

4. Environmental Analysis

4.1 DISCUSSION OF ENVIRONMENTAL EVALUATION

The General Plan EIR included an analysis of the project site as potential Housing Element Site 8 (Bateh Bros.), although the adopted General Plan did not designate this site as a Priority Housing Element Site. The evaluation in the General Plan EIR assumed potential redevelopment of the existing commercial development to commercial and residential uses with 35 dwelling units per acre, or 19 net residential units, with a maximum of 30 feet in height.⁵¹ The cumulative impacts of past, present, and probable future development, in conjunction with overall General Plan buildout, including residential development of the project site, were evaluated in the General Plan EIR. The proposed project is anticipated to be completed in 2022 (subject to regulatory approval); thus, this Initial Study presents an analysis of the near-term impacts of the proposed project under existing conditions and 2025 cumulative conditions. Although the project site was evaluated as Housing Element Site 8 in the General Plan EIR, the adopted General Plan does not designate this site as a Priority Housing Element Site in the Housing Element.⁵²

Consistent with the analysis presented in the General Plan EIR, and due to the urbanized city setting of the project site, the proposed project would not have a significant effect on agriculture, forestry, or mineral resources. Maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency categorize land within Cupertino as Urban and Built-Up Land.⁵³ In addition, according to the 2006 mapping data from the California Department of Forestry and Fire Protection, the city does not contain any woodland or forestland cover.⁵⁴ Finally, the city does not contain land zoned for farmland or timberland production.⁵⁵ Consequently, there would be no impacts with regard to agriculture and forestry resources. The project site is not within an area designated as Mineral Resource Zone, which is an area containing mineral deposits.⁵⁶ Consequently, because the site has been developed and is not considered suitable for protection or conservation, there would be no impacts to mineral resources. For these reasons, these topics are not discussed further in this Initial Study. After the General Plan EIR was certified, the CEQA Guidelines were amended by the Governor's Office of Planning and Research, which is the entity charged with developing guidelines to help agencies implement CEQA, and adequacy of parking

⁵¹ PlaceWorks. 2015. City of Cupertino General Plan EIR, Chapter 3, Project Description, page 3-86.

⁵² City of Cupertino. 2015. City of Cupertino General Plan, Housing Element. Page H-16.

⁵³ California Resources Agency, Farmland Mapping and Monitoring Program. Santa Clara County Important Farmland 2010, accessed on June 17, 2020.

⁵⁴ California Department of Forestry and Fire Protection Fire and Resource Assessment Program, Land Cover Map, accessed on June 17, 2020.

⁵⁵ City of Cupertino, Zoning Map, <http://www.cupertino.org/index.aspx?page=291>, accessed on June 17, 2020.

⁵⁶ City of Cupertino, General Plan Community Vision 2015–2040, Chapter 6, Environmental Resources and Sustainability, Figure ES-2, Mineral Resources.

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is no longer considered to be a significant environmental impact. Accordingly, parking adequacy is not discussed further in this Initial Study.

I. AESTHETICS

Except as provided in Public Resources Code Section 21099 (transit priority area/major transit stop), would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

GENERAL PLAN EIR

Chapter 4.1, Aesthetics, of the General Plan EIR, addressed the impacts to visual resources associated with buildout of the General Plan including the redevelopment of the project site with up to 19 dwelling units and a 30-foot height maximum at a program level. The impacts were found to be less than significant, and no mitigation measures were required.

EXISTING CONDITIONS

The project site is partially developed with an aging one-story convenience store and associated parking. However, the majority of the project site is unimproved and partially unpaved. The project site is immediately surrounded by Stevens Creek Boulevard and existing residential cluster development and one-story commercial developments to the north and east, and single-family residential development to the south and west. There is no existing landscaping on the project site.

DISCUSSION

a) *Would the proposed project have a substantial adverse effect on a scenic vista?*

As discussed in Chapter 4.1, Aesthetics, of the General Plan EIR, the proposed project would have the potential to affect scenic vistas and/or scenic corridors if the redevelopment on the project site blocked views of areas that provide or contribute to such vistas. Potential effects could include blocking views of a scenic vista/corridor from specific publicly accessible vantage points or the alteration of the scenic vista/corridor. Such alterations could be positive or negative.

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Public views of scenic corridors are views seen along a linear transportation route and public views of scenic vistas are views of specific scenic features. Scenic vistas are considered to be long-range views, while scenic corridors are comprised of short-, middle-, and long-range views. The General Plan does not have designated scenic corridors or vistas. However, for the purposes of this analysis, the westward views of the foothills and ridgelines of the Santa Cruz Mountains are considered scenic vistas, and the segment of I-280 from Santa Clara County line on the west to I-880 on the east also is considered a scenic corridor.

The analysis in the General Plan EIR found that building heights remaining at 30 feet would result in a less-than-significant impact to the long-range views of the Santa Cruz Mountain Range and foothills because the maximum heights of the existing on-site and surrounding buildings and mature trees currently limit the opportunity for views of scenic vistas from street-level public viewing. The project location is not considered a destination public viewing point nor is it visible from scenic vistas.

As described in Chapter 3, Project Description, of this Initial Study, the existing commercial building would be removed and replaced by the proposed nine-unit, single-family attached residential project with one ADU, and all structures would be three stories tall and 29 feet and 10.5 inches at the roofline. There are no existing trees on-site.

Because the proposed project would not involve height increases above the surrounding development and are the same as what was evaluated in then General Plan EIR and permitted in the General Plan, and because existing conditions currently limit views of scenic resources combined with the fact that the site and surrounding areas are not public viewing locations, impacts would remain consistent with the conclusions in the General Plan EIR and would be *less than significant*.

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

As discussed in Chapter 4.1, Aesthetics, of the General Plan EIR, the segment of I-280 in Cupertino is not an officially designated State Scenic Highway but is considered eligible for listing as a designated State Scenic Highway. The project site is approximately 0.8 miles to the south of the I-280/North Foothill Boulevard interchange, which is the arterial that connects the project site to I-280. The project site is not visible from I-280. Therefore, there would be no changes to the I-280 viewshed.

Impacts to views of scenic resources from the I-280 view corridor were determined to be less than significant in the General Plan EIR. Because the project proposes building heights that are consistent with what was evaluated in the General Plan EIR and the surrounding development, and are permitted in the General Plan, and because the site is not visible from the I-280 viewshed, project impacts would remain consistent with the conclusions in the General Plan EIR and would be *less than significant*.

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c) *If the proposed project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

The project site is in an urbanized area that is not designated or otherwise identified as a public viewing location for surrounding scenic views. Public views of scenic resources including the westward views of the foothills and ridgelines of the Santa Cruz Mountains, and the segment of I-280 from the Santa Clara County line on the west to I-880 on the east, are partially obstructed under existing conditions due to the natural topography and the existing buildings in the project area.

The proposed project would result in a change from the existing one-story commercial building to multiple three-story residential buildings, none of which would exceed the permitted height limit of 30 feet.

The project site is within the Commercial/Residential General Plan land use designation, which allows residential densities compatible with the surroundings.⁵⁷ The proposed project includes a zoning amendment to change the existing Planned Development with General Commercial (P(CG)), to Planned Development with General Commercial and Residential (P(CG,Res)). The proposed amendment to the Zoning Map would allow residential development on the site which would not conflict with any land use or zoning regulations governing scenic quality.

The proposed development would be required to provide suitable setbacks from public rights-of-way and appropriate buffers and/or height transitions for buildings adjacent to the surrounding low-density residential developments. Furthermore, the proposed project would increase the landscaping to include 10,608 square feet of landscaping. Project landscaping would consist of landscaping throughout the interior, along the perimeter of the project site, and in the common open space areas. For neighborhood privacy, required privacy plantings would be located along the property edge. Trees and other landscaping would be planted along Camino Vista Drive, Stevens Creek Boulevard, and South Foothill Boulevard, as well as along the internal project roadway network.

Furthermore, the proposed project would be subject to the City's discretionary review processes for the proposed Development Permit and Architectural and Site Approval Permit, in accordance with Chapters 19.12 and 19.168 of the Zoning Ordinance, which would ensure the proposed project would harmonize with adjacent development and not degrade the existing visual quality of the site and surrounding land uses. Accordingly, consistent with the conclusions of the General Plan EIR, the proposed project would not substantially degrade the existing visual character of the site and its surroundings, or conflict with an applicable zoning and other regulations governing scenic quality and impacts would remain consistent with the conclusions in the General Plan EIR and would be *less than significant*.

⁵⁷ City of Cupertino. 2015. City of Cupertino General Plan, Appendix A, Land Use Definitions.

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d) *Would the proposed project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?*

Nighttime illumination and glare impacts are the effects on adjoining uses and areas from a project’s exterior lighting. Light and glare impacts are determined through a comparison of the existing light sources with the proposed lighting plan or policies. As discussed in Chapter 4.1, Aesthetics, of the General Plan EIR, the project site and surrounding areas contain existing sources of nighttime illumination. These include street and parking area lights, and exterior lighting on existing commercial buildings. Additional light and glare in the overall area is caused by adjacent land uses and traffic on surrounding roadways. As described in Chapter 3, Project Description, of this Initial Study, the proposed project would redevelop the project site and replace the existing sources of light and glare with new sources that are consistent with the surrounding land uses. As shown in Figure 3-11, the source, intensity, and type of exterior street lighting for the project site would generally be provided for the purpose of orienting residents and their visitors and for safety needs along the streets and sidewalks and would be typical for single-family homes. All permanent on-site lighting would be low-level illumination, downward directed, and shielded to reduce light spill or glare into surrounding residential homes. In landscaped areas, light sources would be concealed and not visible from a public viewpoint. All exterior surface and above-ground mounted fixtures would be complementary to the architectural theme and to the surrounding residential uses.

