	Old Bayshore Highway to North First Street	NB	AM PM	F B	F A	

	Table 3.17	7-5: Study Freeway Segments Level of Ser	rvice – Exist	ting Co	nditions	
No.	Freeway	Segment	Direction	Peak	LC)S
				Hour	Mixed	HOV
3	US 101	North First Street to Guadalupe Parkway (SR 87)	NB	AM PM	F B	F A
4	US 101	Guadalupe Parkway (SR 87) to De La Cruz Boulevard	NB	AM PM	F C	F A
5	US 101	De La Cruz Boulevard to San Tomas Expressway/Montague Expressway	NB	AM PM	F C	F A
6	US 101	San Tomas/Montague Expressway to Bowers Avenue/Great America Parkway	NB	AM PM	F D	F A
7	US 101	Bowers Avenue/Great America Parkway to Lawrence Expressway	NB	AM PM	F D	F B
8	US 101	Lawrence Expressway to North Fair Oaks Avenue	NB	AM PM	F D	F B
9	US 101	North Fair Oaks Avenue to North Mathilda Avenue	NB	AM PM	F C	E A
10	US 101	North Mathilda Avenue to SR 237	NB	AM PM	E C	F C
11	SR 237	Lawrence Expressway to Great America Parkway	EB	AM PM	D F	B F
12	SR 237	Great America Parkway to North First Street	EB	AM PM	D F	C F
13	SR 237	North First Street to Zanker Road	EB	AM PM	D F	B E
14	SR 237	Zanker Road to McCarthy Boulevard	EB	AM PM	D D	B D
15	SR 237	McCarthy Boulevard to I-880	EB	AM PM	C C	A D
16	US 101	SR 237 to North Mathilda Avenue	SB	AM PM	C F	D F
17	US 101	North Mathilda Avenue to North Fair Oaks Avenue	SB	AM PM	C F	B F
18	US 101	North Fair Oaks Avenue to Lawrence Expressway	SB	AM PM	D F	B F
19	US 101	Lawrence Expressway to Bowers Avenue/Great America Parkway	SB	AM PM	D F	B F

	Table 3.17	7-5: Study Freeway Segments Level of Se	rvice – Exist	ting Cor	nditions				
No.	Freeway	Segment	Direction	Peak	LC	DS			
				Hour	Mixed	HOV			
20	US 101	Bowers Avenue/Great America Parkway to San Tomas Expressway/Montague Expressway	SB	AM PM	C F	B F			
21	US 101	San Tomas Expressway/Montague Expressway to De La Cruz Boulevard	SB	AM PM	C F	A F			
22	US 101	De La Cruz Boulevard to Guadalupe Parkway (SR 87)	SB	AM PM	C E	A D			
23	US 101	Guadalupe Parkway (SR 87) to North First Street	SB	AM PM	B F	A F			
24	US 101	North First Street to Old Bayshore Highway	SB	AM PM	B F	A F			
25	US 101	Old Bayshore Highway to I-880	SB	AM PM	B F	A F			
26	SR 237	I-880 to McCarthy Boulevard	WB	AM PM	F C	F A			
27	SR 237	McCarthy Boulevard to Zanker Road	WB	AM PM	F D	F B			
28	SR 237	Zanker Road to North First Street	WB	AM PM	F D	F A			
29	SR 237	North First Street to Great America Parkway	WB	AM PM	F D	F B			
30	SR 237	Great America Parkway to Lawrence Expressway	WB	AM PM	F D	F B			
Notes	Image: Notes: PM D B Notes: * = A VTA Congestion Management Program (CMP) intersection (SC) City of Santa Clara, (SJ) City of San José, (SV) City of Sunnyvale Bold indicates unacceptable LOS. Please note since March 2018, the City of San José evaluates project impacts based on VMT, and no longer utilizes intersection LOS to identify project impacts. However, this project is located in the City of								

Santa Clara and these the two San José study intersections (39 and 40) are CMP intersections. CMP intersections must be in conformance with the CMP, which includes intersection analysis based on LOS. LOS E is the minimum standard for CMP intersections and expressways, as well regionally significant roadways in the City of Santa Clara. LOS D is the minimum standard for all other roadway intersections.

3.17.1.7 Background Intersection Operations

Background traffic conditions represent conditions anticipated to exist after completion of the environmental review process but prior to operation of the proposed development. It takes into account planned transportation system improvements that would occur prior to implementation of the proposed project and background traffic volumes. Background peak hour traffic volumes are

calculated by adding estimated traffic from approved but not yet constructed development to the existing conditions (see Appendix E for a list of Background projects). This traffic scenario represents a more congested traffic condition than the existing conditions scenario since it includes traffic from approved projects. The background conditions analysis is consistent with City of Santa Clara methodology for transportation analyses though it is not required under CEQA, as it is neither a project scenario nor cumulative analysis but represents conditions anticipated to exist at the time the project is built and operational.

Background conditions include the trips generated by the future City Place development Phases 1, 2, and 3, NVIDIA Office Project on San Tomas Expressway, the Yahoo! Office campus on Old Ironsides Drive, and the Santa Clara Square project on Augustine Drive, which is now partially constructed. San José's Approved Trip Inventory (ATI) volumes, traffic generated by Phase 1 of the North San José Development Policy (City of San José approved project), and approved projects in the City of Sunnyvale were also included in the background traffic volumes.

Changes to the Roadway Network

This analysis assumes that the transportation network under background conditions would be the same as the existing roadway network with the exception of the following improvements identified by other approved development projects in the area and/or the City of Santa Clara Capital Improvement Program (CIP):

- *Great America Parkway and Great America Way* The planned improvement includes the addition of a second westbound right-turn lane with an overlap phase and a second southbound left-turn lane.
- *Great America Parkway and Mountain View-Alviso Road* Addition of a second eastbound left-turn lane.
- *Great America Parkway and Tasman Drive* Addition of a southbound right-turn lane and a third westbound left-turn lane.
- *Great America Parkway and Old Glory Lane* Addition of a second northbound left-turn lane.
- *Great America Parkway and Patrick Henry Drive* Addition of a second northbound leftturn lane and eastbound free-right-turn lane. The eastbound right-turn lane includes the addition of a fourth southbound lane on Great America Parkway between Patrick Henry Drive and Mission College Boulevard.
- *Great America Parkway and Mission College Boulevard* The planned improvement includes the addition of a third westbound left-turn lane, second eastbound left-turn lane, fourth southbound through lane, and third northbound left-turn lane as a part of the CIP. The addition of a separate westbound right-turn lane is also a planned improvement.

- *Bowers Avenue and Central Expressway* Addition of a third southbound left-turn lane and third eastbound left-turn lane.
- San Tomas Expressway and Walsh Avenue Addition of a second eastbound left-turn lane.
- *Lawrence Expressway and US 101 Southbound Ramps* Conversion of an eastbound left-turn lane to a shared left-turn/right-turn lane.
- *Great America Parkway and SR-237 Westbound Ramps* Addition of a third westbound left-turn lane and second westbound right-turn lane.
- *Great America Parkway and SR-237 Eastbound Ramps* Addition of a third southbound through lane and second eastbound right-turn lane.

Background Intersection Level of Service

Analysis of the background intersection operations found that 16 signalized intersections would operate at an unacceptable LOS. The intersections are listed below (CMP intersections are denoted with an asterisk*).

City of Santa Clara Intersections

- Lawrence Expressway and Kifer Road (AM and PM Peak Hour)
- Lawrence Expressway and Monroe Street/Reed Avenue* (AM and PM Peak Hours)
- Lawrence Expressway and Cabrillo Avenue (AM Peak Hour)
- Great America Parkway and Great America Way (AM Peak Hour)
- Great America Parkway and Old Mountain View-Alviso Road (AM Peak Hour)
- Great America Parkway and Mission College Boulevard* (PM Peak Hour)
- Bowers Avenue and Augustine Drive (PM Peak Hour)
- Bowers Avenue and Scott Boulevard* (AM and PM Peak Hours)
- Bowers Avenue and Central Expressway* (AM and PM Peak Hours)
- Mission College Boulevard/Thomas Road and Montague Expressway* (AM and PM Peak Hours)
- San Tomas Expressway and Scott Boulevard* (PM Peak Hour)
- San Tomas Expressway and Walsh Avenue (AM and PM Peak Hours)
- San Tomas Expressway and El Camino Real* (AM and PM Peak Hours)
- Scott Boulevard and Central Expressway* (PM Peak Hour)
- Lafayette Street and Central Expressway* (PM Peak Hour)

City of Sunnyvale Intersection

• Lawrence Expressway and Arques Avenue* (PM Peak Hour)

All other intersections would operate at an acceptable LOS under background conditions in both the AM and PM Peak Hours. Please note the Lawrence Expressway/Cabrillo Avenue intersection would

operate at an acceptable LOS during the PM Peak Hour because Lawrence Expressway is considered as an expressway facility. In the City of Santa Clara, all intersections along expressways have a LOS standard of E or better. The results of the analysis are summarized in Table 3.17-6 below. Impacted intersections are shown in bold text.

Table 3.17-6: Study Intersections Level of Service – Background Conditions									
No.	Intersection	Peak	Exis	ting	Backg	round			
		Hour	Delay	LOS	Delay	LOS			
1	Lawrence Expressway and Kifer Road (SC)	AM PM	35.1 83.9	D+ F	99.9 128.4	F F			
2	Lawrence Expressway and Monroe Street/Reed Avenue (SC)*	AM PM	89.2 74.1	F E	134.9 110.6	F F			
3	Lawrence Expressway and Cabrillo Avenue (SC)	AM PM	40.6 41.4	D D	80.6 66.6	F E			
4	Lawrence Expressway and El Camino Real (SC)*		31.9 29.9	C C	36.2 33.5	D+ C-			
5	Garrett Drive and Scott Boulevard (SC)	AM PM	7.9 7.8	A A	7.8 9.5	A A			
6	Lakeside Drive and Scott Boulevard (SC)		12.5 10.9	B B+	11.2 10.5	B+ B+			
7	Great America Parkway and Great America Way (SC)		22.7 15.5	C+ B	96.1 33.1	F С-			
8	Great America Parkway and Old Mountain View – Alviso Road (SC)		20.9 49.3	C+ D	59.3 47.2	E+ D			
9	Great America Parkway and Bunker Hill Lane (SC)	AM PM	18.6 32.2	В- С-	11.4 23.3	B+ C			
10	Great America Parkway and Tasman Drive (SC)*	AM PM	42.0 29.5	D C	46.1 52.9	D D-			
11	Great America Parkway and Old Glory Lane (SC)	AM PM	10.0 14.5	A B	17.0 41.1	B D			
12	Great America Parkway and Patrick Henry Drive (SC)	AM PM	26.7 41.2	C D	33.6 30.1	C- C			
13	Great America Parkway and Mission College Boulevard (SC)*	AM PM	42.9 49.0	D D	48.1 81.0	D F			
14	Great America Parkway and US 101 Northbound Ramps (SC)*	AM PM	5.8 8.1	A A	12.9 22.6	B C+			
15	Bowers Avenue and US 101 Southbound Ramps (SC)*	AM PM	15.7 5.6	B A	19.0 6.5	B- A			
16	Bowers Avenue and Augustine Drive (SC)	AM PM	18.7 26.2	B- C	39.9 57.5	D E+			

Table 3.17-6: Study Intersections Level of Service – Background Conditions									
No.	Intersection	Peak	Exis	ting	Background				
		Hour	Delay	LOS	Delay	LOS			
17	Bowers Avenue and Scott Boulevard (SC)*	AM PM	39.5 34.2	D C-	91.8 80.4	F F			
18	Bowers Avenue and Central Expressway (SC)*	AM PM	58.9 57.3	E+ E+	84.4 102.6	F F			
19	Mission College Boulevard/Thomas Road and Bowers Avenue (SC)*	AM PM	80.7 62.9	F E	176.6 144.7	F F			
20	Agnew Road/Freedom Circle and Mission College Boulevard (SC)		30.2 32.7	C C-	30.8 35.0	C C-			
21	San Tomas Expressway and Scott Boulevard (SC)*	AM PM	30.5 55.5	C E+	43.8 90.1	D F			
22	San Tomas Expressway and Walsh Avenue (SC)	AM PM	45.5 70.1	D E	79.0 129.1	E- F			
23	San Tomas Expressway and Monroe Street (SC)*	AM PM	37.0 45.4	D+ D	56.5 78.1	E+ E-			
24	San Tomas Expressway and Cabrillo Avenue (SC)		29.4 35.0	C C-	34.0 40.9	C- D			
25	San Tomas Expressway and El Camino Real (SC)*		70.0 78.3	E E-	98.5 121.9	F F			
26	Scott Boulevard and Central Expressway (SC)*	AM PM	40.5 69.7	D E	44.4 85.4	D F			
27	Lafayette Street and Central Expressway (SC)*	AM PM	54.3 68.5	D- E	74.4 111.5	E F			
28	Lakeside Drive and Augustine Drive (SC)	AM PM	27.8 36.5	C D+	27.8 36.5	C D+			
31	Lawrence Expressway and US 101 Northbound Ramps (SV)	AM PM	10.0 12.3	A B	10.5 12.6	B+ B			
32	Lawrence Expressway and US 101 Southbound Ramps (SV)	AM PM	21.6 45.7	C+ D	13.8 27.6	B C			
33	Lawrence Expressway and Oakmead Parkway (SV)	AM PM	36.2 45.8	D+ D	56.3 53.7	E+ D-			
34	Lawrence Expressway and Arques Avenue (SV)*	AM PM	41.3 68.1	D E	48.9 108.1	D F			
35	Lakeside Drive and Oakmead Parkway (SV)	AM PM	20.1 20.1	C+ C+	20.3 20.2	C+ C+			
36	Lakeside Drive and Arques Avenue (SV)	AM PM	23.7 19.5	C B-	22.7	C+			

	Table 3.17-6: Study Intersections Level of Service – Background Conditions									
No.	Intersection	Peak	Existing		Background					
		Hour	Delay	LOS	Delay	LOS				
					17.9	В				
37	Oakmead Parkway and Arques Avenue/Scott Boulevard (SV)	AM PM	21.9 25.8	C+ C	21.7 26.3	C+ C				
38	Oakmead Parkway/Corvin Drive and Central Expressway (SV)*	AM PM	43.1 48.5	D D	78.6 79.9	Е- Е-				
39	Great America Parkway and SR 237 Westbound Ramps (SJ)*	AM PM	17.8 17.8	B B	48.3 27.9	D C				
40	Great America Parkway and SR 237 Eastbound Ramps (SJ)*	AM PM	12.6 10.3	B B+	12.7 12.6	B B				
Notes	Notes: * = A VTA Congestion Management Program (CMP) intersection (SC) City of Santa Clara, (SJ) City of San José, (SV) City of Sunnyvale Bold indicates unacceptable LOS.									

Intersections 29. Peterson Way and Lakeside Drive and 30. Peterson Way and Tannery Way in Santa Clara are unsignalized and do not require a LOS evaluation.

Please note since March 2018, the City of San José evaluates project impacts based on VMT, and no longer utilizes intersection LOS to identify project impacts. However, this project is located in the City of Santa Clara and these the two San José study intersections (39 and 40) are CMP intersections. CMP intersections must be in conformance with the CMP, which includes intersection analysis based on LOS. LOS E is the minimum standard for CMP intersections and expressways, as well regionally significant roadways in the City of Santa Clara. LOS D is the minimum standard for all other roadway intersections.

3.17.2 Impact Discussion

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

- 1) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities?
- 2) For a land use project, conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?
- 3) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?
- 4) Result in inadequate emergency access?

3.17.2.1 *Project Impacts*

Impact TRN-1:The project would not conflict with a program plan, ordinance or policy
addressing transit, roadways, bicycle lanes and pedestrian facilities. The
project would conflict with the City's LOS at key intersections and CMP
program for freeway segments. (Significant Unavoidable Impact)

Trip Generation Estimates

Traffic trips generated by the project were estimated using the "General Office Building" rates⁸⁶ contained in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 10th Edition.* The City's 2013 CAP requires the project to achieve a 25 percent reduction in vehicle miles traveled; a 10 percent reduction of which must occur through implementation of a TDM Plan. The project's TDM program meets the 10 percent VMT reduction standard. The project trip estimates include a five percent reduction for TDM. ⁸⁷ Existing trips associated with the office/R&D building on-site were also subtracted from the net project trips, since they reflect the environmental baseline condition and are accounted for in existing intersection counts. A summary of the project trip generation estimates is shown in Table 3.17-7 below.