The proposed project would not include reflective glass. Where glass features such as windows and doors are proposed, glazing treatments would vary, and none of the exterior glass would have a light reflectance value of more than 15 percent.⁵⁸ The exterior of the proposed buildings, including balcony railing elements, could have a combination of UV coatings, frosting, and fritting, which reduces glare and makes the glass visible to birds to reduce collisions. For these reasons, impacts would remain consistent with the conclusions in the General Plan EIR and would be *less than significant*.

II. AIR QUALITY

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project area is in non-attainment under applicable federal or State ambient air quality standards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

⁵⁸A light reflectance value or LRV is a measure of visible and usable light that is reflected from a surface when illuminated by a light source. LRV is expressed as a percentage from 0 to 100; the higher the number the more visible light that is reflected.

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Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

GENERAL PLAN EIR

Chapter 4.2, Air Quality, of the General Plan EIR, addressed the air quality impacts associated with buildout of the General Plan including the redevelopment of the project site with up to 19 dwelling units and a 30-foot height maximum at a program level. Air quality impacts were found to be significant and unavoidable in the General Plan EIR because project-specific details of future development were not available. The City adopted and incorporated mitigation measures into the General Plan to reduce air quality impacts. Mitigation Measures AQ-2a and AQ-2b are specific measures that are to be implemented by future projects, such as the proposed project, to reduce construction-related air quality impacts. Mitigation Measure AQ-2a require applicants for future development projects to comply with the current Bay Area Air Quality Management District (BAAQMD) basic control measures for reducing fugitive dust emissions (PM₁₀ and PM_{2.5}) during construction, and Mitigation Measure AQ-2b provides additional measures if there are significant construction exhaust emissions.

EXISTING CONDITIONS

The environmental setting normally constitutes the baseline physical conditions by which a lead agency determines whether an impact is significant (CEQA Guidelines Section 15125(a)). However, lead agencies have discretion to consider conditions over a range of time periods to account for a temporary lull or spike in operations. Because commercial uses, such as the existing convenience store on the project site, experience periodic transitions in tenants and occupancy, this analysis assumes the commercial building on site is fully occupied and operational (i.e., historic operations) as the baseline.

The project site is currently developed with one commercial building, which is estimated to generate approximately 1,829 gross average daily trips on a weekday.⁵⁹ Commercial uses like the existing convenience store generate criteria air pollutants from transportation sources, energy (natural gas and purchased energy), and area sources such as architectural coatings.

Air Pollutants of Concern

Criteria Air Pollutants

Pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and State law under the federal Clean Air Act (National) and California Clean Air Act, respectively. Air

⁵⁹ Hexagon Transportation Consultants. January 2020. Trip Generation Study for a Residential Project on Stevens Creek Boulevard in Cupertino, CA.

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pollutants are categorized as primary and/or secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxides (NO_x), sulfur dioxide (SO₂), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), and lead (Pb) are primary air pollutants. Of these, all of them except for ROGs are “criteria air pollutants,” which means that ambient air quality standards (AAQS) have been established for them. The National and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect those “sensitive receptors” most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Toxic Air Contaminants

In addition to criteria air pollutants, both the State and federal government regulate the release of TACs. The California Health and Safety Code Section 39655 defines a TAC as “an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health.” A substance that is listed as a hazardous air pollutant pursuant to Section 112(b) of the federal Clean Air Act (42 United States Code Section 7412[b]) is a toxic air contaminant. Under State law, the California Environmental Protection Agency, acting through the California Air Resources Board (CARB), is authorized to identify a substance as a TAC if it determines that the substance is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or may pose a present or potential hazard to human health.

DISCUSSION

The Air Quality section of this Initial Study addresses the impacts of the proposed project on ambient air quality and the exposure of people, especially sensitive individuals, to unhealthy pollutant concentrations. A background discussion on the air quality regulatory setting, meteorological conditions, existing ambient air quality in the vicinity of the project site, and air quality modeling can be found in Appendix A, Air Quality and Greenhouse Gas Emissions Data, of this Initial Study. The construction health risk assessment (HRA) is included in Appendix B, Health Risk Assessment, of this Initial Study.

The primary air pollutants of concern for which ambient air quality standards (AAQS) have been established are ozone (O₃), carbon monoxide (CO), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), and lead (Pb). Areas are classified under the federal Clean Air Act and California Clean Air Act as either in attainment or nonattainment for each criteria pollutant based on whether the AAQS have been achieved. The San Francisco Bay Area Air Basin (SFBAAB), which is managed by the Bay Area Air Quality Management District (BAAQMD or Air District), is nonattainment area for California and National O₃, California and National PM_{2.5}, and California PM₁₀ AAQS.

BAAQMD has identified thresholds of significance for criteria pollutant emissions and criteria air pollutant precursors, including ROG, NO_x, PM₁₀, and PM_{2.5}. Development projects below the regional significance

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thresholds are not expected to generate sufficient criteria pollutant emissions to violate any air quality standard, contribute substantially to an existing or projected air quality violation, or substantially contribute to health impacts. Where available, the significance criteria established by BAAQMD may be relied upon to make the following determinations.

For the purpose of this analysis, operational emissions for the proposed project were not quantified. While the proposed project would generate criteria air pollutant emissions from transportation sources, energy use, and area sources, because the residential use would result in 85 gross daily trips, a substantial decrease from the 1,829 gross average daily trips from existing uses. Furthermore, BAAQMD has also identified screening criteria for project operation and the project would fall substantially below the screening criteria (e.g., 9 units compared to 451 condominium units). Impacts as a result of the proposed project's operation will be discussed qualitatively.

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

The BAAQMD is directly responsible for reducing emissions from area, stationary, and mobile sources in the SFBAAB to achieve National and California AAQS. In April 2017, BAAQMD adopted its 2017 Clean Air Plan, which is a regional and multiagency effort to reduce air pollution in the SFBAAB. Regional growth projections are used by BAAQMD to forecast future emission levels in the SFBAAB. For the Bay Area, these regional growth projections are provided by the Association of Bay Area Governments (ABAG) and transportation projections are provided by the Metropolitan Transportation Commission (MTC) and are partially based on land use designations in city/county general plans. Typically, only large, regionally significant projects have the potential to affect the regional growth projections.

The proposed project would include the construction of nine residential units with one ADU resulting in a density of 13.2 dwelling units per acre and, therefore, would not exceed the 15 dwelling units per acre limit designated in the General Plan or the 35 dwelling units per acre limit maximum that was evaluated in the General Plan EIR. Therefore, the proposed project would not directly result in any additional new population growth or employment growth beyond what was analyzed in the General Plan EIR. The proposed project is not considered a regionally significant project under CEQA Guidelines Section 15206 that would affect regional vehicle miles traveled (VMT) and warrant intergovernmental review by ABAG and MTC.

As discussed in Section XII, Population and Housing, below, the proposed project would not exceed the level of population or housing projected in City or regional planning efforts (*Plan Bay Area*) through 2040, and it would not have the potential to substantially affect housing, employment, and population projections within the region, which is the basis of the 2017 Clean Air Plan projections. Furthermore, the proposed project would create a net decrease in emissions on-site and would not exceed the BAAQMD's emissions thresholds (see Operational Impacts discussion in criterion (b) below). The BAAQMD emissions thresholds were established to identify projects that have the potential to generate a substantial amount of criteria air pollutants. Because the proposed project would result in an air quality benefit, the proposed project would not be considered by the BAAQMD to be a substantial emitter of criteria air pollutants. Therefore, the proposed project would not conflict with or obstruct implementation of the 2017 Clean Air Plan and impacts would be considered *less than significant*.

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- b) *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project area is in non-attainment under applicable federal or State ambient air quality standards?*

This section analyzes potential impacts related to air quality that could occur from a combination of the proposed project with other past, present, and reasonably foreseeable projects within the SFBAAB. The SFBAAB is currently designated a nonattainment area for California and National O₃, California and National PM_{2.5}, and California PM₁₀ AAQS. Any project that produces a significant project-level regional air quality impact in an area that is in nonattainment adds to the cumulative impact. Due to the extent of the area potentially impacted by cumulative plus project emissions (the SFBAAB), a project's contribution to a cumulative impact is cumulatively considerable when project-related emissions exceed the BAAQMD emissions thresholds.

BAAQMD has identified thresholds of significance for criteria pollutant emissions and criteria air pollutant precursors, including ROG, NO_x, PM₁₀, and PM_{2.5}. Development projects below the significance thresholds would not generate sufficient criteria pollutant emissions to violate any air quality standard or contribute substantially to an existing or projected air quality violation. The following describes project-related impacts from regional short-term construction activities and regional long-term operation of the proposed project.

Regional Short-Term Construction Impacts

Construction activities produce combustion emissions from various sources, such as on-site heavy-duty construction vehicles, vehicles hauling materials to and from the site, and motor vehicles transporting the construction crew. Site preparation activities produce fugitive dust emissions (PM₁₀ and PM_{2.5}) from demolition and soil-disturbing activities, such as grading and excavation. Air pollutant emissions from construction activities on site would vary daily as construction activity levels change. Construction activities associated with the project would result in emissions of ROG, NO_x, CO, PM₁₀, and fine PM_{2.5}.

Construction Fugitive Dust

Ground disturbing activities during construction would generate fugitive dust (PM₁₀ and PM_{2.5}). The amount of dust generated during construction would be variable and is dependent on the amount of material being disturbed, the type of material, moisture content, and meteorological conditions. If uncontrolled, PM₁₀ and PM_{2.5} levels downwind of actively disturbed areas could possibly exceed State standards. BAAQMD considers all impacts related to fugitive dust emissions from construction to be *less than significant* with implementation of BAAQMD's best management practices shown in Mitigation Measure AQ-1, which is required pursuant to General Plan EIR Mitigation Measure AQ-2a.