Table 3.17-7: Project Trip Generation Estimates											
I and Use	Daily Trips	AN	I Peak H	our	PM Peak Hour						
Lanu Use		In	Out	Total	In	Out	Total				
Existing Use – Office Building/ Electronics Manufacturing*	<1,083>	<135>	<18>	<153>	<17>	<121>	<138>				
Proposed Project – General Office	6,906	580	95	675	114	599	713				
TDM Reduction (5 percent)	-345	-29	-5	-34	-6	-121	-36				
Net Project Trips 5,477 416 72 488 91 448 539											
* ITE Trip Generation Manual, 10th Editi	on, 2017 [Ge	eneral Ligh	t Industria	l (110)]		•					

Existing Plus Project Intersection Operations

Signalized Intersections

The following three signalized study intersections operate at an unacceptable level of service (LOS E or worse for locally controlled intersections and LOS F for CMP and expressway intersections) during one of the peak hours analyzed (CMP intersections are denoted with an asterisk*) under existing conditions:

- No. 1. Lawrence Expressway and Kifer Road (PM peak hour)
- No. 2. Lawrence Expressway and Monroe Street/Reed Avenue* (AM peak hour)
- No. 19. Mission College Boulevard/Thomas Road and Montague Expressway* (AM peak hour)

All other study intersections operate at acceptable level of service under existing conditions.

⁸⁶ ITE Land Use 710, General Office Building

⁸⁷ Only a five percent VMT reduction in the Traffic Impact Analysis (TIA) since the VTA TIA Guidelines limit the trip reduction attributed to a TDM program at five percent.

Personal Communication. Email: Clayton, Jane, Hexagon Transportation Consultants. *Re 3625 Peterson Way – TDM*. October 19, 2018.

The LOS of the study intersections was calculated under project conditions by adding the project trips from the proposed development to existing conditions. The results of the existing plus project conditions analysis are summarized in Table 3.13-8 below.

	Table 3.17-8: Study Intersections Level of Service – Existing Plus Project Conditions									
No.	Intersection	Peak Hour	Exis	ting	Exis Plus P	ting roject				
			Delay	LOS	Delay	LOS				
1	Lawrence Expressway and Kifer Road (SC)	AM PM	35.1 83.9	D+ F	36.1 84.5	D+ F				
2	Lawrence Expressway and Monroe Street/Reed Avenue (SC)*	AM PM	89.2 74.1	F E	92.2 75.9	F Е				
3	Lawrence Expressway and Cabrillo Avenue (SC)	AM PM	40.6 41.4	D D	41.0 42.0	D D				
4	Lawrence Expressway and El Camino Real (SC)*	AM PM	31.9 29.9	C C	32.1 29.9	C- C				
5	Garrett Drive and Scott Boulevard (SC)		7.9 7.8	A A	10.2 8.6	B+ A				
6	Lakeside Drive and Scott Boulevard (SC)		12.5 10.9	B B+	12.6 12.1	B B				
7	Great America Parkway and Great America Way (SC)		22.7 15.5	C+ B	22.3 15.4	C+ B				
8	Great America Parkway and Old Mountain View – Alviso Road (SC)	AM PM	20.9 49.3	C+ D	20.8 49.3	C+ D				
9	Great America Parkway and Bunker Hill Lane (SC)	AM PM	18.6 32.2	В- С-	18.1 31.9	B- C				
10	Great America Parkway and Tasman Drive (SC)*	AM PM	42.0 29.5	D C	42.1 29.6	D C				
11	Great America Parkway and Old Glory Lane (SC)	AM PM	10.0 14.5	A B	9.9 14.3	A B				
12	Great America Parkway and Patrick Henry Drive (SC)	AM PM	26.7 41.2	C D	26.8 41.0	C D				
13	Great America Parkway and Mission College Boulevard (SC)*	AM PM	42.9 49.0	D D	42.9 48.9	D D				
14	Great America Parkway and US 101 Northbound Ramps (SC)*	AM PM	5.8 8.1	A A	7.6 8.6	A A				
15	Bowers Avenue and US Southbound Ramps (SC)*	AM PM	15.7 5.6	B A	15.8 5.5	B A				
16	Bowers Avenue and Augustine Drive (SC)	AM PM	18.7 26.2	B- C	18.4 28.6	B- C				

	Table 3.17-8: Study Intersections Level of Service – Existing Plus Project Conditions							
No.	Intersection	Peak Hour	Exis	ting	Exis Plus P	ting roject		
			Delay	LOS	Delay	LOS		
17	Bowers Avenue and Scott Boulevard (SC)*	AM PM	39.5 34.2	D C-	40.1 34.7	D C-		
18	Bowers Avenue and Central Expressway (SC)*	AM PM	58.9 57.3	E+ E+	59.3 57.6	E+ E+		
19	Mission College Boulevard/Thomas Road and Bowers Avenue (SC)*	AM PM	80.7 62.9	F E	81.1 62.9	F E		
20	Agnew Road/Freedom Circle and Mission College Boulevard (SC)	AM PM	30.2 32.7	C C-	30.3 32.7	C C-		
21	San Tomas Expressway and Scott Boulevard (SC)*	AM PM	30.5 55.5	C E+	31.0 56.5	C E+		
22	San Tomas Expressway and Walsh Avenue (SC)	AM PM	45.5 70.1	D E	45.6 71.1	D E		
23	San Tomas Expressway and Monroe Street (SC)*	AM PM	37.0 45.4	D+ D	37.1 45.8	D+ D		
24	San Tomas Expressway and Cabrillo Avenue (SC)		29.4 35.0	C C-	29.4 35.2	C D+		
25	San Tomas Expressway and El Camino Real (SC)*	AM PM	70.0 78.3	E E-	70.5 79.5	E E-		
26	Scott Boulevard and Central Expressway (SC)*	AM PM	40.5 69.7	D E	40.6 70.3	D E		
27	Lafayette Street and Central Expressway (SC) *	AM PM	54.3 68.5	D- E	54.5 68.5	D- E		
28	Lakeside Drive and Augustine Drive (SC)	AM PM	27.8 36.5	C D+	85.4 81.3	F F		
31	Lawrence Expressway and US 101 Northbound Ramps (SV)	AM PM	10.0 12.3	A B	10.0 12.3	A B		
32	Lawrence Expressway and US 101 Southbound Ramps (SV)	AM PM	21.6 45.7	C+ D	25.5 46.2	C D		
33	Lawrence Expressway and Oakmead Parkway (SV)	AM PM	36.2 45.8	D+ D	37.3 46.0	D+ D		
34	Lawrence Expressway and Arques Avenue (SV)*	AM PM	41.3 68.1	D E	41.6 68.5	D E		
35	Lakeside Drive and Oakmead Parkway (SV)	AM PM	20.1 20.1	C+ C+	19.1 19.7	В- В-		

Table 3.17-8: Study Intersections Level of Service – Existing Plus Project Conditions									
No.	Intersection	Peak Hour	Exis	ting	Exis Plus P	ting roject			
			Delay	LOS	Delay	LOS			
36	Lakeside Drive and Arques Avenue (SV)	AM PM	23.7 19.5	C B-	23.2 19.2	C B-			
37	Oakmead Parkway and Arques Avenue/Scott Boulevard (SV)	AM PM	21.9 25.8	C+ C	22.1 26.3	C+ C			
38	Oakmead Parkway/Corvin Drive and Central Expressway (SV)*	AM PM	43.1 48.5	D D	47.1 48.8	D D			
39	Great America Parkway and SR 237 Westbound Ramps (SJ)*	AM PM	17.8 17.8	B B	17.9 17.9	B B			
40	Great America Parkway and SR 237 Eastbound Ramps (SJ)*	AM PM	12.6 10.3	B B+	12.5 10.2	B B+			
Note	Kamps (SJ)*PM10.3B+10.2B+Notes: * = A VTA Congestion Management Program (CMP) intersection (SC) City of Santa Clara, (SJ) City of San José, (SV) City of Sunnyvale Bold indicates unacceptable LOS. Intersections 29. Peterson Way and Lakeside Drive and 30. Peterson Way and Tannery Way in Santa Clara are unsignalized and do not require a LOS evaluation. Please note since March 2018, the City of San José evaluates project impacts based on VMT, and no longer utilizes intersection LOS to identify project impacts. However, this project is located in the City of								

intersections must be in conformance with the CMP, which includes intersection analysis based on LOS. LOS E is the minimum standard for CMP intersections and expressways, as well regionally significant roadways in the City of Santa Clara. LOS D is the minimum standard for all other roadway intersections.

The results show that the following intersections would operate at an unacceptable LOS under

existing plus project conditions:

- Lawrence Expressway and Kifer Road (PM Peak Hour)
- Lawrence Expressway and Monroe Street/Reed Avenue (AM Peak Hour)
- Mission College Boulevard/Thomas Road and Montague Expressway (AM Peak Hour)
- Lakeside Drive and Augustine Drive (AM and PM Peak Hours)

Three intersections operating at LOS F under existing conditions would continue to operate at LOS F under existing plus project conditions. Project trips would not be sufficient to cause a significant delay. As a result, the project would have a less than significant impact on these intersections.

The project would cause the Lakeside Drive and Augustine Drive intersection to degrade the LOS in both the AM and PM peak hours. This would result in a significant impact.⁸⁸

⁸⁸ For the other three listed intersections, Existing + Project conditions would result in LOS F, however, all three intersections were already operating at LOS F under existing conditions, and the project would not cause the critical-movement delay at those intersections to increase by four (4) or more seconds or the volume-to-capacity ratio to increase by 0.01 or more.

Impact TRN-1a:The addition of project traffic would cause the Lakeside Drive and Augustine
Drive intersection to degrade from an acceptable LOS C and D+ during the
AM and PM peak hours (under existing and background conditions),
respectively, to an unacceptable LOS F during both peak hours which would
result in a significant impact to this intersection under existing plus project
conditions and background plus project conditions. (Significant Impact)

<u>Mitigation Measure</u>: Implementation of the following mitigation measure would reduce traffic impacts at the Lakeside Drive and Augustine Drive intersection.

MM TRN-1a: The project shall modify the eastbound/westbound approaches of the Lakeside Drive and Augustine Drive intersection to include one shared left-and-through lane and one right-turn lane in the westbound approach, and one shared left-and-through and one shared right-and-through lane in the eastbound approach. These improvements would require changing the signal phasing from protected to split phasing in the eastbound/westbound direction.

Implementation of the above mitigation would improve the intersection's operating conditions to LOS C and D during the AM and PM peak hours, respectively, under background plus project conditions. With the implementation of the mitigation, the addition of project traffic would have a less than significant impact on operations at this intersection. (Less Than Significant Impact with Mitigation Incorporated)

The remaining 34 signalized study intersections would continue to operate at acceptable levels of service during both peak hours analyzed under existing plus project conditions. (Less Than Significant Impact)

Unsignalized Intersections

The unsignalized study intersections of Peterson Way/Lakeside Drive and Peterson Way/Tannery Way were analyzed for operational purposes, based on the peak hour volume signal warrant described in the 2014 California Manual on Uniform Traffic Control Devices (MUTCD). The results of the peak hour traffic signal warrant analysis indicate that both of the unsignalized study intersections are projected to have traffic volumes below the thresholds that warrant signalization under existing plus project conditions. The project would, therefore, have a less than significant impact on unsignalized study intersections under existing plus project conditions. **(Less Than Significant Impact)**

Background Plus Project Intersection Operations

Signalized Intersections

The following signalized study intersections would operate at an unacceptable level of service (LOS E or worse for locally controlled intersections and LOS F for CMP and expressway intersections) during at least one of the peak hours analyzed under background conditions:

- No. 1. Lawrence Expressway and Kifer Road (AM and PM peak hours)
- No. 2. Lawrence Expressway and Monroe Street/Reed Avenue* (AM and PM peak hours)
- No. 3. Lawrence Expressway and Cabrillo Avenue (AM peak hour)
- No. 7. Great America Parkway and Great America Way (AM peak hour)
- No. 8. Great America Parkway and Old Mountain View-Alviso Road (AM peak hour)
- No. 13. Great America Parkway and Mission College Boulevard* (PM peak hour)
- No. 16. Bowers Avenue and Augustine Drive (PM peak hour)
- No. 17. Bowers Avenue and Scott Boulevard* (AM and PM peak hours)
- No. 18. Bowers Avenue and Central Expressway* (AM and PM peak hours)
- No. 19. Mission College Boulevard/Thomas Road and Montague Expwy* (AM and PM peak hours)
- No. 21. San Tomas Expressway and Scott Boulevard* (PM peak hour)
- No. 22. San Tomas Expressway and Walsh Avenue (AM and PM peak hours)
- No. 25. San Tomas Expressway and El Camino Real* (AM and PM peak hours)
- No. 26. Scott Boulevard and Central Expressway* (PM peak hour)
- No. 27. Lafayette Street and Central Expressway* (PM peak hour)
- No. 34. Lawrence Expressway and Arques Avenue* (PM peak hour)

The remaining study signalized intersections would operate at an acceptable level of service under background conditions.

The LOS of the study intersections was calculated under background plus project conditions by adding project trips to the background conditions. The results of the background plus project conditions analysis are summarized in Table 3.17-9.

Та	Table 3.17-9: Study Intersections Level of Service – Background Plus Project Conditions										
No.	Intersection	Peak	Background		Background Plus Project						
		Hou r	Delay	LOS	Delay	LOS	Increase Critical Delay	Increase V/C			
1	Lawrence Expressway and	AM	99.9	F	102.2	F	+3.5	0.008			
	Kifer Road (SC)	PM	128.4	F	130.6	F	+3.7	0.007			
2	Lawrence Expressway and Monroe Street/Reed Avenue (SC)*	AM PM	134.9 110.6	F F	137.5 112.3	F F	+3.6 +2.8	0.009 0.006			
3	Lawrence Expressway and	AM	80.6	F	83.1	F	+ 3.5	0.006			
	Cabrillo Avenue (SC)	PM	66.6	E	68.8	E	+3.3	0.006			
4	Lawrence Expressway and	AM	36.2	D+	36.3	D+	+0.3	0.005			
	El Camino Real (SC)*	PM	33.5	C-	33.5	C-	0.0	0.000			
5	Garrett Drive and Scott	AM	7.8	A	9.8	A	+3.3	0.064			
	Boulevard (SC)	PM	9.5	A	9.9	A	0.0	0.000			
6	Lakeside Drive and Scott	AM	11.2	B+	11.5	B+	+0.4	0.026			
	Boulevard (SC)	PM	10.5	B+	11.9	B+	+2.3	0.035			

Table 3.17-9: Study Intersections Level of Service – Background Plus Project Conditions										
No.	Intersection	Peak	Backg	round	Ba	ackgrou	Ind Plus Pro	oject		
		Hou r	Delay	LOS	Delay	LOS	Increase Critical Delay	Increase V/C		
7	Great America Parkway and	AM	96.1	F	99.8	F	+5.1	0.011		
/	Great America Way (SC)	PM	33.1	C-	36.7	D+	+5.6	0.012		
0	Great America Parkway and	AM	59.3	E+	63.1	E	+5.3	0.011		
8	Alviso Road (SC)	PM	47.2	D	48.5	D	+2.1	0.011		
9	Great America Parkway and Bunker Hill Lane (SC)	AM PM	11.4 23.3	B+ C	11.3 23.3	B+ C	-0.1 0.0	0.011 0.002		
10	Great America Parkway and Tasman Drive (SC)*	AM PM	46.1 52.9	D D-	46.1 53.3	D D-	$^{+0.1}_{+0.8}$	0.010 0.003		
11	Great America Parkway and Old Glory Lane (SC)	AM PM	17.0 41.1	B D	17.1 41.3	B D	+0.2 +0.2	0.012 0.002		
12	Great America Parkway and Patrick Henry Drive (SC)	AM PM	33.6 30.1	C- C	34.5 30.0	C- C	+1.6 +0.2	0.011 0.002		
13	Great America Parkway and Mission College Boulevard (SC)*	AM PM	48.1 81.0	D F	48.1 81.3	D F	+0.2 + 0.7	0.001 0.002		
14	Great America Parkway and US 101 Northbound Ramps (SC)*	AM PM	12.9 22.6	B C+	15.5 24.8	B C	+3.3 +3.1	0.038 0.010		
15	Bowers Avenue and US Southbound Ramps (SC)*	AM PM	19.0 6.5	B- A	19.2 6.5	B- A	+0.1 +0.1	0.003 0.006		
16	Bowers Avenue and	AM	39.9	D	39.7	D	0.0	0.001		
10	Augustine Drive (SC)	PM	57.5	E+	72.8	Ε	+22.8	0.057		
17	Bowers Avenue and Scott	AM	91.8	F	100.1	F	+12.4	0.023		
17	Boulevard (SC)*	PM	80.4	F	84.9	F	+11.6	0.030		
18	Bowers Avenue and Central Expressway (SC)*	AM PM	84.4 102.6	F F	84.9 104.9	F F	+0.9 +2.0	0.004 0.002		
19	Mission College Boulevard/Thomas Road and Bowers Avenue (SC)*	AM PM	176.6 144.7	F F	177.8 153.3	F F	0.0 + 0.5	0.000 0.001		
20	Agnew Road/Freedom Circle and Mission College Boulevard (SC)	AM PM	30.8 35.0	C C-	30.9 35.1	C D+	+0.2 +0.2	0.003 0.003		
21		AM	43.8	D	46.2	D	+8.0	0.025		