Impact AQ-1: Fugitive dust (PM₁₀ and PM_{2.5}) generated by the proposed project during construction could potentially result in significant regional short-term air quality impacts without implementation of the Bay Area Air Quality Management District's best management practices related to reducing fugitive dust emissions.

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Mitigation Measure AQ-1: The project's construction contractor shall comply with the following best management practices for reducing construction emissions of fugitive dust (PM₁₀ and PM_{2.5}) as required by the Bay Area Air Quality Management District Revised California Environmental Quality Act Air Quality Guidelines:

- Water all active construction areas at least twice daily, or as often as needed to control dust emissions. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible.
- Pave, apply water twice daily or as often as necessary to control dust, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
- Sweep daily (with water sweepers using reclaimed water if possible) or as often as needed all paved access roads, parking areas and staging areas at the construction site to control dust.
- Sweep public streets daily (with water sweepers using reclaimed water if possible) in the vicinity of the project site, or as often as needed, to keep streets free of visible soil material.
- Hydroseed or apply non-toxic soil stabilizers to inactive construction areas.
- Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt/sand).
- Limit vehicle traffic speeds on unpaved roads to 15 miles per hour.
- Vegetative ground cover shall be planted in disturbed areas as soon as possible and watered appropriately until the vegetation is established.
- Install sandbags or other erosion control measures to prevent silt runoff from public roadways.
- All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.

Construction Exhaust Emissions

Analysis of construction emissions is based on the preliminary construction duration and normalized California Emissions Estimator Model (CalEEMod) default schedule developed for the proposed project. The proposed project would result in demolition, demolition debris hauling, site preparation, grading and grading soil haul, building construction, paving, and architectural coating that would occur near existing sensitive land uses. Construction emissions were quantified using the CalEEMod Version 2016.3.2.25 based on information provided by the project applicant, which was reviewed and approved by PlaceWorks and the City. The approximately 10-month construction period is assumed to begin in January 2022 and end in November 2022, subject to regulatory approval.

Potential construction-related air quality impacts are determined by comparing the average daily criteria air pollutants emissions generated by the proposed project-related construction activities to the BAAQMD significance thresholds in Table 4-1. Average daily emissions are based on the annual construction emissions divided by the total number of active construction days.

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TABLE 4-1 CONSTRUCTION-RELATED CRITERIA AIR POLLUTANT EMISSIONS ESTIMATES

Year	Criteria Air Pollutants (tons/year) ^a					
	ROG	NO _x	Fugitive PM ₁₀ ^b	Exhaust PM ₁₀ ^b	Fugitive PM _{2.5} ^b	Exhaust PM _{2.5} ^b
2022	0.81	0.91	0.02	0.05	0.01	0.04
Criteria Air Pollutants (average lbs/day) ^a						
Average Daily Emissions ^c	2.34	17.30	0.22	0.42	0.07	0.40
BAAQMD Average Daily Project-Level Threshold	54	54	BMPs	82	BMPs	54
Exceeds Average Daily Threshold	No	No	NA	No	NA	No

Notes: Emissions may not total to 100 percent due to rounding. BMP = Best Management Practices; N/A = not applicable; Reactive Organic Gases = ROG; Nitrogen Oxides = NO_x; Coarse Inhalable Particulate Matter = PM₁₀; Fine Inhalable Particulate Matter = PM_{2.5}

- a. Construction phasing and equipment mix are based on the preliminary information provided by the project applicant. Where specific information regarding project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by South Coast Air Quality Management District of construction equipment and phasing for comparable projects.
- b. Includes implementation of BMPs for fugitive dust control required by BAAQMD as mitigation, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, and street sweeping.
- c. Average daily emissions are based on the total construction emissions divided by the total number of active construction days. The total number of construction days is estimated to be about 218.

Source: California Emissions Estimator Model (CalEEMod), Version 2016.3.2.25

As shown above in Table 4-1, criteria air pollutant emissions from construction equipment exhaust would not exceed the BAAQMD average daily thresholds and impacts from project-related construction activities to the regional air quality would be *less than significant* and implementation of General Plan EIR Mitigation Measure AQ-2b is not required.

Operational Impacts

Typical long-term air pollutant emissions are generated by area sources (e.g., landscape fuel use, aerosols, architectural coatings, and asphalt pavement), energy use (natural gas), and mobile sources (i.e., on-road vehicles). The proposed project would result in new housing and new paved and landscaped surfaces.

As described in Section XV, Transportation, of this Initial Study, below, the proposed project would generate a net total of 85 average daily weekday trips, which would be a decrease of 1,744 average daily weekday trips from the existing land uses at the site. The proposed project would produce an approximate daily VMT of 538, which would be a daily decrease in VMT of 3,262 miles from the existing land uses at the site.⁶⁰ Because transportation emissions would generate the majority of criteria air pollutants associated with the project, this reduction in average daily weekday trips and associated daily VMT would result in a project benefit in reducing criteria air pollutant emissions in the city. In addition, the new buildings would be more energy efficient than the existing structures and would be built to achieve the latest Title 24 Building and Energy Efficiency Standards. Therefore, the proposed project would not exceed the BAAQMD daily pounds per day or annual tons per year project level threshold and would not create a cumulatively considerable contribution to the nonattainment designations of the SFBAAB. Because criteria

⁶⁰ Hexagon Transportation Consultants. January 2020. Trip Generation Study for a Residential Project on Stevens Creek Boulevard in Cupertino, CA.

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air pollutant emissions associated with the proposed project are anticipated to decrease from existing conditions, resulting in a project benefit to air quality, project-related operation activities to the regional air quality would be *less than significant*.

Summary

As described, the proposed project would not have a significant long-term operational phase impact. However, without incorporation of fugitive dust control measures required by BAAQMD, construction activities associated with the proposed project could potentially result in significant regional short-term air quality impacts. Mitigation Measure AQ-1, required by the General Plan Mitigation Measure AQ-2a, would ensure that required fugitive dust control measures are implemented to control project-related fugitive dust generated during construction activities. Therefore, the proposed project's contribution to cumulative air quality impacts would be *less than significant with mitigation*.

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

Development of the proposed project could expose sensitive receptors to elevated pollutant concentrations. Unlike the construction emissions shown in Table 4-1 in criterion (b), described in pounds per day (PPD), localized concentrations refer to an amount of pollutant in a volume of air (parts per millions [ppm] or micrograms per cubic meter [$\mu\text{g}/\text{m}^3$]) and can be correlated to potential health effects.

Construction Off-Site Community Risk and Hazards

The proposed project would elevate concentrations of TACs and $\text{PM}_{2.5}$ in the vicinity of sensitive land uses during construction activities. The BAAQMD has developed *Screening Tables for Air Toxics Evaluation During Construction* (2017) to evaluate construction-related health risks associated with residential, commercial, and industrial projects. According to the screening tables, the surrounding residences are closer than the distance of 100 meters (328 feet) that would screen out potential health risks and, therefore, could be potentially impacted from the proposed construction activities. The nearest sensitive receptors to the project site are the residents along South Foothill Boulevard to the south and east, along Camino Vista Drive to the west, and along Stevens Creek Boulevard to the north. Additional sensitive receptors within 1,000 feet of the site are senior living residents at Sunny View Bay Area Retirement Community, approximately 525 feet to the northeast. Consequently, a site-specific construction health risk assessment (HRA) of TACs and $\text{PM}_{2.5}$ was prepared (see Appendix B of this Initial Study).

A quantified analysis of the proposed project construction emissions was conducted using the CalEEMod, Version 2016.3.2.25. Construction emissions were based on 218 working days of the total 10-month construction duration. The United States Environmental Protection Agency (USEPA) AERMOD, Version 9.9, dispersion modeling program was used to estimate excess lifetime cancer risk, chronic non-cancer hazard index for non-carcinogenic risk, and the $\text{PM}_{2.5}$ maximum annual concentrations at the nearest sensitive receptors. The results of the analysis are shown in Table 4-2.

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TABLE 4-2 CONSTRUCTION RISK SUMMARY – UNMITIGATED

Receptor	Cancer Risk (per million)	Chronic Hazards	PM _{2.5} (µg/m ³)
Maximum Exposed Receptor – Off-site Resident	59.4	0.133	0.63
Maximum Exposed Receptor – Senior Living Resident	0.009	0.002	0.001
BAAQMD Threshold	10	1.0	0.30
Exceeds Threshold?	Yes	No	Yes

Note: micrograms per cubic meter = µg/m³; PM_{2.5} – fine particulate matter

Source: Cancer risk calculated using 2015 Office of Environmental Health Hazard Assessment Health Risk Assessment Guidance Manual; Lakes AERMOD View, 9.9.

The results of the HRA are based on the maximum receptor concentration over a 10-month construction exposure duration for off-site receptors.⁶¹ Risk is based on the updated Office of Environmental Health Hazard Assessment (OEHHA) Guidance Manual:⁶²

- Cancer risk for the maximum exposed off-site resident from construction activities related to the proposed project were calculated to be 59.4 in a million and exceeds the 10 in a million-significance threshold. Utilizing the latest 2015 OEHHA Guidance Manual, the calculated total cancer risk conservatively assumes that the risk for the maximum exposed receptor (MER) consists of a pregnant woman in the third trimester that subsequently gives birth to an infant during the approximately 10-month construction period; therefore, all calculated risk values were multiplied by a factor of 10. In addition, it was conservatively assumed that the residents were outdoors 8 hours a day, 260 construction days per year, and were exposed to all of the daily construction emissions.
- The cancer risk for the maximum exposed senior living residential receptor would not exceed the 10 per million significance threshold.
- For non-carcinogenic effects, the chronic hazard index identified for each toxicological endpoint totaled less than one for all the off-site sensitive receptors. Therefore, chronic non-carcinogenic hazards are within acceptable limits.
- For the residential MER, the maximum annual PM_{2.5} concentration of 0.63 exceeds the BAAQMD significance threshold of 0.3 micrograms per cubic meter (µg/m³). Therefore, PM_{2.5} emissions are not within acceptable limits.
- For the maximum exposed senior living residential receptor, the maximum annual PM_{2.5} concentration does not exceed the threshold of 0.3 µg/m³. Therefore, PM_{2.5} emissions are not within acceptable limits.