Table 3.17-9: Study Intersections Level of Service – Background Plus Project Conditions									
No.	Intersection	Peak	Backg	round	Ba	ackgrou	und Plus Pro	oject	
		Hou r	Delay	LOS	Delay	LOS	Increase Critical Delay	Increase V/C	
	San Tomas Expressway and Scott Boulevard (SC)*	PM	90.1	F	93.5	F	+4.9	0.012	
22	San Tomas Expressway and Walsh Avenue (SC)	AM PM	79.0 129.1	E- F	79.7 131.2	E- F	-0.2 +3.1	0.001 0.006	
22	San Tomas Expressway and	AM	56.5	E+	57.9	E+	+2.2	0.005	
23	Monroe Street (SC)*	PM	78.1	E-	80.1	F	+3.5	0.006	
24	San Tomas Expressway and Cabrillo Avenue (SC)	AM PM	34.0 40.9	C- D	34.4 41.4	C- D	-0.1 0.0	0.001 0.001	
25	San Tomas Expressway and	AM	98.5	F	99.8	F	+2.1	0.005	
25	El Camino Real (SC)*	PM	121.9	F	123.8	F	+3.3	0.005	
26	Scott Boulevard and Central Expressway (SC)*	AM PM	44.4 85.4	D F	44.6 86.4	D F	+0.1 +1.0	0.003 0.003	
27	Lafayette Street and Central Expressway (SC)*	AM PM	74.4 111.5	E F	75.0 111.5	E F	+1.7 +0.2	0.004 0.001	
	Lakeside Drive and	AM	27.8	С	85.4	F	+69.9	0.264	
28	Augustine Drive (SC)	PM	36.5	D+	81.3	F	+67.4	0.182	
31	Lawrence Expressway and US 101 Northbound Ramps (SV)	AM PM	10.5 12.6	B+ B	10.5 12.6	B+ B	0.0 0.0	$0.000 \\ 0.000$	
32	Lawrence Expressway and US 101 Southbound Ramps (SV)	AM PM	13.8 27.6	B C	15.5 27.7	B C	+3.2 +0.3	0.008 0.002	
33	Lawrence Expressway and Oakmead Parkway (SV)	AM PM	56.3 53.7	E+ D-	58.0 54.1	E+ D-	+3.0 +0.1	0.013 0.001	
34	Lawrence Expressway and Arques Avenue (SV)*	AM PM	48.9 108.1	D F	49.1 108.3	D F	0.0 + 0.5	0.000 0.012	
35	Lakeside Drive and Oakmead Parkway (SV)	AM PM	20.3 20.2	C+ C+	19.9 19.8	В- В-	+1.2 -0.1	0.026 0.006	
36	Lakeside Drive and Arques Avenue (SV)	AM PM	22.7 17.9	C+ B	22.2 17.9	C+ B	-0.1 0.0	0.003 0.004	
37	Oakmead Parkway and Arques Avenue/Scott Boulevard (SV)	AM PM	21.7 26.3	C+ C	21.8 26.5	C+ C	-0.1 +0.9	0.003 0.027	

Table 3.17-9: Study Intersections Level of Service – Background Plus Project Conditions								
No.	Intersection	Peak	Background		Background Plus Project			
		Hou r	Delay	LOS	Delay	LOS	Increase Critical Delay	Increase V/C
38	Oakmead Parkway/Corvin Drive and Central Expressway (SV)*	AM	78.6	E-	84.6	F	+10.7	0.020
		PM	79.9	E-	80.3	F	0.0	0.000
39	Great America Parkway and SR 237 Westbound Ramps (SJ)*	AM PM	48.3 27.9	D C	50.3 28.6	D C	+2.6 +0.8	0.008 0.009
40	Great America Parkway and SR 237 Eastbound Ramps (SJ)*	AM PM	12.7 12.6	B B	12.7 12.8	B B	+0.0 +0.2	0.006 0.010
Notes: * = A VTA Congestion Management Program (CMP) intersection								

(SC) City of Santa Clara, (SJ) City of San José, (SV) City of Sunnyvale

Bold indicates unacceptable LOS.

Bold and boxed indicates a significant project impact.

Intersections 29. Peterson Way and Lakeside Drive and 30. Peterson Way and Tannery Way in Santa Clara are unsignalized and do not require a LOS evaluation.

Please note since March 2018, the City of San José evaluates project impacts based on VMT, and no longer utilizes intersection LOS to identify project impacts. However, this project is located in the City of Santa Clara and these the two San José study intersections (39 and 40) are CMP intersections. CMP intersections must be in conformance with the CMP, which includes intersection analysis based on LOS. LOS E is the minimum standard for CMP intersections and expressways, as well regionally significant roadways in the City of Santa Clara. LOS D is the minimum standard for all other roadway intersections.

Eleven intersections operating at LOS E and/or LOS F under background conditions would continue to operate at LOS E and/or LOS F under background plus project conditions (refer to Table 3.17-9). Project trips would not be sufficient to cause a significant delay. As a result, the project would have a less than significant impact on these intersections.

The project would cause eight intersections (five of which operated under LOS E and/or LOS F under background conditions) to degrade to LOS F, increase average critical movement delay by four seconds or more, or increase in volume-to-capacity ratio by one percent (0.01) or more. The delays would result in a significant impact on the following intersections:

- No. 7. Great America Parkway and Great America Way (AM Peak Hour)
- No. 8. Great America Parkway and Old Mountain View-Alviso Road (AM Peak Hour)
- No. 16. Bowers Avenue and Augustine Drive (PM Peak Hour)
- No. 17. Bowers Avenue and Scott Boulevard* (AM and PM Peak Hours)
- No. 21. San Tomas Expressway and Scott Boulevard* (PM Peak Hour)

- No. 23. San Tomas Expressway and Monroe Street* (PM Peak Hour)
- No. 28. Lakeside Drive and Augustine Drive (AM and PM Peak Hours)
- No. 38. Oakmead Parkway/Corvin Drive and Central Expressway* (AM and PM Peak Hours)

The remaining 19 signalized study intersection would continue to operate at acceptable levels of service during both peak hours analyzed under background plus project conditions.

Great America Parkway and Great America Way

Impact TRN-1b:The Great America Parkway and Great America Way intersection would
operate at an unacceptable LOS F during the AM peak hour under
background conditions. The addition of project traffic would cause the
intersection's average critical-movement delay to increase by 5.1 seconds and
the V/C to increase by 0.011 during the AM peak hour which would result in
a significant impact to this intersection under background plus project
conditions. (Significant Impact)

To mitigate the impact at the Great America Parkway and Great America Way intersection, the project would require the addition of a second northbound left-turn lane to the Great America Parkway and Great America Way intersection. This improvement requires the partial removal of the center median on Great America Parkway (south leg of the intersection), widening of Great America Parkway, and implementation of a second receiving lane on the west leg of the intersection (private driveway).

The widening of Great America Parkway and the west leg of the intersection would not be feasible due to right-of-way constraints. The addition of a fourth southbound through-lane would mitigate this impact to acceptable levels; however, this improvement would not be feasible due to right-of-way constraints. Therefore, the project would result in a significant unavoidable level of service impact at the Great America Parkway and Great America Way intersection. (Significant Unavoidable Impact)

Great America Parkway and Old Mountain View – Alviso Road

Impact TRN-1c: The addition of project traffic would cause the Great America Parkway and Old Mountain View-Alviso Road intersection's average critical-movement delay to increase by 5.3 seconds and the V/C to increase by 0.011 during the AM peak hour which would result in a significant impact to this intersection under background plus project conditions.
<u>Mitigation Measures</u>: Implementation of the following mitigation measures would reduce traffic impacts at the Great America Parkway and Old Mountain View – Alviso Road intersection.

MM TRN-1c: The project shall add a separate southbound right-turn lane at the Great America Parkway and Old Mountain View-Alviso Road intersection. The southbound approach at this intersection currently consists of one left-turn lane, three through lanes, and an eight-foot wide bicycle lane/right-turn lane. Implementation of the separate southbound right-turn lane improvement would require the widening of the west side of Great America Parkway (north of Old Mountain View/Alviso Road) by approximately eight feet to provide one six-foot bicycle lane and one 10-foot right-turn lane for a distance of approximately 150 feet.

The above mitigation would require partial removal of landscaping on the west side of Great America Parkway and the relocation of two traffic signal/utilities cabinets, a light pole, and a traffic signal pole. With implementation of the above improvement, the intersection level of service would improve to an acceptable LOS C during the AM peak hour, reducing the project impact on this intersection to less than significant. (Less Than Significant Impact with Mitigation Incorporated)

Bowers Avenue and Augustine Drive

Impact TRN-1d:The addition of project traffic would cause the Bowers Avenue and Augustine
Drive intersection's average critical-movement delay to increase by 22.8
seconds and the V/C to increase by 0.057 during the PM peak hour, which
would result in a significant impact to this intersection under background plus
project conditions. (Significant Impact)

The project would be required to add a fourth southbound through lane to reduce the impacts at the Bowers Avenue and Augustine Drive intersection to less than significant. This improvement, however, would require the widening of Bowers Avenue which is not feasible due to right-of-way constraints. Therefore, the project impact at this intersection is considered significant and unavoidable. (Significant Unavoidable Impact)

Bowers Avenue and Scott Boulevard (CMP Intersection)

Impact TRN-1e:The addition of project traffic would cause the Bowers Avenue and Scott
Boulevard intersection's average critical-movement delay to increase by 12.4
seconds and 11.6 seconds during the AM and PM peak hours, respectively,
and the V/C to increase by more than 0.023 and 0.030 during the AM and PM
peak hours, respectively, which would result in a significant impact to this
intersection under background plus project conditions. (Significant Impact)

<u>Mitigation Measures</u>: Implementation of the following mitigation measures would reduce traffic impacts at the Bowers Avenue and Scott Boulevard intersection.

MM TRN-1e: The project applicant shall make a fair-share contribution towards the addition of a second southbound left-turn lane at Bowers Avenue and Scott

Boulevard (identified as mitigation for the approved City Place development). This improvement would require reducing the width of the three southbound through-lanes from 12 feet to 10 feet and partial removal of the raised center median to provide a second 10- to 12-foot left-turn lane without affecting the adjacent sidewalks and bicycle lane. A separate northbound right-turn lane shall also be added to this intersection. The northbound approach at this intersection currently consists of one left- turn lane, two through lanes, one shared through- and right-turn lane, and a six-foot wide bicycle lane. Implementation of the separate northbound right-turn lane would require the widening of the east side of Bowers Avenue (south of Scott Boulevard) by a minimum of 10 feet to provide one six-foot bicycle lane and one 10-foot right-turn lane. These improvements would require partial removal of the landscaping and removal of two trees to accommodate a five-foot sidewalk along the east side of Bowers Avenue.

Mitigation would require implementation of a separate northbound right-turn lane and/or a fair share contribution towards the second southbound left-turn lane. With implementation of the above mitigation, the Bowers Avenue and Scott Boulevard intersection level of service would improve to acceptable LOS E during both the AM and PM peak hours, reducing the project impact to this intersection to less than significant. (Less Than Significant Impact with Mitigation Incorporated)

San Tomas Expressway and Scott Boulevard (CMP Intersection)

Impact TRN-1f:The addition of project traffic would cause the San Tomas Expressway and
Scott Boulevard intersection's average critical-movement delay to increase by
4.9 seconds and the V/C to increase by 0.012 during the PM peak hour, which
would result in a significant impact to this intersection under background plus
project conditions. (Significant Impact)

<u>Mitigation Measures</u>: Implementation of the following mitigation measures would reduce traffic impacts at the San Tomas Expressway and Scott Boulevard intersection.

MM TRN-1f:The project applicant shall make a fair-share contribution toward planned
improvements at the San Tomas Expressway and Scott Boulevard
intersection. Planned improvements include the addition of a second
westbound right-turn lane at this intersection (identified as a Tier 1C priority
improvement in the Comprehensive County Expressway Planning Study 2008
Update and is included in the City of Santa Clara Traffic Mitigation
Program). The addition of an interchange is also a planned improvement (Tier
2 priority improvement in the Comprehensive County Expressway Planning
Study 2008 Update) at this intersection.

The above mitigation would reduce the project impact at the San Tomas Expressway and Scott Boulevard intersection to less than significant. Since the San Tomas Expressway and Scott Boulevard intersection is a CMP intersection and is outside of City of Santa Clara jurisdiction, the City would not be able to implement the improvements concurrently with the proposed project. The project impact at this intersection would, therefore, be significant and unavoidable. (Significant Unavoidable Impact)

San Tomas Expressway and Monroe Street (CMP Intersection)

Impact TRN-1g:The addition of project traffic would cause the San Tomas Expressway and
Monroe Street intersection's LOS to degrade to an unacceptable LOS F
during the PM peak hour. Based on the CMP LOS impact criteria, the
addition of project traffic to this intersection would result in a significant
impact under background plus project conditions. (Significant Impact)

<u>Mitigation Measure</u>: Implementation of the following mitigation measure would reduce traffic impacts at the San Tomas Expressway and Monroe Street intersection.

MM TRN-1g.: The project applicant shall pay a fair share contribution toward the addition of a second northbound left-turn lane (identified in the approved City Place FEIR).

The addition of a second northbound left-turn lane at this intersection was identified in the City Place FEIR as a Tier 3 priority improvement in the Comprehensive County Expressway Planning Study Policy Advisory Board 2015 Update.⁸⁹ Implementation of this improvement, however, would not improve intersection operating conditions and the project impact would continue to be significant.

In addition to implementing the planned improvements discussed in the above, the project would be required to add a fourth southbound through lane to the San Tomas Expressway and Monroe Street intersection to reduce the project impact at this intersection to less than significant. This improvement will require the widening of San Tomas Expressway, or conversion of the existing HOV lane to a mixed-flow lane to reduce the project impacts at this intersection to less than significant.

The widening of San Tomas Expressway, however, is not feasible due to right-of-way constraints and the conversion of the existing HOV lane to a mixed-flow lane is not feasible for a single development. This intersection is a CMP intersection outside of City of Santa Clara jurisdiction, and, therefore, the City would not be able to implement improvements concurrently with the proposed project. The addition of project traffic would result in a significant unavoidable impact to this intersection. **(Significant Unavoidable Impact)**

Lakeside Drive and Augustine Drive (City of Santa Clara)

As stated in the Impact TRN-1a discussion, the addition of project traffic would cause the Lakeside Drive and Augustine Drive intersection to degrade from an acceptable LOS C and D during the AM and PM peak hours (under background conditions), respectively, to an unacceptable LOS F during both peak hours which would result in a significant impact to this intersection under existing plus project conditions and background plus project conditions.

⁸⁹ The Comprehensive County Expressway Planning Study Policy Advisory Board 2015 Update is a supplement to the 2008 Comprehensive County Expressway Planning Study.

With the implementation MM TRN-1a as previously discussed in this section, the addition of project traffic would, therefore, have a less than significant impact on operations at this intersection under existing plus project conditions and background plus project conditions. (Less Than Significant Impact with Mitigation Incorporated)

Oakmead Parkway/Corvin Drive and Central Expressway (CMP Intersection)

Impact TRN-1h:The addition of project traffic would cause the Oakmead Parkway/Corvin
Drive and Central Expressway intersection to degrade from a LOS E to an
unacceptable LOS F during both peak hours, which would result in a
significant impact to this intersection under background plus project
conditions. (Significant Impact)

<u>Mitigation Measures</u>: Implementation of the following mitigation measures would reduce traffic impacts at the Oakmead Parkway/Corvin Drive and Central Expressway intersection.