Because the incremental cancer risk and maximum annual PM_{2.5} concentrations for the maximum exposed receptor would exceed BAAQMD’s significance thresholds due to construction activities associated with the proposed project, impacts are *potentially significant*, and the following mitigation is required.

⁶¹ The 2015 Office of Environmental Health Hazard Assessment Air Toxics Hot Spots Program Guidance Manual identified that exposure duration has changed from 70 years to 30 years for operational risk to residents; however, the risk is still averaged over a 70-year lifetime.

⁶² Office of Environmental Health Hazard Assessment, 2015. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments.

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Impact AQ-2: The proposed project could expose sensitive receptors to substantial pollutant concentrations during construction.

Mitigation Measure AQ-2: During construction, the construction contractor(s) shall:

- Use construction equipment that have engines that meet either United State Environmental Protection Agency (USEPA) or California Air Resources Board (CARB) Tier 4 Interim emission standards for off-road diesel-powered construction equipment with more than 25 horsepower, unless it can be demonstrated to the City of Cupertino Building Division that such equipment is not available. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by Tier 4 Interim emissions standards for a similarly sized engine, as defined by the CARB’s regulations.
- Prior to issuance of any construction permit, ensure that all construction plans submitted to the City of Cupertino Planning Department and/or Building Division clearly show the requirement for Tier 4 Interim emission standards for construction equipment more than 25 horsepower.
- Maintain a list of all operating equipment in use on the project site for verification by the City of Cupertino Building Division official or their designee. The construction equipment list shall state the makes, models, and number of construction equipment on site.
- Ensure that all equipment shall be properly serviced and maintained in accordance with manufacturer recommendations.
- Communicate with all sub-contractors in contracts and construction documents that all nonessential idling of construction equipment is restricted to 5 minutes or less in compliance with CARB Rule 2449 and is responsible for ensuring that this requirement is met.

Mitigation Measure AQ-2, which is not a General Plan EIR Mitigation Measure, would reduce the proposed project localized construction emissions, as shown in Table 4-3. The results indicate that, with mitigation, cancer risks and annual PM_{2.5} concentrations would be less than the BAAQMD’s significance thresholds for residential-based receptors. Therefore, the proposed project would not expose off-site sensitive receptors to substantial concentrations of air pollutant emissions during construction and impacts would be *less than significant with mitigation*.

TABLE 4-3 CONSTRUCTION RISK SUMMARY – MITIGATED

Receptor	Cancer Risk (per million)	Chronic Hazards	PM _{2.5} (µg/m ³)
Maximum Exposed Receptor – Off-site Resident	4.9	0.011	0.05
Maximum Exposed Receptor – Senior Living Resident	<0.001	<0.001	<0.001
BAAQMD Threshold	10	1.0	0.3
Exceeds Threshold?	No	No	No

Notes: micrograms per cubic meter = µg/m³; PM_{2.5} – fine particulate matter; Risks incorporate Mitigation Measure AQ-2, which requires all equipment of 25 horsepower, or more be fitted with engines that meet the EPA’s Tier 4 Interim emissions standards.

Source: Cancer risk calculated using 2015 Office of Environmental Health Hazard Assessment Health Risk Assessment Guidance Manual; Lakes AERMOD View, 9.9.

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Operation Phase Community Risk and Hazards

Types of land uses that typically generate substantial quantities of criteria air pollutants and TACs include industrial (stationary sources), manufacturing, and warehousing (truck idling) land uses. These types of major air pollutant emissions sources are not included as part of the proposed residential project. The proposed project would not include stationary sources that emit TACs and would not generate a significant amount of heavy-duty truck trips (a source of diesel particulate matter [DPM]). Therefore, the proposed project would not expose sensitive receptors to substantial concentrations of air pollutant emissions during operation, and impacts would be *less than significant*.

Carbon Monoxide (CO) Hotspot Analysis

Areas of vehicle congestion have the potential to create pockets of carbon monoxide (CO) called hotspots. These pockets have the potential to exceed the State 1-hour standard of 20 ppm or the 8-hour standard of 9 ppm. The proposed project would not conflict with the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program (CMP) because it would not hinder the capital improvements outlined in the CMP or alter regional travel patterns. VTA's CMP must be consistent with MTC's/ABAG's *Plan Bay Area 2040*. An overarching goal of the regional *Plan Bay Area 2040* is to concentrate development in areas where there are existing services and infrastructure rather than locate new growth in outlying areas where substantial transportation investments would be necessary to achieve the per capita passenger vehicle, VMT, and associated GHG emissions reductions. The proposed project is an infill residential development that is in close proximity to existing employment centers, roadways, transit, and bicycle and pedestrian routes, and for these reasons would be consistent with the overall goals of *Plan Bay Area 2040*.

Furthermore, under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited—in order to generate a significant CO impact. Implementation of the proposed project would not increase traffic volumes at affected intersections by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (see Section XV, Transportation, below).⁶³ Project implementation would generate 143 fewer AM (morning) peak hour trips and 109 fewer PM (evening) peak hour trips.⁶⁴ As a result, the proposed project would result in a reduction in CO concentrations at intersections. Localized air quality impacts related to mobile-source emissions would be a project benefit; and therefore, *no impact* would occur.

⁶³ Bay Area Air Quality Management District (BAAQMD), 2011 Revised. California Environmental Quality Act Air Quality Guidelines.

⁶⁴ Hexagon Transportation Consultants. January 2020. Trip Generation Study for a Residential Project on Stevens Creek Boulevard in Cupertino, CA.

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

Construction and operation of the residential development would not generate odors that would affect a substantial number of people. The type of facilities that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. Residential uses are not associated with foul odors that constitute a public nuisance.

During construction activities, construction equipment exhaust and application of asphalt and architectural coatings would temporarily generate odors. Any construction-related odor emissions would be temporary and intermittent. Additionally, odors would typically be confined to the immediate vicinity of the construction equipment. By the time such emissions reach any sensitive receptor sites, they would be diluted to well below any level of air quality concern.

Odors are also regulated under BAAQMD Regulation 1, Rule 1-301, Public Nuisance, which states that “no person shall discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or the public; or which endangers the comfort, repose, health or safety of any such persons or the public, or which causes, or has a natural tendency to cause, injury or damage to business or property.”

A limited Phase II ESA subsurface investigation evaluated the soil and water conditions on the project site.⁶⁵ As discussed further in Section VIII, Hazards and Hazardous Conditions, the Phase II ESA found no-risk or hazards above the regulatory values but did find the potential for vapor intrusion that could cause a nuisance odor. The Phase II ESA included a recommendation to install a vapor barrier beneath the concrete foundation slab of the proposed building at the site to mitigate any potential odor risks associated with concentration of vapors resulting from soil vapor contamination at neighboring property 22510 Stevens Creek Boulevard (Cupertino Beacon).⁶⁶ Therefore, implementation of Mitigation Measure AQ-3 is required to reduce potential odor impacts to a less-than-significant level.

Impact AQ-3: Development on the project site could expose future residents to potential odors from non-hazardous soil vapor contamination from the neighboring property at 22510 Stevens Creek Boulevard.

Mitigation Measure AQ-3: The project applicant shall install a vapor barrier beneath the concrete foundation slab of the proposed residential buildings at the project site to mitigate potential odor risks associated with concentration of non-hazardous soil vapor contamination. This mitigation measure shall be identified on the permit application drawing set and as part of the construction drawing set, and shall be implemented by the on-site Construction Manager.

⁶⁵ Achievement Engineering, 2019. Phase II Environmental Site Assessment, 22690 Stevens Creek Boulevard, Cupertino, California, page 2, October 17.

⁶⁶ Achievement Engineering, 2019. Phase II Environmental Site Assessment, 22690 Stevens Creek Boulevard, Cupertino, California, page 9, October 17.

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III. BIOLOGICAL RESOURCES

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on a plant or animal population, or essential habitat, defined as a candidate, sensitive or special-status species?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community type?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species, their wildlife corridors or nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local ordinances or policies protecting biological resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or State habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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Chapter 4.3, Biological Resources, of the General Plan EIR, addressed the impacts to biological resources associated with buildout of the General Plan including the redevelopment of the project site with up to 19 dwelling units and a 30-foot height maximum at a program level. Impacts to biological resources were found to be less than significant with implementation of mitigation measures to reduce potential impacts to birds protected under the Migratory Bird Treaty Act (MBTA). Future projects in Cupertino are required to comply with General Plan EIR Mitigation Measure BIO-1, previously adopted and incorporated into the General Plan, to ensure the protection of nesting raptors and other birds when in active use, as required by the federal MBTA and the California Fish and Game Code (CFG Code) if applicable.

EXISTING CONDITIONS

The project site and surrounding area is urbanized and contains roadways, structures, and other impervious surfaces. There are no existing trees on-site. Existing conditions include a commercial building and associated paved surface parking surrounded by an undeveloped and unpaved (dirt and gravel) area adjacent to Stevens Creek Boulevard and South Foothill Boulevard. The surrounding area is built out and primarily dominated by buildings and landscaped and non-native vegetation. Based on a review of historical aerial photographs, the project site has been subject to historic disturbance, including mass grading between the period of 1939 and 1950. These conditions do not lend themselves to presence of

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rare plant and animal populations, and such species are not anticipated to be present prior to or during project construction.