MM TRN-1h.: The project shall make a fair share contribution to the addition of a second eastbound left-turn lane at the Oakmead Parkway/Corvin Drive and Central Expressway intersection.

Implementation of the above mitigation would improve the intersection's operating conditions to LOS E during both peak hours, reducing the project impact to less than significant. The Oakmead Parkway/Corvin Drive and Central Expressway intersection is, however, a CMP intersection outside of the City's jurisdiction. The City is not authorized to implement the above mitigation concurrently with the proposed project and, therefore, the addition of project traffic would result in a significant unavoidable impact to this intersection under background plus project conditions. (Significant Unavoidable Impact)

Unsignalized Intersections

The results of the peak hour traffic signal warrant analysis indicate that both of the Peterson Way/Lakeside Drive and Peterson Way/Tannery Way unsignalized study intersections are projected to have traffic volumes that fall below the thresholds that warrant signalization under background plus project conditions. The project would, therefore, have a less than significant impact on unsignalized intersections analyzed in the project area. **(Less Than Significant Impact)**

Impacts to Freeway Segments

Freeway segments were analyzed during AM and PM Peak Hours to calculate the amount of project traffic projected to be added to the nearby freeways.⁹⁰ Project trips were assigned to the HOV lanes in proportion to existing HOV use. The results show that the mixed-flow lanes on 26 of the 30 directional freeway segments analyzed would operate at an unacceptable LOS F during one of the peak hours under project conditions. In addition, the HOV lanes on 25 of the study segments also are projected to operate at LOS F conditions under project conditions. Table 3.13-9 shows the results of the freeway level of service analysis under existing plus project conditions.

⁹⁰ Freeway segment analysis was completed using information from VTA's 2016 CMP Annual Monitoring Report.

	Table 3.17-10: Existing Plus Project Freeway Segment Level of Service Analysis									
	Existing Plus Project Project Trips									
No.	Freeway	Segment	Direction	Peak Hr.	LC	LOS		Mixed		HOV
					Mixed	HOV	Vol.	Capacity	Vol.	Capacity
1	US 101	L 880 to Old Describence U. Strenger	ND	AM	F	F	75	1.09	29	1.76
1 05 101	1-880 to Old Bayshore Highway	NB	PM	В	В	19	0.28	4	0.24	
2	2	Old Bayshore Highway to North	ND	AM	F	F	75	1.09	29	1.76
US 101	First Street	NB	PM	В	А	19	0.28	4	0.24	
3	US 101	North First Street to Guadalupe	NB	AM	F	F	75	1.09	29	1.76
		Parkway (SR 87)		PM	В	А	19	0.28	4	0.24
4	US 101	Guadalupe Parkway (SR 87) to	NB	AM	F	F	75	1.09	29	1.76
		De La Cruz Boulevard		PM	С	А	19	0.28	4	0.24
		De La Cruz Boulevard to San Tomas Expressway/Montague Expressway	NB	AM	F	F	75	1.09	29	1.76
5	US 101			PM	С	А	19	0.28	4	0.24
		San Tomas/Montague Expressway		AM	F	F	75	1.09	29	1.76
6	US 101	to Bowers Avenue/Great America Parkway	NB	РМ	D	А	19	0.28	4	0.24
7	US 101	Bowers Avenue/Great America	NB	AM	F	F	4	0.06	1	0.06
/	05 101	Parkway to Lawrence Expressway	ND	PM	D	В	28	0.41	6	0.36
8	US 101	Lawrence Expressway to North	NB	AM	F	F	8	0.12	3	0.18
	0.5 101	Fair Oaks Avenue		PM	D	В	58	0.84	9	0.55
9	US 101	North Fair Oaks Avenue to North	NB	AM	F	Е	8	0.12	3	0.18
		Mathılda Avenue		PM	C	A	58	0.84	9	0.55

	Table 3.17-10: Existing Plus Project Freeway Segment Level of Service Analysis									
	Existing Plus Project Project Trips									
No.	Freeway	Segment	Direction	Peak Hr.	LC	DS		Mixed		HOV
					Mixed	HOV	Vol.	Capacity	Vol.	Capacity
10	US 101	North Mathilda Avenue to SR 237	NB	AM PM	E C	F C	8 52	0.12 0.75	3 15	0.18 0.91
11	SR 237	Lawrence Expressway to Great America Parkway	EB	AM PM	D F	B F	16 3	0.36 0.07	5 2	0.30 0.12
12	SR 237	Great America Parkway to North First Street	EB	AM PM	D F	C F	4 19	0.09 0.43	1 12	0.06 0.73
13	SR 237	North First Street to Zanker Road	EB	AM PM	D F	B E	4 19	0.09 0.43	1 12	0.06 0.73
14	SR 237	Zanker Road to McCarthy Boulevard	EB	AM PM	D D	B D	4 19	0.09 0.43	1 12	0.06 0.73
15	SR 237	McCarthy Boulevard to I-880	EB	AM PM	C C	A D	4 19	0.09 0.43	1 12	0.06 0.73
16	US 101	SR 237 to North Mathilda Avenue	SB	AM PM	C F	D F	15 5	0.22 0.07	48 9	2.91 0.55
17	US 101	North Mathilda Avenue to North Fair Oaks Avenue	SB	AM PM	C F	C F	15 5	0.22 0.07	48 9	2.91 0.55
18	US 101	North Fair Oaks Avenue to Lawrence Expressway	SB	AM PM	D F	B F	15 5	0.22 0.07	48 9	2.91 0.55
19	US 101	Lawrence Expressway to Bowers Avenue/Great America Parkway	SB	AM PM	D F	B F	27 4	0.39 0.06	43	0.24 0.18

	Table 3.17-10: Existing Plus Project Freeway Segment Level of Service Analysis									
	Existing Plus Project Project Trips									
No.	Freeway	Segment	Direction	Peak Hr.	LC	DS		Mixed		HOV
			-	•	Mixed	HOV	Vol.	Capacity	Vol.	Capacity
20		Bowers Avenue/Great America Parkway to San Tomas	SB	AM	С	В	16	0.23	2	0.12
	US 101	Expressway/Montague Expressway		PM	F	F	72	1.04	40	2.42
		San Tomas Expressway/Montague		AM	С	А	16	0.23	2	0.12
21	US 101	Expressway to De La Cruz Boulevard	SB	PM	F	F	72	1.04	40	2.42
22	US 101	De La Cruz Boulevard to	SB	AM	С	А	16	0.23	2	0.12
22	05 101	Guadalupe Parkway (SR 87)	50	PM	Е	D	72	1.04	40	2.42
23	US 101	Guadalupe Parkway (SR 87) to	SB	AM	В	А	16	0.23	2	0.12
25	00101	North First Street	55	PM	F	F	72	1.04	40	2.42
24	US 101	North First Street to Old Bayshore	SD	AM	В	А	16	0.23	2	0.12
24	05 101	Highway	20	PM	F	F	72	1.04	40	2.42
25	US 101	Old Daughang Highway to L 890	SD	AM	В	А	16	0.23	2	0.12
23	05 101	Old Bayshore Highway to 1-880	28	PM	F	F	72	1.04	40	2.42
26	SP 227	L 880 to McCarthy Boulevard	WP	AM	F	F	18	0.41	11	0.67
20	SK 237	1-880 to McCarthy Boulevard	WB	PM	C	А	5	0.11	1	0.06
27	SR 237	McCarthy Boulevard to Zanker Road	WB	AM PM	F D	F B	18 5	0.41 0.11	11 1	0.67 0.06

	Table 3.17-10: Existing Plus Project Freeway Segment Level of Service Analysis									
	Existing Plus Project Project Trips									
No.	Freeway	Segment	Direction	Peak Hr.	LOS		Mixed		HOV	
					Mixed	HOV	Vol.	Capacity	Vol.	Capacity
20	CD 227	Zankan Dood to Month First Street	WD	AM	F	F	18	0.41	11	0.67
28	SK 257	Zanker Road to North First Street	W D	PM	D	А	5	0.11	1	0.06
20	CD 227	North First Street to Great America Parkway	WB	AM	F	F	18	0.41	11	0.67
29	SR 257			PM	D	В	5	0.11	1	0.06
20	CD 227	Great America Parkway to	WD	AM	F	F	2	0.05	2	0.12
30	SR 237	Lawrence Expressway	wВ	PM	D	В	17	0.39	5	0.30
Notes	Notes: * = A VTA Congestion Management Program (CMP) intersection (SC) City of Santa Clara, (SJ) City of San José, (SV) City of Sunnyvale Pold indicates unaccontrol I J OS									

Bold indicates unacceptable LOS.
 Bold and boxed indicates a significant impact.
 Source: Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2016.

Impact TRN-1i: Based on the freeway segment analysis, the proposed project is projected to add traffic volumes representing one percent or more of the freeway capacity to the mixed-flow lanes on 11 directional freeway segments and to the HOV lanes on seven directional freeway segments that currently operate at LOS F.

Based on CMP freeway impact criteria, the project would have a significant impact on the following directional freeway segments (mixed-flow and/or HOV lanes):

- No. 1. Northbound US 101, from I-880 to Old Bayshore Highway (AM Peak Hour Mixed-flow and HOV Lanes)
- No. 2. Northbound US 101, from Old Bayshore Highway to North First Street (AM Peak Hour Mixed-flow and HOV Lanes)
- No. 3. Northbound US 101, from North First Street to SR 87/Guadalupe Parkway (AM Peak Hour Mixed-flow and HOV Lanes)
- No. 4. Northbound US 101, from SR 87/Guadalupe Parkway to De La Cruz Boulevard (AM Peak Hour Mixed-flow and HOV Lanes)
- No. 5. Northbound US 101, from De La Cruz Boulevard to San Tomas/Montague Expressway (AM Peak Hour Mixed-flow and HOV lanes)
- No. 6. Northbound US 101, from San Tomas/Montague Expressway to Bowers Avenue/Great America Parkway (AM Peak Hour Mixed-flow and HOV lanes)
- No. 20. Southbound US 101, from Bowers Avenue/Great America Parkway to San Tomas/Montague Expressway (PM Peak Hour Mixed-flow and HOV lanes)
- No. 21. Southbound US 101, from San Tomas/Montague Expressway to De La Cruz Boulevard (PM Peak Hour Mixed-flow lanes)
- No. 23. Southbound US 101, from SR 87/Guadalupe Parkway to North First Street (PM Peak Hour Mixed-flow lanes)
- No. 24. Southbound US 101, from North First Street to Old Bayshore Highway (PM Peak Hour Mixed-flow lanes)
- No. 25. Southbound US 101, from Old Bayshore Highway to I-880 (PM Peak Hour Mixed-flow lanes)

Full mitigation of significant project impacts on freeway segments would require roadway widening to construct additional through lanes, thereby increasing freeway capacity.

VTA's Valley Transportation Plan 2040 identifies freeway express lane projects along US 101, between Whipple Avenue in San Mateo County and Cochrane Road in Morgan Hill, which includes the impacted freeway segments. The express lane projects on US 101 consist of the conversion of approximately 34 miles of existing High Occupancy Vehicle (HOV or carpool) lanes to express lanes and adding a second express lane for a total of two express lanes in each direction. Converting the HOV lanes to express lanes would, however, not mitigate the project impacts.

Full mitigation of significant project impacts on freeway segments would require roadway widening to construct additional through lanes, thereby increasing freeway capacity. It is not feasible for an individual development to implement such extensive transportation system improvements due to constraints in acquisition and cost of right-of-way. Therefore, the addition of project traffic would result in a significant unavoidable impact to the 11 impacted freeway segments identified in Table 3.17-10. (Significant Unavoidable Impact)

Impacts to Bicycle, Pedestrian and Transit Facilities

New pedestrian traffic would be generated by the proposed project. The project site, however, is located within walking distance (less than half one mile) of various pedestrian destinations, including restaurants, shopping centers, and bus stops. With the existing sidewalks and crosswalks along roadways and intersections in the vicinity of the project site, adequate pedestrian access to and from the project site to nearby pedestrian destinations would be provided. The project would have a less than significant impact on pedestrian facilities and no off-site pedestrian improvements would be necessary.

The proposed project could increase the demand on bicycle facilities in the vicinity of the project site. Assuming bicycle trips would comprise no more than one percent of the total project-generated trips, the project could generate six to seven new bicycle trips during the peak hours.⁹¹ The potential demand could be served by the bicycle facilities available in the immediate vicinity of the project site. For these reasons, the potential increase in bicycle trips by the proposed project would not have a significant impact on the existing bicycle facilities in the project area and would not require new off-site bicycle facilities.

Given the proximity of bus stops to the project site, it is assumed that some tenants of the proposed project would utilize existing transit services. With a commute hour transit mode share of two percent, the project would generate up to 13 new transit riders during the peak hours. Given that the project site is served by three local bus routes, one limited-stop route, and one shuttle, an average of three to four new transit riders would access each of the available bus routes during the peak hours⁹². Based on this assessment, future transit riders associated with the project could be accommodated by the existing transit services. For these reasons, the proposed project would have a less than significant impact on existing transit facilities. **(Less Than Significant Impact)**

 ⁹¹ Hexagon Transportation Consultants. 3625 Peterson Way Office Development: Traffic Impact Analysis. June 24, 2019.
 ⁹² Ibid.

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

The CEQA Guidelines Section 15064.3, Subdivision (b)(1) states that land use projects with vehicle miles traveled (VMT) exceeding an applicable threshold of significance may indicate a significant impact. The estimated VMT for the proposed project is 12,546,631. ⁹³ Given the proposed office project would be surrounded by similar office uses in the area, the project would not result in a significant increase in VMT in the area. The City of Santa Clara does not currently have an adopted VMT threshold. Based on Senate Bill 743, by July 1, 2020, all CEQA lead agencies must analyze transportation impacts using VMT (instead of level of service standards).⁹⁴ The City of Santa Clara is not currently required to have a VMT threshold, therefore, the proposed project is not in conflict with CEQA Guidelines Section 15064.3, Subdivision (b)(1). **(Less Than Significant Impact)**

Impact TRN-3:	The project would not substantially increase hazards due to a geometric
	design feature (e.g., sharp curves or dangerous intersections) or incompatible
	uses (e.g., farm equipment). (Less than Significant Impact)

The project design does not include sharp curves or dangerous intersections that could result in safety hazards; nor does the project propose incompatible uses, such as farm equipment. The proposed project is consistent with the land uses allowed on-site by the General Plan⁹⁵ and consistent with the surrounding mix of land uses.

Based on a review of site access and circulation, with the inclusion of the following conditions of approval, the project would provide adequate site access and on-site circulation. The project applicant shall implement the following conditions of approval:

- *Prohibit On-Street Parking Adjacent to Project Driveways.* On-street parking shall continue to be prohibited adjacent to the project site driveway along Lakeside Drive in order to provide the required minimum stopping sight distance of 250 feet at this driveway. No parking zones shall be located adjacent to the project driveways on Peterson Way and Tannery Way to ensure that exiting vehicles can see pedestrians on the sidewalk, as well as vehicles on the road.
- *Provide Clear Sight Triangles at Driveways*. Proposed landscaping and signage located adjacent to the project driveways shall not obstruct the view for drivers exiting the site.

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12,546,632 VMT - (0.10 VMT reduction* 12,546,632) = 12,546,631 VMT
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⁹³ Illingworth & Rodkin, Inc. 3625 Peterson Way Office Development Air Quality and GHG Assessment, San José, California. March 15, 2018 (updated July 20, 2019).

⁹⁴ Santa Clara Valley Transportation Authority. Level of Service (LOS) to Vehicle Miles Traveled (VMT) Transition. http://www.vta.org/projects-and-programs/congestion-management-program/los-vmt. Accessed March 4, 2019.
⁹⁵ The proposed office R&D project is consistent with the site's General Plan land use designation (Low-Intensity Office/R&D) with the exception of the maximum 1.00 FAR requirement. The project's exceedance of the General Plan's maximum FAR requirement is, however, minimal and the FAR limitation is not a policy adopted for the purpose of avoiding an environmental effect.

• *Design of Project Site*. The design of the project site, including but not limited to driveways, sidewalks, drive aisles, turn radii, parking stalls, and signage shall comply with City of Santa Clara design standards.

A more detailed discussion of site access and circulation is in Section 3.17.2.2 of this EIR. The final design of roadways, driveways, and access points shall be approved by the City. For these reasons, the project would not substantially increase hazards due to a design feature or incompatible land use. **(Less Than Significant Impact)**

Impact TRN-4:	The project would not result in inadequate emergency access. (Less than
	Significant Impact)

All proposed project site driveways, with the exception of Driveway 3 on Tannery Way, would provide adequate width for larger vehicles (such as emergency vehicles, delivery trucks, and garbage trucks) to access the project site (Figure 3.17-4 shows the project driveways). The proposed landscaped center median at Driveway 3 separating the 20-foot access lanes could potentially obstruct access to vehicles that have a larger turn radius, such as emergency vehicles. There are four other driveways that could, however, accommodate emergency vehicle access along each of the streets, providing full access to the project site. For these reasons, emergency vehicle access to the site would be adequate. **(Less Than Significant Impact)**



3.17.2.2 Consistency with Plans

Santa Clara General Plan

The General Plan includes the following transportation policies applicable to the proposed project.

Roadway Network Policies

5.8.2-P2: Discourage widening of existing roadway or intersection rights-of-way without first considering operational improvements, such as traffic signal modifications, turn-pocket extensions and intelligent transportation systems.

Consistency: A TIA was prepared for the proposed project, which included a level of service analysis and operations analysis. Operational improvements (including extension of left-turn pockets) were considered in the TIA. The project would be consistent with Policy 5.8.2-P2.

5.8.2-P9: Require all new development to provide streets and sidewalks that meet City goals and standards, including new development in employment areas.

Consistency: The proposed sidewalk and driveway improvements along Peterson Way, Tannery Way and Lakeside Drive would meet the City's goals and standards. The full street cross section, Figure 5.7-5 in the City's General Plan, illustrates a landscape strip with tree planting and a sidewalk behind the landscaping. The project does not include this street section type due to existing grade challenges along the site frontage and location of significant and healthy redwood trees that would require removal if the complete street section were constructed. The existing sidewalk meanders along the project site frontage and would be retained in its present location. Although the proposed sidewalk would achieve the intent of a full-service street, which is designed and operated to enable safe access and movement for all users, including pedestrians and transit riders, the project is not consistent with the full-service street design (in order to protect healthy redwood trees, consistent with Policy 5.10.1-P4).

Bicycle and Pedestrian Network

5.8.4-P8: Require new development and public facilities to provide improvements, such as sidewalks, landscaping and bicycling facilities, to promote pedestrian and bicycle use.

<u>Consistency</u>: The proposed project would improve sidewalks along the site frontages and include landscaping and bicycle parking. The project would, therefore, be consistent with Policy 5.8.4-P8.

5.8.4-P9: Encourage pedestrian- and bicycle-oriented amenities, such as bicycle racks, benches, signalized mid-block crosswalks, and bus benches or enclosures.

Consistency: The proposed project would include on-site bicycle parking, outdoor seating, and pedestrian paths (on the site). The project would, therefore, be consistent with Policy 5.8.4-P9.

Transportation Demand Management Policies

Policy 5.8.5-P1: Require new development to include transportation demand management sitedesign measures, including preferred carpool and vanpool parking, enhanced pedestrian access, bicycle storage and recreational facilities.

<u>Consistency</u>: The project includes carpool and vanpool parking, pedestrian access via sidewalks, and on-site recreational facilities. The project is, therefore, consistent with Policy 5.8.5-P1.

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

Consistency: The proposed project is located within walking distance of existing bus stops and will provide future employees access to local and regional transit systems. Therefore, the proposed project is consistent with Policy 5.8.5-P4.

Policy 5.8.5-P5: Encourage transportation demand management programs that provide incentives for the use of alternative travel modes to reduce the use of single-occupancy vehicles.

Consistency: The project would implement a TDM program that provides incentives for the use of alternative modes of transportation and to reduce the use of single-occupancy vehicles. The TDM program includes pre-tax benefit for clipper cards and carpool and vanpool programs for future employees. Therefore, the proposed project is consistent with Policy 5.8.5-P5.

3.17.2.3 *Cumulative Impacts*

Impact TRN-C:The project would not result in a cumulatively considerable contribution to a
significant transportation impact. (Significant Unavoidable Cumulative
Impact)

Cumulative traffic conditions represent future traffic conditions with expected growth in the area. The expected future traffic growth conditions include approved and pending projects in Santa Clara, Sunnyvale, and San José (refer to Table 3.0-1). Traffic volumes under cumulative conditions were estimated by adding the trips from approved developments, estimated project trips, and trips from proposed but not yet approved (pending) development projects. Cumulative conditions also include trips associated with development of Phase 2 of the approved North San José Development Policy. Phases 1 through 3 of the City Place project and their corresponding intersection improvements, as

assumed under background conditions, were assumed to be implemented under cumulative conditions. 96,97

Cumulative Transportation Network

It is assumed in this analysis that the transportation network under cumulative conditions and cumulative plus project conditions would be the same as described under background conditions.

City of Santa Clara and Sunnyvale Cumulative Threshold of Significance

The project would create a significant adverse cumulative impact on traffic conditions at a signalized intersection in the City of Santa Clara if for either peak hour:

- The level of service at the intersection degrades from an acceptable level (LOS D or better at all City-controlled intersections and LOS E or better at all expressway intersections) under cumulative conditions to an unacceptable level (LOS E or F at City-controlled intersections and LOS F at expressway intersections) under cumulative plus project conditions, or
- The level of service at the intersection is an unacceptable level (LOS E or F at Citycontrolled intersections and LOS F at expressway intersections) under cumulative conditions and the addition of project trips causes the average critical delay to increase by four or more seconds and V/C increases by 0.01 or more.

An exception to this rule applies when the addition of project traffic reduces the amount of average stopped delay for critical movements (i.e., the change in average stopped delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by .01 or more.

A significant impact by the Cities of Santa Clara and Sunnyvale standards is considered to be satisfactorily mitigated when measures are implemented that would restore intersection level of service to an acceptable level or no worse than cumulative conditions.

CMP Cumulative Threshold of Significance

The definition of a significant impact at a CMP intersection is the same as for the local intersections, except that the CMP standard for acceptable level of service at a CMP intersection is LOS E or better.

⁹⁶ The City Place project includes a total of 9,164,400 square feet of development on a 227-acre site, which would be constructed in eight phases. The construction of Phase 4 would start in 2020 and includes 1,095,900 square feet of development. Phase 5 would include development of 720,000 square feet, Phase 6 would include development of 1,200,000 square feet, Phase 7 would include development of 1,080,000 square feet, and Phase 8 would develop 1,080,000 square feet, which would end in 2031.

⁹⁷ North San José Development Policy is a policy document prepared by the City of San José to guide ongoing growth and development of the North San José area, along with the City's General Plan. The Policy supports growth of North San José as an employment center through a pool of 26.7 million square feet of industrial development capacity that can be allocated to specific properties in the Policy Area. The plan contains four phases. Phase 2, where traffic is accounted for in the cumulative conditions, involves up to a maximum of 16,000 dwelling units and 200,000 square feet of commercial space.

The project would create a significant adverse cumulative impact on traffic conditions at a CMPdesignated signalized intersection if for either peak hour:

- The level of service at the intersection degrades from an acceptable LOS E or better under cumulative conditions to an unacceptable LOS F under cumulative plus project conditions, or
- The level of service at the intersection is an unacceptable LOS F under cumulative conditions and the addition of project trips under cumulative plus project conditions causes both the critical-movement delay at the intersection to increase by four or more seconds and V/C increases by 0.01 or more.

An exception to this rule applies when the addition of project traffic reduces the amount of average delay for critical movements (i.e., the change in average delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by .01 or more. A significant impact by CMP standards is said to be satisfactorily mitigated when measures are implemented that would restore intersection level of service to cumulative conditions or better.

Cumulative Plus Project Intersection Levels of Service

Cumulative plus project conditions were evaluated relative to cumulative conditions for City of Santa Clara study intersections and to background conditions for City of San José and Sunnyvale intersections to determine potential project impacts.

The results show that, measured against applicable municipal and CMP LOS impact criteria, 22 study intersections would operate at unacceptable levels under cumulative conditions. Based on applicable municipal and CMP significance criteria, the project would have a cumulatively considerable contribution to seven (7) of the 22 cumulatively significant impacted intersections (see listed intersections below). Table 3.17-11 summarizes the cumulatively significantly impacted intersections.

City of Santa Clara Intersections

- No. 7. Great America Parkway and Great America Way (AM Peak Hour)
- No. 8. Great America Parkway and Old Mountain View-Alviso Road (AM Peak Hour)
- No. 16. Bowers Avenue and Augustine Drive (PM Peak Hour)
- No. 17. Bowers Avenue and Scott Boulevard* (AM Peak Hour)
- No. 21. San Tomas Expressway and Scott Boulevard* (AM and PM Peak Hours)
- No. 28. Lakeside Drive and Augustine Drive (AM and PM Peak Hours)

City of Sunnyvale Intersection

• No. 38. Oakmead Parkway/Corvin Drive and Central Expressway* (AM Peak Hour)

All other study intersections are projected to operate at acceptable levels during both the AM and PM peak hours of traffic when measured against the applicable municipal and CMP level of service standards.

Ta	Table 3.17-11: Study Intersections Level of Service – Cumulative Plus Project Conditions							
			Cumu	lative	С	umulat	ive Plus Pro	oject
No.	Intersection	Peak Hour	Delay	LOS	Delay	LOS	Increase Critical Delay	Increase V/C
1	Lawrence Expressway and Kifer Road (SC)	AM PM	120.5 144.7	F F	122.9 147.7	F F	+3.6 +3.9	0.008 0.007
2	Lawrence Expressway and Monroe Street/Reed Avenue (SC)*	AM PM	152.4 126.8	F F	155.0 128.6	F F	+3.7 +2.9	0.009 0.006
3	Lawrence Expressway and Cabrillo Avenue (SC)	AM PM	102.8 83.8	F F	105.5 86.1	F F	+3.6 +3.5	0.006 0.006
4	Lawrence Expressway and El Camino Real (SC)*	AM PM	38.4 38.7	D+ D	38.5 38.8	D+ D+	+0.3 0.0	0.005 0.000
5	Garrett Drive and Scott Boulevard (SC)	AM PM	10.0 16.5	A B	12.2 16.6	B B	+3.6 0.0	0.064 0.000
6	Lakeside Drive and Scott Boulevard (SC)	AM PM	11.3 11.3	B+ B+	11.6 12.9	B+ B	+0.6 +2.7	0.026 0.035
_	Great America Parkway	AM	111.4	F	115.2	F	+5.2	0.011
1	and Great America Way (SC)	PM	47.4	D-	51.7	D-	+6.7	0.012
Q	Great America Parkway	AM	75.9	E-	79.8	E-	+5.4	0.011
0	Alviso Road (SC)	PM	52.9	D-	54.7	D-	+3.0	0.011
9	Great America Parkway and Bunker Hill Lane (SC)	AM PM	11.9 24.1	B+ C	11.9 24.1	B+ C	$\begin{array}{c} 0.0\\ 0.0\end{array}$	0.011 0.002
10	Great America Parkway	AM	51.1	D-	51.3	D-	+0.4	0.010
10	and Tasman Drive (SC)*	PM	66.9	Е	151.7	Е	+1.0	0.003
11	Great America Parkway and Old Glory Lane (SC)	AM PM	19.7 54.2	B- D-	20.1 54.5	C+ D-	$^{+0.7}_{+0.7}$	0.012 0.002
	Great America Parkway	АМ	52.4	D-	54.9	D-	+4.4	0.011
12	and Patrick Henry Drive (SC)	PM	79.5	E-	79.7	E-	+1.0	0.002
13	Great America Parkway and Mission College Boulevard (SC)*	AM PM	63.3 1 21.1	E F	63.4 1 22.4	E F	+0.4 + 0.8	0.001 0.002
1.4	Great America Parkway	AM	18.4	B-	24.9	С	+9.1	0.038
14	and US 101 Northbound Ramps (SC)*	PM	53.2	D-	56.4	E+	+4.7	0.010

Ta	Table 3.17-11: Study Intersections Level of Service – Cumulative Plus Project Conditions							
			Cumu	lative	C	umulat	ive Plus Pro	oject
No.	Intersection	Peak Hour	Delay	LOS	Delay	LOS	Increase Critical Delay	Increase V/C
15	Bowers Avenue and US 101 Southbound Ramps (SC)*	AM PM	24.8 9.6	C A	25.3 9.7	C A	+0.4 +0.3	0.003 0.006
16	Bowers Avenue and	AM	47.9	D	48.0	D	0.0	0.001
	Augustine Drive (SC)	PM	84.0	F	104.3	F	+25.3	0.057
17	Bowers Avenue and Scott	AM	120.5	F	129.5	F	+12.4	0.023
	Boulevard (SC)*	PM	124.3	F	130.8	F	+0.6	0.001
18	Bowers Avenue and Central Expressway (SC)*	AM PM	108.7 123.5	F F	109.2 126.0	F F	+1.1 +53.9	0.004 -0.011
19	Mission College Boulevard/Thomas Road and Bowers Avenue (SC)*	AM PM	227.8 235.2	F F	229.0 236.0	F F	0.0 +0.5	0.000 0.001
20	Agnew Road/Freedom Circle and Mission College Boulevard (SC)	AM PM	36.5 57.6	D+ E+	36.8 57.9	D+ E+	+0.4 +0.8	0.003 0.003
21	San Tomas Expressway and Scott Boulevard (SC)*	AM PM	52.6 117.6	D- F	55.0 120.8	E+ F	+9.2	0.025
22	San Tomas Expressway and Walsh Avenue (SC)	AM PM	122.0 157.4	F F	123.7 159.7	F F	+2.7 +3.3	0.005 0.006
23	San Tomas Expressway and Monroe Street (SC)*	AM PM	73.3 105.6	E F	74.9 107.7	E F	+2.6 + 3.7	0.005 0.006
24	San Tomas Expressway and Cabrillo Avenue (SC)	AM PM	41.7 51.1	D D-	43.0 52.4	D D-	+1.9 +2.0	0.005 0.005
25	San Tomas Expressway and El Camino Real (SC)*	AM PM	116.7 139.2	F F	118.2 140.9	F F	+2.4 +3.1	0.005 0.005
26	Scott Boulevard and Central Expressway (SC)*	AM PM	45.8 96.1	D F	45.9 97.4	D F	+0.1 + 1.1	0.003 0.003
27	Lafayette Street and Central Expressway (SC)	AM PM	83.6 119.4	F F	84.2 119.4	F F	+1.9 +0.2	0.004 0.002

Table 3.17-11: Study Intersections Level of Service – Cumulative Plus Project Conditions								
		Cumulative			C	umulat	ive Plus Pro	oject
No.	Intersection	Peak Hour	Delay	LOS	Delay	LOS	Increase Critical Delay	Increase V/C
20	Lakeside Drive and	AM	27.8	С	85.4	F	+69.9	0.264
28	Augustine Drive (SC)	PM	36.5	D+	81.3	F	+67.4	0.182
31	Lawrence Expressway and US 101 Northbound Ramps (SV)	AM PM	10.6 12.7	B+ B	10.6 12.7	B+ B	0.0 0.0	$0.000 \\ 0.000$
32	Lawrence Expressway and US 101 Southbound Ramps (SV)	AM PM	14.1 26.0	B C	16.0 26.0	B C	+3.4 +0.1	0.008 0.002
33	Lawrence Expressway and Oakmead Parkway (SV)	AM PM	62.1 56.3	E E+	64.1 56.7	E E+	+3.7 +0.2	0.013 0.001
34	Lawrence Expressway and Arques Avenue (SV)*	AM PM	51.5 115.5	D- F	51.6 116.0	D- F	0.0 +1.0	0.000 0.012
35	Lakeside Drive and Oakmead Parkway (SV)	AM PM	20.3 20.3	C+ C+	19.9 20.0	В- В-	+1.3 -0.1	0.026 0.006
36	Lakeside Drive and Arques Avenue (SV)	AM PM	22.4 17.9	C+ B	22.0 18.6	C+ B-	-0.1 +2.2	0.003 0.104
37	Oakmead Parkway and Arques Avenue/Scott Boulevard (SV)	AM PM	21.7 26.2	C+ C	21.8 26.5	C+ C	-0.1 +0.9	0.003 0.027
	Oakmead Parkway/Corvin	AM	109.3	F	115.6	F	+11.1	0.020
38	Drive and Central Expressway (SV)*	PM	113.0	F	113.1	F	0.0	0.000
39	Great America Parkway and SR 237 Westbound Ramps (SJ)*	AM PM	59.1 32.6	E+ C-	61.5 33.8	Е С-	+ 3.0 +1.4	0.008 0.009
40	Great America Parkway and SR 237 Eastbound Ramps (SJ)*	AM PM	12.6 13.3	B B	12.6 13.5	B B	+0.0 +0.4	0.006 0.010
Notes	s: * = A VTA Congestion Manage (SC) City of Santa Clara, (SJ) C Bold indicates unacceptable LC Intersections 29. Peterson Way Clara are unsignalized and do n Please note since March 2018, longer utilizes intersection LOS	ement Pro City of Sar OS. and Lakes not require the City of S to identif	gram (CM 1 José, (SV side Drive a LOS ev f San José fy project i	P) interse) City of and 30. I aluation. evaluates mpacts	ection Sunnyvale Peterson W sproject im However f	ay and T pacts ba	annery Way ir sed on VMT, a	n Santa and no the City of

longer utilizes intersection LOS to identify project impacts. However, this project is located in the City of Santa Clara and these San José study intersections (39 and 40) are CMP intersections. CMP intersections must be in conformance with the CMP, which includes intersection analysis based on LOS.