As previously described in Chapter 3, Project Description, the CALVEG⁶⁷ habitat mapping program classifies the site as an “urban area.” Property with this classification tends to have low to poor wildlife habitat value due to replacement of natural communities, fragmentation of remaining open space areas and parks, and intensive human disturbance. According to the Vegetation Map shown in the Environmental Resources and Sustainability Element of the General Plan, the project site is within the urban forest (i.e., trees in the city),⁶⁸ although there are no trees or other landscaping on the project site.

A recent search of the CNDDDB shows that the project site does not contain any known special-status species on-site. However, special-status plant and animal species have been recorded within 5 miles of the project site. All of these special-status species were recorded outside of or near the city limits except for the Western leatherwood (*Dirca occidentalis*), Woodland woollythreads (*Monolopia congdonii*), Cooper’s hawk (*Accipiter cooperi*), White-tailed kite (*Elanus leucurus*), American peregrine falcon (*Falco peregrinus*), California tiger salamander (*Ambystoma californiense*), and the Santa Cruz black salamander (*Aneides flavipunctatus niger*). These special-status species were recorded at least 1 mile away from the site.

The nests of most bird species are protected under the MBTA when in active use. Because there are no existing trees or vacant buildings on-site, there is no habitat for nesting available on-site. There are trees on the adjacent properties that could have nests that could be disturbed during project construction.

Numerous bat species are found in the Cupertino area, most of which are relatively common and are not considered special-status species. As previously stated, the CNDDDB does not show any occurrences of special-status bats in the vicinity of the project site but does show records within several miles of Cupertino. The records include occurrences of Townsend’s big-eared bat (*Corynorhinus townsendii*), hoary bat (*Lasiurus cinereus*), and Yuma myotis (*Myotis yumanensis*). These three species have no legal protected status under the State or federal Endangered Species Acts, but Townsend’s big-eared bat is considered a Species of Special Concern by the California Department of Fish and Wildlife. These species have various priority rankings with the Western Bat Working Group, ranging from “High” for Townsend’s big-eared bat, “Medium” for hoary bat, to “Low-Medium” for Yuma myotis. Bat species found in the Cupertino vicinity may forage and occasionally roost in the site vicinity, but suitable habitat conditions for maternity roosts does not exist on the project site.

Wetlands and jurisdictional waters within the city boundary include creek corridors and associated riparian scrub and woodland, and areas of freshwater marsh around ponds, seeps, springs, and other waterbodies. Some remnant stands of riparian scrub and woodland occur along segments of the numerous creeks through the urbanized valley floor. The project site does not contain these creek corridors or contain other regulated waters; however, the Stevens Creek Corridor is approximately 0.5

⁶⁷ The CALVEG system was initiated in January 1978 by the Region 5 Ecology Group of the US Forest Service to classify California’s existing vegetation communities for use in statewide resource planning. CALVEG maps use a hierarchical classification on the following categories: forest; woodland; chaparral; shrubs; and herbaceous.

⁶⁸ City of Cupertino General Plan (Community Vision 2015-2040), Chapter 6, Environmental Resources and Sustainability Element, Figure ES-1.

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miles to the east of the project site. Existing single-family residential neighborhoods act as a barrier between Stevens Creek and the project site.

There is no existing wildlife movement corridor designation on the project site by any agency, including the United States Fish and Wildlife or the California Department of Fish and Wildlife. Furthermore, there are no open space areas or natural lands adjacent to the project site.

DISCUSSION

a) *Would the project have a substantial adverse effect, either directly or through habitat modifications, on a plant or animal population, or essential habitat, defined as a candidate, sensitive or special-status species?*

As stated above in the existing conditions discussion, there are no known occurrences of special-status plant or animal species and no suitable habitat for such species on the project site nor are there any trees on the project site. The analysis in the General Plan EIR found that impacts to special-status species, including nesting birds, would be reduced to less than significant with mitigation. Accordingly, the implementation of Mitigation Measure BIO-1 which is required by General Plan EIR Mitigation Measure BIO-1, would also be required for the project to reduce impacts to a *less-than-significant* level.

Nesting Birds

While there are no existing trees on the project site, the residential properties immediately adjacent to the project site to the south contain mature trees that have the potential to have nesting birds. Accordingly, implementation of Mitigation Measure BIO-1 which is required by General Plan EIR Mitigation Measure BIO-1, would be required for the project to reduce impacts to a *less-than-significant* level.

Impact BIO-1: Demolition and construction activities could disturb active nests in trees at the residential properties immediately adjacent to the project site to the south, and/or otherwise interfere with nesting of birds protected under federal and State law.

Mitigation Measure BIO-1: Nests of raptors and other birds shall be protected when in active use, as required by the federal Migratory Bird Treaty Act and the California Fish and Game Code. The construction contractor shall indicate the following on all construction plans, if construction activities and any required tree removal occur during the breeding season (February 1 and August 31).

- Preconstruction surveys shall:
 - Be conducted by a qualified biologist prior to tree removal or grading, demolition, or construction activities. Note that preconstruction surveys are not required for tree removal or construction, grading, or demolition activities outside the nesting period.
 - Be conducted no more than 14 days prior to the start of tree removal or construction.
 - Be repeated at 14-day intervals until construction has been initiated in the area after which surveys can be stopped.
 - Document locations of active nests containing viable eggs or young birds.

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- Protective measures for active nests containing viable eggs or young birds shall be implemented under the direction of the qualified biologist until the nests no longer contain eggs or young birds, and the young have left the nest and are foraging independently, or the nest is no longer active. Protective measures shall include:
 - Establishment of clearly delineated exclusion zones (i.e., demarcated by identifiable fencing, such as orange construction fencing or equivalent) around each nest location as determined by the qualified biologist, taking into account the species of birds nesting, their tolerance for disturbance and proximity to existing development. In general, exclusion zones shall be a minimum of 300 feet for raptors and 75 feet for passerines and other birds.
 - Monitoring active nests within an exclusion zone on a weekly basis throughout the nesting season to identify signs of disturbance and confirm nesting status.
 - An increase in the radius of an exclusion zone by the qualified biologist if project activities are determined to be adversely affecting the nesting birds. Exclusion zones may be reduced by the qualified biologist only in consultation with the California Department of Fish and Wildlife.

Bird Collision

Avian injury and mortality resulting from collisions with buildings, towers, and other man-made structures is a common occurrence in city and suburban settings. Some birds are unable to detect and avoid glass and have difficulty distinguishing between actual objects and their reflected images, particularly when the glass is transparent and views through the structure are possible. Night-time lighting can interfere with movement patterns of some night-migrating birds, causing disorientation or attracting them to the light source. The frequency of bird collisions in a particular area is dependent on numerous factors, including: characteristics of building height, fenestration (the arrangement of windows and doors on the elevations of a building) and exterior treatments of windows and their relationship to other buildings and vegetation in the area; local and migratory avian populations, their movement patterns, and proximity of water, food and other attractants, time of year; prevailing winds; weather conditions; and other variables.

The proposed project would alter the physical characteristics of the site; however, this change is not expected to contribute to a substantial increase in the risk of collisions to local and migratory birds. This is due to several reasons, including that the surrounding area is developed with residential and commercial buildings of similar height (30 feet); the project site does not have existing trees; and the proposed structures would have limited transparency (i.e., no large uninterrupted windows in the new buildings). Because the site vicinity is already developed with urban uses and the project site is currently developed with an occupied structure, most birds, as under existing conditions, would likely acclimate to the presence of the new building once completed. The potential risk of bird collision with the new buildings would be extremely low.

While the design of the exterior treatment of the proposed buildings is in the conceptual phase and has not yet been finalized, and must still go through Design Review, there are design options to minimize the risk of bird collisions by using well-documented bird-safe designs for window treatments, roof top equipment, and night-time lighting. While any bird collisions that do occur should not have a substantial adverse effect on special-status bird species or more common bird species that may be flying through the

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vicinity, the applicant, as described in Chapter 3, Project Description, has committed to implementing bird-safe design measures in the new buildings, consistent with the proposed draft Cupertino Bird-Safe Guidelines, which would further address the low risk of collision. These include the following measures that would be part of the design of the new building:

- **Non-Reflective Glass:** None of the exterior glass in the new buildings will have a light reflectance value of more than 15 percent because some birds in certain circumstances might see vegetation in the reflection and fly into a building.
- **Fritted Glass:** Fritted glass is a non-reflective glass that is used to reduce glare and lower the danger to birds. The residential units, including balcony railing elements, would have a combination of UV coatings, frosting, and fritting, which reduces glare and makes the glass visible to birds to reduce collisions.
- **Building Lighting:** Overly lit buildings can be problematic, especially if there is up-lighting. The project is required to meet City code minimum standards on exterior lighting, and the new building would have no up-lighting. The source, intensity, and type of exterior lighting for the project site would generally be provided for the purpose of orienting site users and for safety needs. All on-site lighting would be low-level illumination and shielded to reduce light spill or glare.
- **Tree Screening:** The project site includes landscaping throughout the project site's interior and the surrounding perimeter, and additional landscaping in the common open space areas. For neighborhood privacy, shrubs and screen planting would occur along the southern property edge, consisting of broadleaf evergreen trees, primary accent trees, and required privacy planting shrubs. Trees and other landscaping would be planted along Camino Vista Drive, Stevens Creek Boulevard, and South Foothill Boulevard, as well as along the internal project roadway network. These trees would help shield the first floors, which shielding would increase as the new trees grow over time.

The location of the project site, the building design features and selected materials, were determined to adequately address the remote potential for special-status bird species dispersing through the site vicinity to collide with the new structure and be injured or killed. These measures would serve to minimize the potential for bird strikes through the use of bird-friendly design guidelines in the treatment of windows and other aspects of the proposed buildings and would ensure any potential impact would be *less than significant* for special-status birds and more common bird species.