Impact TRN-C-1:The addition of project traffic would cause the Great America Parkway and
Great America Way intersection's average critical-movement delay to
increase by 5.2 seconds and the V/C ratio to increase by 0.011 during the AM
peak hour, which would result in a significant impact to this intersection
under cumulative plus project conditions. (Significant Cumulative Impact)

Planned improvements to mitigate impacts to the Great America Parkway and Great America Way intersection include the addition of a second westbound right-turn lane and a second southbound left-turn lane. Although the planned improvements would improve operating conditions, the intersection is projected to continue to operate deficiently under background and cumulative conditions. With the addition of a second northbound left-turn lane, the project would continue to operate unacceptably during the AM peak hour and the cumulative impact at this intersection would be significant.

To improve the operations to acceptable levels of service at the Great America Parkway and Great America Way, the project would require the addition of a fourth-southbound through lane. This improvement, however, is not feasible due to right-of-way constraints. Given the constraints which would limit implementation of this mitigation, the project impact to this intersection is considered significant and unavoidable. **(Significant Unavoidable Cumulative Impact)**

Great America Parkway and Old Mountain View-Alviso Road

Impact TRN-C-2:The addition of project traffic would cause the Great America Parkway and
Old Mountain View-Alviso Road intersection's average critical-movement
delay to increase by 5.4 seconds and the V/C ratio to increase by 0.011 during
the AM peak hour, which would result in a significant impact to this
intersection under cumulative plus project conditions. (Significant
Cumulative Impact)

<u>Mitigation Measures</u>: Implementation of the following mitigation measures would reduce traffic impacts at the Great America Parkway and Old Mountain View-Alviso Road intersection.

MM TRN-C-2.1: The project shall add a separate southbound right-turn lane at the Great America Parkway and Old Mountain View-Alviso Road intersection. The southbound approach at this location currently consists of one left-turn lane, three through lanes, and an eight-foot wide bicycle lane/right-turn lane. Implementation of the separate southbound right-turn lane improvement will require the widening of the west side of Great America Parkway (north of Old Mountain View/Alviso Road) by approximately eight feet to provide one sixfoot bicycle lane and one 10-foot right-turn lane for a distance of approximately 150 feet.

This intersection has previously been identified to operate deficiently with the addition of traffic associated with an approved development (City Place). The City Place FEIR has identified improvements (described under background conditions and included under background and

cumulative conditions) as partial mitigation to their impact at this location, however, their impact was identified to remain significant and unavoidable.

The addition of a separate southbound right-turn lane would require partial removal of landscaping on the west side of Great America Parkway and the relocation of two traffic signal/utilities cabinets, a light pole, and a traffic signal pole. With the implementation of the above mitigation, operations at the Great America Parkway and Old Mountain View – Alviso Road intersection would improve to an acceptable LOS D during the AM peak hour and the addition of project traffic would result in a less than significant cumulative impact on this intersection. (Less Than Significant Cumulative Impact with Mitigation Incorporated)

Bowers Avenue and Augustine Drive

Impact TRN-C-3:The addition of project traffic would cause the Bowers Avenue and Augustine
Drive intersection's average critical-movement delay to increase by 25.3
seconds and the V/C ratio to increase by 0.057 during the PM peak hour,
which would result in a significant impact to this intersection under
cumulative plus project conditions. (Significant Cumulative Impact)

The Bowers Avenue and Augustine Drive intersection was identified to operate deficiently with the addition of traffic associated with an approved development (City Place). The City Place FEIR identified no feasible mitigations due to right-of-way restrictions and concluded that the impact at this location would be significant and unavoidable.

The project would be required to widen Bowers Avenue to include four through lanes (with a separate right-turn lane in the southbound direction) in the northbound and southbound directions to improve the intersection operations to acceptable levels of service. These improvements, however, are not feasible due to right-of-way constraints.

Since no improvements at this intersection would be feasible, the addition of project traffic would result in a significant unavoidable cumulative impact to this intersection. (Significant Unavoidable Cumulative Impact)

Bowers Avenue and Scott Boulevard (CMP Intersection)

Impact TRN-C-4:The addition of project traffic would cause the Bowers Avenue and Scott
Boulevard intersection's average critical-movement delay to increase by 12.4
seconds and the V/C to increase by 0.023 during the AM peak hour, which
would result in a significant impact to this intersection under cumulative plus
project conditions. (Significant Cumulative Impact)

To mitigate the impact at Bowers Avenue and Scott Boulevard intersection, the project applicant would be required to make a fair share contribution towards the addition of a second southbound leftturn lane at that Bowers Avenue and Scott Boulevard intersection (planned improvement). Furthermore, the addition of a separate northbound right-turn lane would be required. Implementation of the separate northbound right-turn lane would require the widening of the east side of Bowers Avenue (south of Scott Boulevard) by a minimum of 10 feet to provide one six-foot bicycle lane and one 10-foot right-turn lane. The widening of the east side of Bowers Avenue would require partial removal of landscaping and the removal of two trees to accommodate the five-foot sidewalk on the east side of Bowers Avenue. In addition, to improve the intersection's operating conditions to acceptable levels, the project would be required to add a fourth northbound through lane and a separate southbound right-turn lane. The addition of a northbound right-turn lane will require widening of the east side of Bowers Avenue, south of Scott Boulevard which is not feasible due to right-of-way constraints. Therefore, the addition of project traffic would result in a significant unavoidable cumulative impact to the Bowers Avenue and Scott Boulevard intersection. (Significant Unavoidable Cumulative Impact)

San Tomas Expressway and Scott Boulevard (CMP Intersection)

Impact TRN-C-5: The San Tomas Expressway and Scott Boulevard intersection would operate at an unacceptable LOS D and F during the AM and PM peak hours, respectively, under cumulative no project conditions. The addition of project traffic would cause the intersection's level of service to deteriorate to an unacceptable LOS E during the AM peak hour and the average criticalmovement delay to increase by 4.6, and the V/C to increase by 0.012 during the PM peak hour. This would result in a significant impact to this intersection under cumulative plus project conditions. (Significant Cumulative Impact)

<u>Mitigation Measures</u>: Implementation of the following mitigation measures would reduce traffic impacts at the San Tomas Expressway and Scott Boulevard intersection.

MM TRN-C-5.1: The project applicant shall make a fair-share contribution towards planned improvements at the San Tomas Expressway and Scott Boulevard intersection. Planned improvements include the addition of a second westbound right-turn lane and the addition of an interchange.

The San Tomas Expressway and Scott Boulevard intersection was identified to operate deficiently with the addition of traffic associated with an approved development (City Place). The City Place EIR has identified a fair-share contribution towards the implementation of a second westbound right-turn lane (Tier 1C priority improvement in the Comprehensive County Expressway Planning Study 2008 Update, March 2009) and implementation of an interchange (Tier 2 priority improvement in the Comprehensive County Expressway Planning Study).

The above mitigation would reduce the cumulative impact to the San Tomas Expressway and Scott Boulevard intersection operations to less than significant. Since this intersection is a CMP intersection and is located outside of City of Santa Clara jurisdiction, the City would not be able to implement improvements concurrently with the proposed project. Therefore, the addition of project traffic would result in a significant unavoidable cumulative impact to this intersection. (Significant Unavoidable Cumulative Impact) Impact TRN-C-6:The Lakeside Drive and Augustine Drive intersection would operate at an
acceptable LOS C and D during the AM and PM peak hours, respectively,
under cumulative no project conditions. The addition of project traffic would
cause the intersection's level of service to deteriorate to an unacceptable LOS
F during both peak hours. The intersection's average critical-movement delay
to increase by 69.9 seconds and the V/C ratio to increase by 0.26 during the
AM peak hour, and 67.4 seconds and 0.18 during the PM peak hour.
Therefore, the addition of project traffic would result in a significant impact
to this intersection under cumulative plus project conditions. (Significant
Cumulative Impact)

<u>Mitigation Measures</u>: Implementation of the following mitigation measures would reduce traffic impacts at the Lakeside Drive and Augustine Drive to a less than significant level.

MM TRN-C-6.1: The project shall modify the eastbound/westbound approaches of the Lakeside Drive and Augustine Drive intersection to include one shared left- and through-lane and one right-turn lane in the westbound approach, and one shared left-and-through lane and one shared right-and-through lane in the eastbound approach. These improvements also will require changing the signal phasing from protected to split phasing in the eastbound/westbound direction.

The above mitigation measure would improve the intersection's operating conditions to LOS C and D during the AM and PM peak hours, respectively, under cumulative plus project conditions. With the implementation of the mitigation measure, the addition of project traffic would result in a less than significant cumulative impact to this intersection. (Less Than Significant Cumulative Impact with Mitigation)

Oakmead Parkway/Corvin Drive and Central Expressway (Sunnyvale CMP Intersection)

Impact TRN-C-7:The addition of project traffic would cause the Oakmead Parkway/Corvin
Drive and Central Expressway intersection's average critical-movement delay
to increase by 11.1 seconds and the V/C to increase by 0.02 during the AM
peak hour, which would result in a significant impact to this intersection
under cumulative plus project conditions. (Significant Cumulative Impact)

<u>Mitigation Measures</u>: Implementation of the following mitigation measures would reduce traffic impacts at the Oakmead Parkway/Corvin Drive and Central Expressway to a less than significant level.

MM TRN-C-7.1: The project shall add a second eastbound left-turn lane to the Oakmead Parkway/Corvin Drive and Central Expressway intersection to reduce the cumulative impact to this intersection to less than significant.

The project applicant shall make a fair-share contribution toward the widening of Central Expressway to include three through lanes in each direction from San Tomas Expressway to Lawrence Expressway (to improve this intersection's operating conditions to acceptable levels of service), as identified in the March 2015 update to the 2008 Countywide Expressway Study.

The addition of a second eastbound left-turn lane would improve the Oakmead Parkway/Corvin Drive and Central Expressway intersection's operating conditions to better than cumulative no project conditions and reduce the cumulative impact at this intersection to less than significant. The intersection would, however, continue to operate at unacceptable LOS F during both peak hours.

The widening of Central Expressway to include three through lanes in each direction would be necessary to improve the intersection's operating conditions to acceptable levels. The Central Expressway widening to three lanes in each direction from San Tomas Expressway to Lawrence Expressway is included as a Tier 3 improvement identified in the March 2015 update to the 2008 Countywide Expressway Study.

Since the intersection is a CMP intersection and is located outside of City of Santa Clara jurisdiction, the City would not be able to implement improvements concurrently with the proposed project. Therefore, the addition of project traffic would result in a significant unavoidable cumulative impact to this intersection. (Significant Unavoidable Cumulative Impact)

3.17.3 <u>Non-CEQA Effects</u>

3.17.3.1 Operational Transportation Issues - Not Covered Under CEQA

Site Access and Circulation

Site Access

Vehicular access to the project site would be provided via two driveways along Peterson Way, two driveways along Tannery Way, and one driveway along Lakeside Drive. All project driveways would provide full access to/from the project site. The site's project driveways are identified on Figure 3.17-4.

The two driveways on Peterson Way would be located approximately 60 feet from each other, and approximately 500 feet north of Tannery Way. Driveway 1 would provide direct access to the proposed parking structure and Driveway 2 would provide access to the surface parking area. Driveway 3 would be located approximately in the middle of the project site frontage on Tannery Way and it would provide direct access to the southern parking area. Driveway 4 would be located next to the eastern project site boundary and would provide direct access to the eastern parking area.

Driveway 5 along Lakeside Drive would provide direct access to both the parking structure and the eastern parking area. All project driveways, with the exception of Driveway 3 along Tannery Way, would be 30 feet wide. Driveway 3 on Tannery Way would be 60 feet wide but includes a landscaped 20-foot center median that separates the 20-foot inbound and outbound lanes. The project would

provide adequate site access and proposed driveways would be consistent with the driveway design standards included in Santa Clara City Code, Chapter 18.74.

Site Distance at the Driveways

Peterson Way and Tannery Way are long and straight roadways and provide a clear line of sight from all project site driveways. A minimum of 400 feet of sight distance is provided at all project site driveways on Peterson and Tannery Ways, which is consistent with Caltrans standards. Driveway 5 is located along a curving segment of Lakeside Drive, which results in limited sight distance. The required stopping sight distance of 250 feet is, however, currently provided at this driveway, as long as on-street parking along the south side of Lakeside Drive is prohibited for a minimum of 250 feet to the north/west and 100 feet to the south/east (between Driveway 5 and the adjacent driveways), in accordance with the site access and circulation project conditions listed in this section below. With the implementation of Caltrans design standards, adequate stopping sight distance would continue to be provided at all project site driveways.

On-site Circulation

The project would provide 90-degree parking throughout the surface parking areas and within the proposed parking structure. All surface drive aisles are shown on the site plan to be 28 to 30 feet wide, with 16-foot long parking stalls along both sides of the drive aisle. Parking spaces within the parking structure are shown to be 18 feet long with 24-, 25-, and 28-foot drive aisles.

The proposed drive aisle widths, in combination with the parking dimensions, would provide sufficient room for vehicles to back out of the 90-degree parking stalls. The parking structure would have two entrances at the southwest corner of the garage and two additional entrances at the southeast corner of the garage. All four parking levels (three above-grade and one at-grade) would be accessible via all garage entrances.

The designated loading areas for delivery trucks would be located at the north side of both proposed buildings, which would be accessible via Driveways 2, 4, and 5. Additionally, all parking areas and parking structure would be connected, allowing drivers to circulate the site without the need to enter and exit the site while looking for parking.

Connectivity between all parking areas and the parking structure, adequate drive aisle widths and turn radii, and on-site vehicular circulation would be adequate to serve the site. On-site circulation would comply with the City of Santa Clara City Code Chapter 18.74 (parking regulations) and generally accepted traffic engineering standards.

Pedestrian Access and Circulation

The proposed project would provide sidewalks along its entire frontage on Peterson and Tannery Ways. With the available sidewalks and crosswalks along roadways and intersections in the vicinity of the project site, adequate pedestrian access to and from the project site to nearby pedestrian destinations would be provided.

Pedestrian pathways would be provided throughout the project site, providing a connection between sidewalks on the adjacent streets, the proposed buildings, and other amenities on-site.

Additionally, the project is proposing to construct a half-mile walking path along the perimeter of the project site, which would include the sidewalks along Peterson and Tannery Ways. Therefore, pedestrian access to all proposed facilities within the project site would be adequate.

Pedestrian access between the parking structure and the office buildings would be provided via the on-site pedestrian pathways. A drop-off area is shown within the first level of the parking structure, along its southern boundary. The on-site pedestrian pathways would connect directly to the drop-off area. For these reasons, pedestrian access to all proposed facilities within the project site would be adequate. With the inclusion of the project conditions listed in the response to Impact TRN-3, the project would provide adequate site access and on-site circulation.

Parking

Vehicle Parking

The City of Santa Clara zoning regulations (Section 18.74.020) requires office developments to provide one space for each 300 square feet of gross floor area. Based on these standards, the proposed project would be required to provide 2,254 on-site parking spaces⁹⁸.

The project proposes 2,281 parking spaces, which would be 27 spaces more than the number of spaces required to satisfy the City's parking requirement. As a result, the proposed number of parking spaces would adequately serve the site.

Bicycle Parking

Based on VTA's Bicycle Technical Guidelines, the proposed project would be required to provide a total of 115 bicycle parking spaces, with 86 long-term spaces and 29 short-term spaces. The project proposes 60 short-term bicycle parking spaces and 180 long-term bicycle parking spaces. The proposed number of bicycle parking spaces exceeds the required number of long-term spaces and short-term parking spaces. Based on the City's requirements, the project would provide 84 Class I and 28 Class II around the proposed office buildings and 96 Class I and 32 Class II bicycle spaces in the parking structure. The project would, therefore, meet the City's and VTA's parking standards.