Should the draft City of Cupertino draft Bird Safe Design Ordinance described in Chapter 3, Project Description, in Section 3.1.4.3, Other Requirements, be adopted by the City Council prior to project construction, the project applicant would also be required to comply with these standards which would also ensure that any potential impact would be *less than significant* for special-status birds and more common bird species.

Roosting Bats

As described in the existing conditions, the CNDDDB records were recently searched for, among other species, occurrences of Townsend's big-eared bat (*Corynorhinus townsendii*), hoary bat (*Lasiurus*

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cinereus), and Yuma myotis bat (*Myotis yumanensis*). These three species have no legal protected status under the State or federal Endangered Species Acts, but Townsend's big-eared bat is considered a Species of Special Concern by the California Department of Fish and Wildlife. Bat species found in the Cupertino vicinity may forage and occasionally roost in the site vicinity, but suitable habitat conditions for maternity roosts is absent from the site. The potential for any special-status bat species to be present on the site is considered highly remote, given the urbanization of the site vicinity and intensity of human activity, which typically discourages possible occupation by special-status bats. Accordingly, the construction and operation of the proposed project would not result in the inadvertent loss of any bats and impacts would be *less than significant*.

b) *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community type?*

As discussed in the existing conditions above, the proposed project is located in an urbanized area where no sensitive natural communities are found. The nearest creek is Stevens Creek, located approximately 0.5 miles to the east of the project site. The existing single-family residential neighborhoods act as a barrier between Stevens Creek and the project site. Based on the existing conditions and the fact that the proposed project would redevelop and underdeveloped site, impacts would be consistent with the conclusions in the General Plan EIR and would remain *less than significant*.

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

As discussed in the existing conditions and determined in the General Plan EIR, development of the proposed project would occur in urbanized areas where no wetlands or jurisdictional waters occur on or near the project site; therefore, no impact would occur directly. Indirect impacts to wetlands and jurisdictional or other waters include: 1) an increase in the potential for sedimentation due to construction grading and ground disturbance, 2) an increase in the potential for erosion due to increased runoff volumes generated by impervious surfaces, and 3) an increase in the potential for water quality degradation due to increased levels in non-point pollutants. However, indirect impacts would be largely avoided through effective implementation of best management practices during construction and compliance with water quality controls. As discussed in Impact HYDRO-1, water quality impacts from construction and operation of the proposed project would be less than significant. Accordingly, indirect impacts to wetlands and jurisdictional waters would remain consistent with the conclusions in the General Plan EIR and would be *less than significant*.

d) *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species, their wildlife corridors or nursery sites?*

Development on the project site would occur in an urbanized area where sensitive wildlife resources and important wildlife movement corridors are no longer present because of the existing development. Given the absence of trees and mostly paved and gravel surfaces on-site with one building, the types of wildlife species that are common to urban and suburban habitat would not likely be displaced by construction of

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the proposed project. The types of species that would be acclimated to the project site are relatively abundant, and adapted to human disturbance. As discussed in Chapter 3, Project Description, of this Initial Study, the proposed project would not include the removal of trees, as none currently exist on-site. Furthermore, the proposed project would provide 10,608 square feet of landscaping that would provide replacement habitat for wildlife species that may have adapted to the project site. Proposed project landscaping includes native, drought tolerant landscaping that is beneficial to the environment. Therefore, project impacts on the movement of fish and wildlife, wildlife corridors, or wildlife nursery sites would remain consistent with the conclusions in the General Plan EIR and would be *less than significant*.

e) *Would the project conflict with any local ordinances or policies protecting biological resources?*

As discussed in criteria (a) through (d), above, the project site is in an urbanized area where sensitive biological and wetland resources are considered to be absent, and no trees currently exist on the project site. Additionally, no major conflicts with the relevant policies or ordinances related to biological resources in the General Plan and/or CMC would occur. Therefore, project impacts would remain consistent with the conclusions in the General Plan EIR and would be *less than significant*.

f) *Would the project conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or State habitat conservation plan?*

No adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan includes the city or the project site, and the proposed project would not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan. Impacts would remain consistent with the conclusions in the General Plan EIR, and *no impact* would occur.

IV. CULTURAL RESOURCES

Would the proposed project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c)	Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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Chapter 4.4, Cultural Resources, of the General Plan EIR, addressed the impacts to cultural and Tribal Cultural Resources (TCRs) associated with buildout of the General Plan including the redevelopment of the project site with up to 19 dwelling units and a 30-foot height maximum at a program level. The

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impacts were found to be less than significant, and no mitigation measures were required. The following is a summary of Section, 4.4.1.2, Existing Conditions, of Chapter 4.4, which is based on the cultural resource analysis conducted by Tom Origer & Associates on July 24, 2013, included as Appendix D, Cultural Resources Data, of the General Plan EIR. The cultural resources study consists of archival research at the Northwest Information Center at Sonoma State University, examination of the library and files, field inspection, and contact with the Native American community. As shown in Table 4.4-2, Cultural Resources in the Project Study Area and Vicinity, and on Figure 4.4-1, Cultural Resources, of the General Plan EIR, there are no identified cultural resources on the project site.

EXISTING CONDITIONS

As shown in Table 4.4-2, *Cultural Resources in the Project Study Area and Vicinity*, and Figure 4.4-1, Cultural Resources, of the General Plan EIR, there are no identified cultural resources on the project site. In 1939 the site was occupied by an orchard and the orchard trees were gradually cleared from the site between the period of 1939 and 1950. Review of the historical data available for the site reveals that the development of the site in its current form most likely took place between 1950 and 1956,⁶⁹ which is within the 45-year age limit established by the State Office of Historic Preservation for buildings that may be of historical value.⁷⁰ However, the existing building is not currently listed on the National Register of Historic Places or the list of California Historical resources.⁷¹ Nor is the existing building associated with significant cultural events, persons in California's past, and does not have any distinctive historical characteristics, and as such does not have any qualifying historical value.

DISCUSSION

a) *Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?*

Under CEQA, both prehistoric and historic-period archaeological sites may qualify as historical resources.⁷² Archaeological resources are addressed in criterion (b), and human remains are addressed below in criterion (c), below.

As discussed above in the existing conditions, the project site's commercial building was developed between 1950 and 1956. The existing building does not meet the criteria for listing in the California Register of Historical Resources. Additionally, the General Plan EIR did not identify the project site or existing building as a historic resource, and the existing buildings are not currently listed as California

⁶⁹ Achievement Engineering Corp. 2019. Phase I Environmental Site Assessment for 22690 Stevens Creek Boulevard, Cupertino, California, pages 2 and 3.

⁷⁰ Public Resources Code Section 5024.1.

⁷¹ California Office of Historic Preservation. 2019. California Historical Resources. Accessed June 19, 2020 at <http://ohp.parks.ca.gov/ListedResources/?view=county&criteria=43>.

⁷² California Code of Regulations, Title 14, Chapter 3, Section 15064.5(c), Determining the Significance of Impacts on Historical and Unique Archeological Resources.

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Historical Resources.⁷³ Accordingly, impacts would remain consistent with the conclusions in the General Plan EIR and *less-than-significant* impacts to historical architectural resources would occur as a result of project development.

b) *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?*

While the project site is currently developed, and the cultural resources study prepared for the General Plan EIR⁷⁴ did not identify any known archaeological deposits on the project site. However, the site could still contain subsurface archaeological deposits, including unrecorded Native American prehistoric archaeological materials. If subsurface historical and pre-contact archaeological deposits that meet the definition of historical resource under CEQA Section 21084.1 or CEQA Guidelines Section 15064.5 are present at the project site, they could be damaged or destroyed by ground-disturbing construction activities (e.g., site preparation, grading, excavation, and trenching for utilities) associated with development allowed under the proposed project. Should this occur, the ability of the deposits to convey their significance, either as containing information about prehistory or history, or as possessing traditional or cultural significance to Native American or other descendant communities, would be materially impaired. Therefore, any project-related ground-disturbing activities have the potential to affect subsurface prehistoric archaeological resources that may be present. Implementation of Mitigation Measure CULT-1, which is not required by the General Plan EIR, would reduce impacts to unknown archaeological deposits to a *less-than-significant* level.

Impact CULT-1: The proposed project could cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.

Mitigation Measure CULT-1: A tribal representative shall be permitted on-site at all times during ground disturbance (including grading, demolition and/or construction) to monitor for potential prehistoric or historic subsurface cultural resources. Notice shall be given to the Tribe in a manner requested by the Tribe at least 48 hours before any ground disturbing activity. Prior to ground disturbance activities, construction workers conducting the ground disturbing activities shall undergo cultural resource sensitivity training conducted by the on-site tribal representative.

If any prehistoric or historic subsurface cultural resources are discovered during ground-disturbing (including grading, demolition and/or construction) activities:

- All work within 50 feet of the resources shall be halted, the City shall be notified, and a qualified archaeologist and tribal representative shall be consulted. The contractor shall cooperate in the recovery of the materials. Work may proceed on other parts of the project site while mitigation for tribal cultural resources, historical resources or unique archaeological resources is being carried out.

⁷³ Office of Historic Preservation, Listed California Historical Resources. Accessed June 19, 2020 at <http://ohp.parks.ca.gov/ListedResources/?view=county&criteria=43>.

⁷⁴ City of Cupertino, certified General Plan Amendment, Housing Element Update, and Associated Rezoning EIR, State Clearinghouse Number 2014032007. December 4, 2014, Appendix D, Cultural Resources Data, Tom Origer & Associates on July 24, 2013.