⁹⁸ The proposed amenities building would be exclusive to on-site tenants; therefore, the project would not need to provide additional parking for the amenities building.

3.18 TRIBAL CULTURAL RESOURCES

3.18.1 <u>Environmental Setting</u>

3.18.1.1 *Regulatory Framework*

State

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

Under AB 52, TCRs are defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
 - Included or determined to be eligible for inclusion in the California Register of Historic Resources,⁹⁹ or
 - Included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).
- A resource determined by the lead agency to be a TCR.

3.18.1.2 *Existing Conditions*

Under Assembly Bill 52, a lead agency can, at its discretion and supported by substantial evidence, choose to treat a resource as a tribal resource. No tribes have requested consultation with the City and, therefore, no tribes were consulted for the proposed project. There are no known tribal resources on the site.

3.18.2 Impact Discussion

For the purpose of determining the significance of the project's impact on tribal cultural resources, would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

⁹⁹ See Public Resources Code section 5024.1. The State Historical Resources Commission oversees the administration of the California Register of Historical Resources (CRHR) and is a nine-member state review board that is appointed by the Governor, with responsibilities for the identification, registration, and preservation of California's cultural heritage. The CRHR "shall include historical resources determined by the commission, according adopted procedures, to be significant and to meet the criteria in subdivision (c) (Public Resources Code, Section 5024.1 (a)(b)).

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

Impact TCR-1:	The project would not cause a substantial adverse change in the significance
	of a tribal cultural resource that is listed or eligible for listing in the California
	Register of Historical Resources, or in a local register of historical resources
	as defined in Public Resources Code Section 5020.1(k). (Less than
	Significant Impact with Mitigation Incorporated)

The project site is located approximately 800 feet east of Calabazas Creek, which is considered sensitive for prehistoric and archaeological deposits, and could include tribal cultural objects. No tribal cultural resources, including sites, features, places, cultural landscapes or sacred place have been identified at the site based on available information.¹⁰⁰

No tribes have sent written requests for notification of projects to the City of Santa Clara under AB 52. Based on available data, there are no recorded tribal cultural objects in the project area. Any subsurface artifacts found on-site would be addressed consistent with mitigation measures MM CUL-2.1, CUL-2.2, and CUL-3.1 specified in this document. Therefore, with the implementation of mitigation measures, the proposed project would have a less than significant impact on tribal cultural resources. **(Less Than Significant Impact with Mitigation Incorporated)**

Impact TCR-2:	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the
	criteria set forth in subdivision (c) of Public Resources Code Section 5024.1,
	the lead agency shall consider the significance of the resource to a California
	Native American tribe. (Less than Significant Impact)

As discussed under Impact TCR-1, there are no known tribal cultural resources on-site, and the project includes measures to reduce potential impacts to a less than significant level. For this reason, the project would not cause a substantial adverse change in the significance of a tribal cultural resources that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. (Less than Significant Impact)

¹⁰⁰ City of Santa Clara. 2010-2035 General Plan. 2014 Update. Albion Environmental, Inc. Cultural Resources Sensitivity of the City of Santa Clara. May 2010.

3.18.2.1 Consistency with Plans

Given the City has not been contacted by any tribes with concerns regarding the project area, the project is consistent with AB 52. The City's General Plan does not include policies for tribal cultural resources. The General Plan, however, does include policies to protect archaeological and cultural resources. As stated in Section 3.5, Cultural Resources in this document, the project would be consistent with the following cultural resources policies:

Cultural Resources Policies

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

5.6.3-P2: Encourage salvage and preservation of scientifically valuable paleontological or archaeological materials.

5.6.3-P5: In the event that archaeological/paleontological resources are discovered, require that work be suspended until the significance of the find and recommended actions are determined by a qualified archaeologist/paleontologist.

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

Consistency: Mitigation measure MM CUL-3.1 is consistent with the above General Plan policies pertaining to cultural resources. The project would comply with the cultural resources measures in Section 3.5, Cultural Resources and General Plan policies to reduce or avoid impacts to archaeological resources. These measures and policies would be implemented during project construction or excavation. In the event that archaeological/subsurface tribal cultural resources are discovered, work would be suspended until the significance of the find and recommended actions are determined by a qualified archaeologist.

3.18.2.2 *Cumulative Impacts*

Impact TCR-C: The project would not result in a cumulatively considerable contribution to a significant tribal cultural resources impact. (No Cumulative Impact)

The geographic study area for cumulative impacts to tribal cultural resources is the surrounding area (within 1,000 feet of the project site). No tribal cultural features, including sites, features, places, cultural landscapes or sacred place have been identified at the site based on available information. Additionally, no tribes have sent written requests for notification of projects to the City of Santa Clara under AB 52. As a result, the project would not contribute to a cumulative impact to tribal resources. **(No Cumulative Impact)**

3.19 UTILITIES AND SERVICE SYSTEMS

The following analysis is based, in part, on a Sanitary Sewer Study prepared by *Woodard & Curran* in April 2018. In addition, the following analysis is also based upon a Water Supply Assessment prepared by the City of Santa Clara. These reports are included as Appendices F and G of this document.

3.19.1 <u>Environmental Setting</u>

3.19.1.1 *Regulatory Framework*

State and Regional

Urban Water Management Plan

Pursuant to State Water Code requirements, 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. The State Water Code requires water agencies to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, and to address a number of related subjects including water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events. The City of Santa Clara adopted its most recent Urban Water Management Plan in November 2016.

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 are required to include waste diversion mitigation measures.

Wastewater

The RWQCB includes regulatory requirements that each wastewater collection system agency shall, at a minimum, develop goals for the Sewer System Management Plan to provide adequate capacity to convey peak flows.

Assembly Bill 341

Assembly Bill (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 1383 (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.

3.19.1.2 *Existing Conditions*

Water Services

Water is provided to the site by the City of Santa Clara Water Utility. The system consists of more than 335 miles of water mains, 26 active wells, and seven storage tanks with approximately 28.8 million gallons of water capacity.¹⁰¹ Drinking water is provided by an extensive underground aquifer (accessed by the City's wells) and by two wholesale water importers: Valley Water (imported from the Sacramento-San Joaquin Delta) and the San Francisco Hetch-Hetchy System (imported from the Sierra Nevada). The three sources are used interchangeably or are blended together. A water recharge program administered by Valley Water from local reservoirs and imported Sacramento-San Joaquin Delta water enhances the dependability of the underground aquifer.

The project site is currently developed with an approximately 218,375 square foot office/R&D building and uses approximately 23,606 gallons of water per day.¹⁰²

Wastewater Services

The City of Santa Clara Departments of Public Works and Water and Sewer Utilities are responsible for the wastewater collection system within the City. Wastewater is collected by sewer systems in Santa Clara and is conveyed by pipelines to the Regional Wastewater Facility (RWF) located in San José. The RWF is one of the largest advanced wastewater treatment facilities in California and serves over 1,400,000 people in San José, Santa Clara, Milpitas, Campbell, Cupertino, Los Gatos, Saratoga, and Monte Sereno.¹⁰³ The RWF has available capacity to treat up to 167 million gallons per day (mgd). The RWF presently operates at an average dry weather flow of 110 mgd, which is 57 mgd (or 35 percent) under the facility's 167 mgd treatment capacity.¹⁰⁴ Approximately 10 percent of the plant's effluent is recycled for non-potable uses and the remainder flows into San Francisco Bay.

¹⁰¹ City of Santa Clara. "Water Utility." Accessed: May 11, 2018. Available at: <u>http://santaclaraca.gov/government/departments/water-sewer-utilities/water-utility</u>.

¹⁰² City of Santa Clara. *3625 Peterson Way Water Supply Assessment*. June 28, 2018. Based on a water usage rate of 0.09 gallons per day per square feet for office and 0.077 gallons per day per square feet for flow rate of 0.15 gallons per day per square feet for irrigation.

¹⁰³ City of San José. "San José-Santa Clara Regional Wastewater Facility." Accessed: May 11, 2018. Available at: <u>http://www.sanjoseca.gov/index.aspx?NID=1663</u>.

¹⁰⁴ City of Santa Clara. 2010-2035 General Plan Integrated Final Environmental Impact Report. SCH# 2008092005. January 2011.

The project site currently generates approximately 32,756 gallons per day (gpd) of wastewater.¹⁰⁵ Wastewater flow from the project site enters the City's sanitary sewer system via existing pipes along Lakeside Drive.

Storm Drainage

The City of Santa Clara owns and maintains the municipal storm drainage system. There are existing storm drain lines along Peterson Way, Tannery Way, and Lakeside Drive.

Solid Waste

Solid waste collection in the City of Santa Clara is provided by Mission Trail Waste System through a contract with the City. Mission Trail Waste System also has a contract to implement the Clean Green portion of the City's recycling plan by collecting yard waste. All other recycling services are provided through Stevens Creek Disposal and Recycling. The City has an arrangement with the owners of the Newby Island Landfill, located in San José, to provide disposal capacity for the City of Santa Clara through 2024. The City of San José approved expansion of Newby Island Landfill in August 2012 and the landfill could continue to provide disposal capacity to Santa Clara beyond 2024. Prior to 2024, the City would need to amend their contract with Newby Island or contract with another landfill operator which would be subject to environmental review. Newby Island Landfill is currently in the process of seeking authorization from San José to expand the permitted capacity and accept an additional 15.1 million cubic yards and extend its closure date to 2041.¹⁰⁶ If the landfill is not available to accept waste, the City will prepare a contract with another landfill, such as Guadalupe Mines in San José, which is anticipated to close in 2048.

As discussed in Section 3.14.1.1, SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. In addition to the state targets, the City of Santa Clara has a construction debris diversion ordinance which requires all projects over 5,000 square feet to divert a minimum 50 percent of construction and demolition debris from landfills.

The existing office building generates approximately 1,200 pounds of solid waste per day.¹⁰⁷

¹⁰⁵ Woodard & Curran. Sanitary Sewer Capacity Evaluation for Proposed Development at 3625 Peterson Way (APN: 216-30-049). April 2018. Based on 0.15 gallons per day/square foot.

The Sanitary Sewer Capacity Evaluation provides a conservative estimate for wastewater generation from the existing office development (0.15 gallons per day/square feet). The sanitary sewer evaluation overestimates the wastewater discharged from the site (32,756 gallons per day). As a result, the estimated wastewater discharge rate is greater than the estimated water usage.

¹⁰⁶ The Mercury News. "San José to Study Odors from Newby Island Landfill Before Considering Any Expansion." Accessed: April 24, 2018. Available at: <u>https://www.mercurynews.com/2016/01/14/san-jose-to-study-odors-from-newby-island-landfill-before-considering-any-expansion/</u>.

¹⁰⁷ The solid waste generation is based on a solid waste generation rate of six pounds per 1,000 square feet per day for office use.

3.19.2 Impact Discussion

For the purpose of determining the significance of the project's impact on utilities and service systems, would the project:

- 1) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
- 2) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?
- 3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- 4) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- 5) Be noncompliant with federal, state, and local management and reduction statutes and regulations related to solid waste?

3.19.2.1 *Project Impacts*

Impact UTL-1:The project would not require or result in the relocation or construction of
new or expanded water, wastewater treatment or stormwater drainage, electric
power, natural gas, or telecommunications facilities, the construction or
relocation of which could cause significant environmental effects. (No
Impact)

The proposed project would connect to the City's existing stormwater, electric, natural gas, telecommunications, waste, and wastewater system infrastructure. The proposed project would incrementally increase the demand on existing facilities in the City of Santa Clara. The analysis in the following sections discusses the potential impacts of the project on existing facilities. Based on the following analysis, no relocation of existing or construction of new facilities are needed to serve the proposed project; therefore, there would be no impact. (No Impact)

Impact UTL-2:	The project would not have insufficient water supplies available to serve the
	project and reasonably foreseeable future development during normal, dry and
	multiple dry years. (Less than Significant Impact)

The project would demolish the existing 218,375 square foot office building and construct two approximately 338,155 square foot office buildings, for a total of 676,310 square feet. The proposed development would use approximately 72,275 gallons of water per day,^{108,109} a net increase of

¹⁰⁸ City of Santa Clara. *3625 Peterson Way Water Supply Assessment*. June 2018.

¹⁰⁹ Please note the square footage of proposed office space has increase by approximately 4,310 since the Water Supply Assessment was prepared. Therefore, the water usage rate of 0.09 gallons per day for office was used and 0.077 gpd/square feet for irrigation (assuming 148,100 square feet of landscaping), as identified in the WSA.

approximately 48,670 gallons of water per day when compared to existing conditions. The water supply assessment (WSA) concluded that the increase in water demand would not exceed the capacity of the Santa Clara Water Utility to provide water services to the site. In addition, the City's Water Utility has sufficient water supplies to meet the projected water demand of the City (including water demand from existing uses and projected growth) and the proposed project during normal, single dry year, and multiple dry year scenarios (refer to *Appendix G*). (Less Than Significant Impact)

Impact UTL-3: The project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. **(Less than Significant Impact)**

Based on the City's General Plan, the RWF has the capacity to treat 167 million gallons of wastewater a day. Based on 2009 data¹¹⁰, the City's average dry weather flow is 13.3 mgd while the treatment capacity is 23 mgd. The proposed project would generate approximately 101,447 gpd of wastewater.¹¹¹ The proposed project would not increase the need for wastewater treatment beyond the capacity of the RWF. The RWF has the ability to treat wastewater generated by the proposed project and, as a result, the project would not have a significant impact on the capacity of the RWF. **(Less Than Significant Impact)**

The proposed project would connect to existing sewer lines on Tannery Way. Based on the sanitary sewer model run under existing conditions, the wastewater flow rate for the site is approximately 40,236 gpd. Construction of the project would increase the wastewater flow rate to 101,447 gpd, a net increase of 61,211 gpd of wastewater compared to existing conditions. The proposed project would increase flow to the pump stations by approximately 0.04 mgd (combined). City staff have concluded that no capacity improvement would be needed to serve the proposed development. (Less Than Significant Impact)

Impact UTL-4:	The project would not generate solid waste in excess of state or local
	standards, or in excess of the capacity of local infrastructure, or otherwise
	impair the attainment of solid waste reduction goals. (Less than Significant
	Impact)

The Newby Island Landfill, located in San José, has an agreement with the City to provide disposal capacity through 2024. The proposed project would generate a total of approximately 4,058 pounds

¹¹⁰ City of Santa Clara. 2010-2035 General Plan Integrated Final Environmental Impact Report. SCH# 2008092005. January 2011.

¹¹¹ Please note the square footage of proposed office space has increase by approximately 4,310 since the Sanitary Sewer Capacity Evaluation was prepared. Therefore, the unit flow rate of 0.15 gallons per day per square feet of office was used.

The Sanitary Sewer Capacity Evaluation provides a conservative estimate for wastewater generation by the proposed office development (0.15 gallons per day/square feet). The sanitary sewer evaluation overestimates the wastewater discharged from the proposed development (101,447 gallons per day). As a result, the estimated wastewater discharge rate is greater than the estimated water usage.

of solid waste per day.¹¹² This is 2,858 pounds per day more than the solid waste currently generated on-site.

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

Impact UTL-5:	The project would not be noncompliant with federal, state, and local
	management and reduction statutes and regulations related to solid waste. (No
	Impact)

The proposed project would not negatively impact the provision of solid waste services and would comply with AB 341 which requires all businesses in California that generate four or more cubic yards of garbage per week (approximately 6,740 pounds per week) to recycle. Future occupants of the site would be required to direct and recycle waste consistent with federal, state, and local requirements. Thus, the project would not impair the attainment of solid waste reduction goals. (Less than Significant Impact)

3.19.2.2 Consistency with Plans

City of Santa Clara General Plan

The General Plan includes the following utilities and service systems policies applicable to the proposed project.

General Land Use Policies

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

Consistency: The proposed project would not exceed the capacity of existing infrastructure and can be adequately served by existing public facilities and services. Therefore, the project is consistent with Policy 5.3.1-P9.

Safety Policies

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

¹¹² The solid waste generation is based on a solid waste generation rate of six pounds per 1,000 square feet per day for office use.
Consistency: The project would not exceed the capacity of the storm drainage lines that serve the project site. Therefore, the project is consistent with Policy 5.10.5-P21.

3.19.2.3 *Cumulative Impacts*

Impact UTL-C:The project would not result in a cumulatively considerable contribution to a
significant utilities and service systems impact. (Less than Cumulatively
Considerable Contribution to Significant Cumulative Impact)

The project, by itself, would have a less than significant impact on utilities and service systems (refer to Section 3.14). As discussed in Section 3.14, the WSA completed for the project determined there is sufficient water supply to meet the projected water demands of the City (including water demand from existing uses and projected growth) and the proposed project.

Build-out of the General Plan would result in an increase in sewage generated within the City. As discussed in the certified General Plan EIR, the average dry weather flows projected from the full build-out of the General Plan were projected to be within the City's allocated treatment capacity at RWF, which at the time of the certification of the General Plan EIR was 20.1 mgd¹¹³ and below the City's 2017 flow allocation of approximately 20.5 mgd.

Since the certification date of the General Plan EIR, however, the City has approved development applications that have included General Plan amendments, each of which have incrementally increased the potential sewage generation at full build-out. Consequently, it is conceivable that at some point prior to 2035, the City could exceed its current capacity allocation, and the proposed project is anticipated to generate an additional 0.3 mgd.¹¹⁴ The RWF has excess flow capacity of approximately 59.7 mgd and the City has a process to obtain additional capacity rights at the RWF should the need arise.¹¹⁵

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

Based on the results from the sanitary sewer capacity evaluation, wastewater flow from the site to the City's pump stations would not cause the facilities to exceed capacity. The cumulative projects would not cause the City's pump stations to exceed capacity, as the City is planning for future capacity improvements as additional developments are proposed. The project would, therefore, not result in cumulative impacts to pump stations or sanitary sewer facilities. (Less than Significant Cumulative Impact)

¹¹³ City of Santa Clara. 2010-2035 General Plan Integrated Final Environmental Impact Report. SCH# 2008092005. January 2011. Page 228.

¹¹⁴ V&A Consulting Engineers. *City of Santa Clara Gateway Crossing Mixed Use Sewer Capacity Study*. June 2017. ¹¹⁵ The total flow capacity at the RWF is 167 mgd, and the joint owners (Santa Clara and San José) have agreements with several tributary agencies, which have capacity rights of approximately 35 mgd. Pursuant to Section V.B.3 of the 1983 agreements with the tributary agencies, Santa Clara can purchase additional capacity from those tributary agencies.

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

Build-out of the City and the proposed project would generate solid waste that would need to be disposed of appropriately. Consistent with the conclusion in the certified General Plan and City Place Santa Clara Project FEIR,¹¹⁶ without a specific plan for disposing of solid waste beyond 2024, the solid waste generated by development in the City post-2024 (including waste from the proposed project and other cumulative projects such as City Place Santa Clara) would result in a significant unavoidable cumulative impact.

The proposed project, by itself, would not have a considerable contribution towards solid waste. (Less than Cumulatively Considerable Contribution to a Significant Cumulative Impact)

¹¹⁶ City of Santa Clara. *City Place Santa Clara Project Draft Environmental Impact Report*. SCH# 2014072078. Certified June 2016. Pages 3.14-38 and 3.14-39.

3.20 WILDFIRE

3.20.1 <u>Environmental Setting</u>

3.20.1.1 *Existing Conditions*

The California Department of Forestry and Fire Protection (Cal Fire) is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. Referred to as Fire Hazard Severity Zones (FHSZ), these maps influence how people construct buildings and protect property to reduce risk associated with wildland fires. The project site is not located in a FHSZ.¹¹⁷

3.20.2 Impact Discussion

For the purpose of determining the significance of the project's impact on wildfire, if located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

- 1) Substantially impair an adopted emergency response plan or emergency evacuation plan?
- 2) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
- 3) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
- 4) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

3.20.2.1 *Project Impacts*

The project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; therefore, the project would not result in wildfire impacts. (No Impact)

3.20.2.2 *Consistency with Plans*

The project would not be located in a wildfire hazard severity zone established by CalFire. Therefore, the project would not conflict with any plans or policies related to wildfires.

¹¹⁷ California Board of Forestry and Fire Protection. *Fire Hazard Severity Zones Maps*. Accessed April 8, 2019. <u>http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones</u>.

Impact WF-C: The project would not result in a cumulatively considerable contribution to a significant wildfire impact. (No Cumulative Impact)

The project site is not located within or adjacent to a state responsibility areas or lands classified as very high fire hazard severity zones; therefore, the project has no potential to combine with other projects to result in cumulative wildfire impacts. (No Cumulative Impact)

Impact GRO-1: The project would not foster or stimulate significant economic or population growth in the surrounding environment. (Less than Significant Impact)

The CEQA Guidelines require that an EIR identify the likelihood that a proposed project could "foster" or stimulate "economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment" (Section 15126.2(d)). This section of the EIR is intended to evaluate the impacts of such growth in the surrounding environment.

The project is proposed on an infill site in the City of Santa Clara. The site is developed with an office R&D building and is surrounded by existing infrastructure and both existing and planned development. Development of the project would not require upgrades to the existing water, sanitary sewer, and/or storm drain lines that directly serve the project site. In addition, the project does not include expansion of the existing infrastructure that would facilitate growth in the project area or other areas of the City.

Development of the project site would place a new office R&D complex in the middle of an office/industrial area. The proposed project would be compatible with the surrounding land uses and would not pressure adjacent industrial, office, and commercial properties to redevelop with new or different land uses.

The project would not have a significant growth inducing impact. (Less Than Significant Impact)

SECTION 5.0 SIGNIFICANT AND IRREVERSIBLE ENVIRONMENTAL CHANGES

This section was prepared pursuant to CEQA Guidelines Section 15126.2(c), which requires a discussion of the significant irreversible changes that would result from the implementation of a proposed project. Significant irreversible changes include the use of nonrenewable resources, the commitment of future generations to similar use, irreversible damage resulting from environmental accidents associated with the project, and irretrievable commitments of resources. Applicable environmental changes are described in more detail below.

5.1 USE OF NONRENEWABLE RESOURCES

The proposed project, during construction and operation, would require the use and consumption of nonrenewable resources. Renewable resources, such as lumber and other wood byproducts, could also be used. Unlike renewable resources, nonrenewable resources cannot be regenerated over time. Nonrenewable resources include fossil fuels and metals.

Energy would be consumed during both the construction and operational phases of the project. The construction phase would require the use of nonrenewable construction material, such as concrete, metals, and plastics, and glass. Nonrenewable resources and energy would also be consumed during the manufacturing and transportation of building materials, preparation of the site, and construction of the buildings. The operational phase would consume energy for multiple purposes including, building heating and cooling, lighting, appliances, and electronics. Energy, in the form of fossil fuels, would be used to fuel vehicles traveling to and from the project site.

The project would result in a substantial increase in demand for nonrenewable resources. The project would, however, be subject to the standard California Code of Regulations Title 24 Part 6 and CALGreen energy efficiency requirements.

As discussed in *Section 3.5, Energy*, the project is consistent with the City's General Plan policies regarding energy use, which fosters development that reduces the use of nonrenewable energy resources in transportation, buildings, and urban services (utilities).

SECTION 6.0 SIGNIFICANT UNAVOIDABLE IMPACTS

A significant unavoidable impact is an impact that cannot be mitigated to a less than significant level if the project is implemented as it is proposed. The following significant unavoidable impacts have been identified as resulting from the proposed project:

• **Transportation:** The proposed project would result in a significant unavoidable impact to the Bowers Avenue and Augustine Drive, San Tomas Expressway and Scott Boulevard, San Tomas Expressway and Monroe Street, and Oakmead Parkway/Corvin Drive and Central Expressway intersections under background plus project conditions.

The proposed project would result in a significant unavoidable impact to 11 freeway segments under existing plus project conditions.

- **Cumulative Transportation:** The proposed project would result in a significant unavoidable cumulative impact to the Bowers Avenue and Augustine Drive, San Tomas Expressway and Scott Boulevard, and Oakmead Parkway/Corvin Drive and Central Expressway intersections.
- All other significant impacts of the proposed project would be reduced to a less than significant level with the implementation of mitigation measures identified in this EIR.

7.1 OVERVIEW

CEQA requires that an EIR identify and evaluate alternatives to a project as it is proposed. Two key provisions from the CEQA Guidelines pertaining to the discussion of alternatives are included below:

Section 15126.6(a). Consideration and Discussion of Alternatives to the Proposed Project. An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

Section 15126.6(b). Purpose. Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or be more costly.

Other elements of the Guidelines discuss that alternatives should include enough information to allow a meaningful evaluation and comparison with the proposed project. The CEQA Guidelines state that if an alternative would cause one or more additional impacts, compared to the proposed project, the discussion should identify the additional impact, but in less detail than the significant effects of the proposed project.

The three critical factors to consider in selecting and evaluating alternatives are: (1) the significant impacts from the proposed project that could be reduced or avoided by an alternative, (2) consistency with the project's objectives, and (3) the feasibility of the alternatives available. Each of these factors is discussed below.

7.2 OBJECTIVES OF THE PROJECT

While CEQA does not require that alternatives be capable of meeting all project objectives, their ability to meet most of the objectives is considered relevant to their consideration. The stated objectives of the project proponent are to:

- 1. Construct a high-quality project with enough office floor area to produce a return on investment sufficient to attract private capital and construction financing.
- 2. Improve the architectural and urban design character of the project site by replacing existing

structures and surface parking with a high-quality office campus meeting LEED Gold equivalency.

- 3. Construct two office/R&D buildings totaling up to 676,310 square feet.
- 4. Construct a new parking garage along the northern property line to accommodate up to 1,910 cars with an attached amenity building totaling up to 13,370 square feet.
- 5. Provide increased landscape and open space of up to 120,000 square feet at the central core of the site.
- 6. Improve the surrounding streets with added landscaping and preservation of existing heritage trees.
- 7. Encourage multimodal transit opportunities by accommodating private on-site shuttle stops, secure bike storage and shower facilities, and expanded bicycle pathways.

The City's objectives for development at the site are as follows:

- 1. Promote quality job growth within the City.
- 2. Encourage innovative design of new office space to promote higher-intensity development and on-site expansion of existing uses.
- 3. Support campus development that can take advantage of transit opportunities by concentrating jobs near existing transit facilities.
- 4. Support development of higher-intensity employment centers located near local and regional transportation corridors in the City of Santa Clara to facilitate use of transit services and reduce vehicle miles traveled.

7.3 SIGNIFICANT IMPACTS FROM THE PROJECT

The significant unavoidable impacts identified in this EIR resulting from the proposed project include:

• **Transportation:** The proposed project would result in a significant unavoidable impact at the Great America Parkway and Great America Way, Bowers Avenue and Augustine Drive, San Tomas Expressway and Scott Boulevard, and Oakmead Parkway/Corvin Drive and Central Expressway intersections under background plus project conditions.

The proposed project would result in a significant unavoidable impact to 11 freeway segments (see Section 3.17.2).

• **Cumulative Transportation:** The proposed project would result in a significant unavoidable cumulative impact to the Great America Parkway and Great America Way, Bowers Avenue

and Augustine Drive, Bowers Avenue and Scott Boulevard, San Tomas Expressway and Scott Boulevard, and Oakmead Parkway/Corvin Drive and Central Expressway intersections.

Alternatives may also be considered if they would further reduce impacts that are already less than significant because of identified mitigation. The project would result in potentially significant impacts in the following areas, but mitigation measures have been identified that would reduce the impacts to less than significant levels:

- **Biological Resources:** Construction activities associated with the proposed project could result in the loss of fertile eggs, nesting raptors or other migratory birds, or nest abandonment.
- **Cultural Resources:** Subsurface cultural resources could be uncovered during demolition/construction of the proposed project.
- **Geology and Soils:** Implementation of the proposed project could increase erosion and sedimentation until construction of the project is complete.
- **Transportation:** Implementation of the project would result in a significant impact to level of service operations at the Lakeside Drive and Augustine Drive, Great America Parkway and Old Mountain View Alviso Road, and Bowers Avenue and Scott Boulevard intersections under background plus project conditions.

There is no rule requiring an EIR to explore off-site project alternatives in every case. As stated in the Guidelines: "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." (Guidelines, § 15126.6, subd. (a), italics added.) As this implies, "an agency may evaluate on-site alternatives, off-site alternatives, or both." (*Mira Mar, supra*, 119 Cal.App.4th at p. 491.) The Guidelines thus do not require analysis of off-site alternatives in every case. Nor does any statutory provision in CEQA "expressly require a discussion of alternative project locations." (119 Cal.App.4th at p. 491 citing §§ 21001, subd. (g), 21002.1, subd. (a), 21061.)

In considering an alternative location in an EIR, the CEQA Guidelines advise that the key question is "whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location".¹¹⁸ The proposed project is an office development within the City of Santa Clara. Any alternative location within the general project area would not substantially lessen the transportation impacts because employees would be traveling from the same residential locations and the traffic trips would generally use the same roadways and freeway segments. In addition, the City has already evaluated the uses of the project site in the adopted General Plan FEIR and concluded that this site was suitable for low intensity office/R&D development. There is only one site in the southern half of the City that is designated *Low Intensity Office/R&D*. This site is located at the southwestern portion of the City and is surrounded by residences and open space. This

¹¹⁸ CEQA Guidelines Section 15126.6(f)(2)(A)

site is not in proximity to the various transit options available to the project site and is adjacent to sensitive receptors. It is not likely that an alternative location within Santa Clara would substantially lessen the identified impacts.

7.4 **PROJECT ALTERNATIVES**

7.4.1 <u>No Project Alternative</u>

The CEQA Guidelines [Section 15126(d)4] require an EIR specifically include a "No Project" alternative. The purpose of including a No Project alternative is to allow decision-makers to compare the impacts of approving the project with the impacts of not approving the project. The Guidelines specifically advise that the No Project alternative is "what would be reasonably expected to occur in the foreseeable future if the project is not approved, based on current plans and consistent with available infrastructure and community services." [Section 15126.6(e)(2)] The Guidelines emphasize that an EIR should take a practical approach, and not "…create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment [Section 15126.6(e)(3)(B)]."

The No Project – No Development Alternative would retain the existing two-story office building and surface parking lot. The existing development is consistent with the General Plan designation. If the site were to remain as is, there would be no new impacts. None of the project objectives would be met under the No Project Alternative.

7.4.2 <u>Reduced Scale Alternative</u>

In an effort to avoid one or more of the significant transportation impacts that would result from the proposed project but still provide new office space on-site, this alternative evaluates a reduced amount of development.

To avoid the 11 identified significant and unavoidable freeway segment impacts, the proposed development's office space would need to be reduced to 365,000 square feet. The proposed office space would need to be reduced to 240,000 square feet to avoid the eight identified project-level intersection impacts under existing and background plus project conditions, and to 230,000 square feet to avoid the cumulative impacts to the seven identified intersections.¹¹⁹ A 230,000 square foot office development would, therefore, avoid all of the identified traffic impacts.

This alternative, however, would not avoid the significant biological resources, cultural resources, geology and soils, hazards and hazardous materials, or tribal cultural resources impacts. The alternative would meet most of the project objectives; however, the project applicant's objective number three would not be met.

¹¹⁹ Personal Communication. Del Rio, Gicela, Hexagon. Re: 3625 Peterson Office TIA. November 19, 2018.

7.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The CEQA Guidelines state than an EIR shall identify an environmentally superior alternative. If the environmentally superior alternative is the "No Project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (Section 15126.6(e)(2)). The environmentally superior alternative would be the No Project - No Development Alternative, which would avoid all project impacts; however, this alternative would not meet any project objectives.

The Reduced Scale Alternative would avoid project-level and cumulative traffic impacts. This alternative would meet all but one of the project objectives. Therefore, the Reduced Density Alternative would be the environmentally superior alternative to the proposed project.

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SECTION 9.0 LEAD AGENCY AND CONSULTANTS

9.1 LEAD AGENCY

City of Santa Clara

Community Development Department Andrew Crabtree, Director of Community Development Debby Fernandez, Project Planner

9.2 CONSULTANTS

David J. Powers & Associates, Inc.

Environmental Consultants and Planners

Shannon George, *Principal Project Manager* Amber Sharpe, *Project Manager* Fiona Phung, *Associate Project Manager* Zach Dill, *Graphic Artist*

Haley & Aldrich Walnut Creek, CA Phase I Environmental Site Assessment

Hexagon Transportation Consultants Gilroy, CA Transportation

Illingworth & Rodkin

Petaluma, CA Air Quality and Greenhouse Gas

McClenahan Consulting

Portola Valley, CA Arboriculturists

Woodard & Curran

Sanitary Sewer