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- The qualified archaeologist shall prepare a report for the evaluation of the resource to the California Register of Historical Places and the City Building Department. The report shall also include appropriate recommendations in collaboration with a tribal representative regarding the significance of the find and appropriate mitigations as follows:
 - If the resource is a non-tribal resource, the archaeologist shall assess the significance of the find according to CEQA Guidelines Section 15064.5.
 - If the resource is a tribal resource – whether historic or prehistoric – the consulting archaeologist shall consult with the appropriate tribe(s) to evaluate the significance of the resource and to recommend appropriate and feasible avoidance, testing, preservation, or mitigation measures, in light of factors such as the significance of the find, proposed project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) may be implemented.
- All significant non-tribal cultural materials recovered shall be, as necessary, and at the discretion of the consulting archaeologist, subject to scientific analysis, professional museum curation, and documentation according to current professional standards.

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

There are no known human remains on the project site; however, the potential to unearth unknown human remains during ground disturbing activities associated with the construction of the project could occur. Any human remains encountered during ground-disturbing activities associated with the proposed project would be subject to federal, State, and local regulations to ensure no adverse impacts to human remains would occur in the unlikely event human remains are found.

Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and CEQA Guidelines Section 15064.5(e) contain the mandated procedures of conduct following the discovery of human remains. According to the provisions in CEQA, if human remains are encountered at the site, all work in the immediate vicinity of the discovery shall cease and necessary steps to ensure the integrity of the immediate area shall be taken. The Santa Clara County Coroner shall be notified immediately. The Coroner shall then determine whether the remains are Native American. If the Coroner determines the remains are Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours, who would, in turn, notify the person the NAHC identifies as the Most Likely Descendant (MLD) of any human remains. Further actions shall be determined, in part, by the desires of the MLD. The MLD has 48 hours to make recommendations regarding the disposition of the remains after having been allowed access to inspect the project site. If the MLD does not make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC. This would be included as a condition of approval of the project to ensure implementation.

Therefore, with the mandatory regulatory procedures described above, potential impacts related to the potential discovery or disturbance of any human remains accidentally unearthed during construction

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activities associated with the proposed project would impacts would remain consistent with the conclusions in the General Plan EIR and would be *less than significant*.

V. ENERGY

Would the proposed project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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Chapter 4.14, Utilities and Services Systems, of the General Plan EIR addressed energy impacts associated with buildout of the General Plan including the redevelopment of the project site with up to 19 dwelling units and a 30-foot height maximum at a program level. Energy impacts were found to be less than significant, and no mitigation measures were required.

EXISTING CONDITIONS

PG&E supplies electricity and natural gas to much of northern and central California – from Humboldt and Shasta counties in the north to Kern and Santa Barbara counties in the south – including the infrastructure for the City of Cupertino. Total electricity consumption in PG&E’s service area is forecast to increase from 104,868 gigawatt-hours (GWh) in 2015 to 119,633 GWh in 2027.⁷⁵ The nearest PG&E substation to the project site is the Monta Vista Substation on California Oak Way approximately 0.4 miles northwest of the project site. The nearest electricity transmission lines to the project site are located adjacent to the project site along Stevens Creek Boulevard and South Foothill Boulevard.⁷⁶

The current project site is served by both electricity and natural gas connections. Electricity is supplied to the project site via infrastructure maintained by PG&E. Silicon Valley Clean Energy (SVCE), a locally controlled public agency that has a partnership with PG&E, supplies the electricity to the project site. SVCE provides a standard 50 percent renewable energy portfolio, in addition to a 100 percent renewable option that electricity customers can opt into. Natural gas and associated infrastructure are provided and maintained by PG&E.

⁷⁵ California Energy Commission (CEC). 2017. California Energy Demand Updated Forecast, 2017-2027. <https://efiling.energy.ca.gov/getdocument.aspx?tn=214635>, accessed on June 18, 2020.

⁷⁶ California Energy Commission (CEC). 2012, October 25. Local Reliability Maps for 2013: Enlargement Maps. http://www.energy.ca.gov/maps/infrastructure/3part_enlargements.html.

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Current energy demands are derived from the operation of one single-story commercial convenience store that was constructed between 1950 and 1956.⁷⁷ Current energy demand includes energy demand from vehicle trips. When applying the trip generation rate for a convenience market, the existing uses on the site generate 1,829 gross average daily trips and 3,800 daily VMT.⁷⁸

DISCUSSION

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

Construction activities use energy from various sources, such as on-site heavy-duty construction vehicles, vehicles hauling materials to and from the site, and motor vehicles transporting the construction crew and vendors. The operation of the proposed residential buildings would use energy for cooling, heating, lighting, and landscape equipment, and for vehicle trips to and from the residential uses. According to the existing trip estimates described in Section XV, Transportation, the proposed project would generate 85 net daily weekday vehicle trips and 538 net daily VMT, which is 1,744 average daily weekday vehicle trips and 3,262 daily VMT less than what is generated for the existing 2,400 square foot convenience market.⁷⁹

The proposed project is an infill development project that would result in the redevelopment of the project site in a currently developed portion of the city. The project site currently has access to existing infrastructure and services; however, the proposed project would require the construction or installation of new infrastructure and capacity enhancing alterations to existing on-site facilities to connect the new residential buildings to water, stormwater, sanitary sewer, electricity, and natural gas lines. The construction of new infrastructure and capacity enhancing alterations would be necessary as part of the construction of the residential buildings and would be consistent with the design and installation of typical utility infrastructure for new residential buildings. Therefore, the construction or installation of new infrastructure and capacity enhancing alterations would not be a wasteful, inefficient, or unnecessary use of energy.

The proposed project would improve connectivity for pedestrians and bicyclists as it would include the construction of sidewalks along the perimeter of the project site, alongside Stevens Creek Boulevard, Camino Vista Drive and South Foothill Boulevard, and the construction of Class II bike lanes along the project site of Stevens Creek Boulevard. Existing crosswalks and Class II bike lanes on South Foothill Boulevard and Stevens Creek Boulevard would also remain and would provide additional access to the project site. As described in Section X, Land Use and Planning, below, of this Initial Study, the proposed project is consistent with the General Plan land use designation and would not result in new growth potential from what was considered in the General Plan EIR.

⁷⁷ Achievement Engineering Corp., 2019, Phase I Environmental Site Assessment for 22690 Stevens Creek Boulevard, Cupertino, California, pages 2 and 3, July 29.

⁷⁸ Hexagon Transportation Consultants, Inc. January 2020. Trip Generation Study for a Residential Project on Stevens Creek Boulevard in Cupertino, CA. See Appendix G of this Initial Study.

⁷⁹ Hexagon Transportation Consultants, Inc. January 2020. Trip Generation Study for a Residential Project on Stevens Creek Boulevard in Cupertino, CA. See Appendix G of this Initial Study.

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The proposed residential buildings would meet the 2019 Building and Energy Efficiency Standards of the California Public Resources Code, Title 24, Part 6, which applies to any project that is proposed to begin construction on or after August 2020. The 2019 Building Energy Efficiency Standards improve upon the 2016 Standards. The 2019 Standards require 53 percent or more energy efficiency for residential buildings, and 30 percent or more energy efficiency for non-residential buildings, respectively.⁸⁰

As described above in Chapter 3, Project Description, in Section 3.1.4.4, Utilities and Energy, the City enforces the CALGreen Building Standards, which establish planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), in CMC Chapter 16.58, Green Building Standards Code Adopted. CMC Sections 16.58.100 through 16.58.220 sets forth the standards for green building requirements by type of building. As shown on Table 101.10 in CMC Section 16.58.220, single family and multi-family homes equal to or less than nine homes are required to meet CALGreen Building Code in accordance with CALGreen's minimum thresholds. CMC Section 16.58.230 permits applicants to apply an alternate green building standard for a project in lieu of the minimum standards outlined in CMC Section 16.58.220 that meet the same intent of conserving resources and reducing solid waste. Energy conserving features of the proposed project would include new landscaping that is native and/or adaptive, and drought resistant to conserve water and subsequently save energy.

New buildings constructed in accordance with the General Plan land use designation and to the standards identified above would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Accordingly, impacts would remain consistent with the conclusions in the General Plan EIR and would be *less than significant*.

b) *Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?*

As discussed below in criterion (b) of Section VII, Greenhouse Gas Emissions, the proposed project would not conflict with the current CARB 2017 *Climate Change Scoping Plan*, *Plan Bay Area*, or the *Cupertino Climate Action Plan*, all which involve planning for use of renewable energy planning and energy efficiency standards. Additionally, as previously discussed, the proposed project would be built to the current 2019 Building and Energy Efficiency Standards of the California Public Resources Code, Title 24, Part 6. Accordingly, impacts would be *less than significant*, and no mitigation measures would be required.

⁸⁰ California Energy Commission. March 2018. 2019 Building Energy Efficiency Standards. Accessed May 24, 2019, at https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf.

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VI.GEOLOGY AND SOILS

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides, mudslides or other similar hazards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined by Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

GENERAL PLAN EIR

Chapter 4.5, Geology, Soils, and Seismicity, of the General Plan EIR, addressed geological and seismic-related impacts associated with buildout of the General Plan including the redevelopment of the project site with up to 19 dwelling units and a 30-foot height maximum at a program level. Impacts were found to be less than significant, and no mitigation measures were required. The following discussion is based on project site information available in Section 4.5.1.2, Existing Conditions, of Chapter 4.5 and project specific information from the Geotechnical Report dated March 3, 2020, prepared for the project site by Achievement Engineering Corp. (AEC), which can be found in Appendix C, Geotechnical Report, of this Initial Study. The report discusses the findings of the geotechnical investigation, including the site soils and groundwater presence, and provides recommendations for the design and construction of the foundation of the structures.

EXISTING CONDITIONS

The following describes the existing conditions on the project site with respect to geology and soil:

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- **Geology.** The City of Cupertino lies in the west-central part of the Santa Clara Valley, a broad, mostly flat alluvial plain that extends southward from San Francisco Bay. The site is generally flat with an average elevation of 386 feet above mean sea level and the depth of groundwater is estimated to be 25 to 30 feet below ground surface. The soil is Urban Land Flaskan Complex, which is a well-drained sandy loam, sandy clay loam, gravelly sandy clay loam and very gravelly sandy clay loam soil.⁸¹ Surficial geology is young, unconsolidated Quaternary alluvium,⁸² which is described as Holocene-age younger alluvium and coarse-grained alluvium that are composed of unconsolidated, poorly sorted gravel, silt, sand, and clay and organic matter.

Unique geologic features are those that are unique to the field of geology. Each rock unit tells a story of the natural processes operating at the time it was formed. The rocks and geologic formations exposed at the earth's surface or revealed by drilling and excavation are our only record of that geologic history. What makes a geologic unit or feature unique can vary considerably. For example, a geologic feature may be considered unique if it is the best example of its kind and has distinctive characteristics of a geologic principle that is exclusive locally or regionally, is a key piece of geologic information important to geologic history, contains a mineral that is not known to occur elsewhere in the County, or is used as a teaching tool.

Unique geological features are not common in Cupertino. The geologic processes are generally the same as those in other parts of the state, country, and even the world. The geology and soils on the project site are common throughout the city and region and are not considered to be unique.

- **Soils.** Web-accessible soil mapping data compiled by the USDA's Soil Conservation Survey and the California Soil Resource Laboratory hosted by University of California at Davis was used to identify the major soil types on the project site. The predominant soil types for the project site are soils of the Flaskan (formed on slopes of 0 to 30 percent), Landelspark (formed on slopes of 0 to 2 percent), and Botella (formed on slopes of 0 to 15 percent). In almost all instances, these soils are reportedly deep and well drained, and are typified by low to medium runoff.⁸³
- **Fault Rupture.** The San Francisco Bay Area is one of the most seismically active regions in the United States. The significant earthquakes that occur in the Bay Area are generally associated with crustal movement along well-defined active fault zones such as the San Andreas Fault system. Many of these zones exhibit a regional trend to the northwest. The site is not located within a State-designated Alquist-Priolo Earthquake Fault Zone (known formerly as a Special Studies Zone) or a Santa Clara County-designated Fault Rupture Hazard Zone.⁸⁴ No active fault traces are known to cross the site; however the San Andreas Fault passes a few miles west of the city of Cupertino.
- **Liquefaction.** The site is not located within a seismically induced liquefaction hazard zone, as mapped by the State of California and Santa Clara County. During cyclic ground shaking, such as seismic

⁸¹ California Soil Resource Lab. <https://casoilresource.lawr.ucdavis.edu/gmap/>, accessed on June 19, 2020.

⁸² US Geological Survey, 1994, Preliminary Quaternary Geologic Maps of Santa Clara Valley, Santa Clara, Alameda, and San Mateo Counties, California: A Digital Database, Open-File Report 94-231, by E.J. Helley, R.W. Graymer, G.A. Phelps, P.K. Showalter, and C.M. Wentworth.

⁸³ UC Davis Soil Resource Laboratory, 2019. California Soil Resource Lab, Online Soil Survey, URL: <https://casoilresource.lawr.ucdavis.edu/gmap/>, accessed June 19, 2020.

⁸⁴ Santa Clara County, 2012. Santa Clara County Geologic Hazard Zones, Map 18, updated October 26, 2012.

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shaking during an earthquake, cyclically induced stresses may cause increased pore water pressures within the soil matrix, resulting in liquefaction. Liquefied soil may lose shear strength that may lead to large shear deformations and/or flow failure. Liquefied soil can also settle as pore pressures dissipate following an earthquake.

Soils most susceptible to liquefaction are loose to moderately dense, saturated, non-cohesive soils with poor drainage, such as sands and silts with interbedded or capping layers of relatively low permeability soil.

- **Lateral Spreading.** Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying alluvial material toward an open or “free” face such as an open body of water, channel, or excavation. In soils, this movement is generally due to failure along a weak plane and may often be associated with liquefaction. As cracks develop within the weakened material, blocks of soil are displaced laterally toward the open face. Cracking and lateral movement may gradually propagate away from the face as blocks continue to break free. Because of the low potential for liquefaction, the risk of lateral spreading at the site is also considered low.
- **Paleontological Resources.** A review of the University of California’s Museum of Paleontology’s fossil locality database was conducted for the City of Cupertino. No paleontological resources have been identified on the project site; however, the presence of Pleistocene deposits that are known to contain fossils indicates that the overall city could contain paleontological resources.

DISCUSSION

- a) *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: (i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; (ii) Strong seismic ground shaking; (iii) Seismic-related ground failure, including liquefaction; (iv) Landslides, mudslides or other similar hazards?*

Fault Rupture

As discussed in the General Plan EIR, only one Alquist-Priolo Earthquake Fault Zone has been mapped within the City of Cupertino, namely, the zone that flanks the San Andreas Fault in the southwestern most part of the city. Because the site is not located within a State-designated Alquist-Priolo Earthquake Fault Zone or Santa Clara County-designated Fault Rupture Hazard Zone, and no active faults are known to traverse the site, the risk of surface fault rupture is considered low. The impacts from project development as they relate to surface fault rupture are considered *less than significant*.

Strong Seismic Ground Shaking

The hazards posed by strong seismic ground shaking during a major earthquake, while variable, are nearly omnipresent in the San Francisco Bay Area. As discussed in the General Plan EIR, in the event of a large, magnitude 6.7 or greater seismic event, much of the city is projected to experience “strong” ground shaking, with the most intense shaking forecast for the northeast part of the city where the project is

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located. Adherence to applicable building code, including conformance to the California Building Code (CBC) and the City's building permit requirements would ensure that the impacts associated with strong seismic ground shaking are minimized to the maximum extent practicable. The impacts of project development as they relate to strong seismic ground shaking would be *less than significant*.

Liquefaction

The project site is not located within an area mapped by the State of California or Santa Clara County as having a high potential for seismically induced liquefaction. As discussed in the General Plan EIR, the potential for seismically induced liquefaction in the vicinity appears low and is limited to a very narrow strip of alluvial deposits that flank Stevens Creek approximately 0.4 miles east of the project site. Accordingly, impacts associated with project development as they may relate to seismically induced liquefaction would be *less than significant*.

Landslides

The site is generally flat with elevation an average of 386 feet above mean sea level.⁸⁵ The project site is not located within an area mapped by the State of California or Santa Clara County as having a high potential for seismically induced landslides. Therefore, impacts associated with project development as they may relate to seismically induced landslides would be *less than significant*.

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

Substantial soil erosion or loss of topsoil during construction could, in theory, undermine structures and minor slopes during development of the project site. However, compliance with existing regulatory requirements, such as the implementation of grading erosion control measures specified in Appendix J, Grading of the CBC and CMC Section 16.08.110, Interim Erosion and Sediment Control Plan, would reduce impacts from erosion and the loss of topsoil.

Examples of these control measures are best management practices such as hydroseeding or short-term biodegradable erosion control blankets; vegetated swales, silt fences, or other forms of protection at storm drain inlets; post-construction inspection of drainage structures for accumulated sediment; and post-construction clearing of debris and sediment from these structures.

Section 16.08.110 of the CMC requires the preparation and submittal of *Interim Erosion and Sediment Control Plans* for all projects subject to City-issued grading permits, which would minimize the removal of topsoil, avoid overly steep cut and/or fill slopes, and protect existing vegetation during grading operations. These requirements are applicable to residential development projects. Adherence to these regulations would help ensure that the impacts of project development as they relate to substantial soil erosion or loss of topsoil would be *less than significant*.

⁸⁵ Achievement Engineering Corp., 2019, Phase I Environmental Site Assessment for 22690 Stevens Creek Boulevard, Cupertino, California, page 2, July 29.

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- c) *Would the project 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?*

As discussed in criterion (a), the project site is not located within an area mapped as having significant potential for seismically induced liquefaction. Because of the low potential for liquefaction, the risk of lateral spreading at the site would also be low. Therefore, the impacts of project development as they relate to liquefaction and lateral spreading would be *less than significant* and no mitigation measures would be required.

The site is generally flat with an average elevation of 386 feet above mean sea level.⁸⁶ The properties surrounding the project site are also at a similar elevation. The impacts of project development as they relate to landslides would be *less than significant*.

- d) *Would the project be located on expansive soil, as defined by Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

Expansive soils can undergo dramatic changes in volume in response to variations in soil moisture content. When wet, these soils can expand; conversely, when dry, they can contract or shrink. Sources of moisture that can trigger this shrink-swell phenomenon can include seasonal rainfall, landscape irrigation, utility leakage, and/or perched groundwater. Expansive soil can develop wide cracks in the dry season, and changes in soil volume have the potential to damage concrete slabs, foundations, and pavement. Special building/structure design or soil treatment are often needed in areas with expansive soils. Expansive soils are typically very fine-grained with a high to very high percentage of clay, typically montmorillonite, smectite, or bentonite clay.

The proposed project would be subject to the CBC regulations and provisions, as adopted in CMC Chapter 16.04, Building Code, and enforced by the City during plan review prior to building permit issuance. The CBC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition, and also regulates grading activities, including drainage and erosion control. Thus, compliance with existing regulations and policies would ensure that the potential future development impacts permitted under the proposed project would be reduced. Therefore, the impacts of project development as they relate to expansive soils are considered *less than significant*.

- e) *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The development of the proposed project would not require the construction or use of septic tanks or alternative wastewater disposal systems. Therefore, *no impact* would occur.

⁸⁶ Alan Enterprises LLC, 2019. Phase I Environmental Site Assessment, 22690 Stevens Creek Boulevard, Cupertino, California, page 4.

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

As discussed above in existing conditions, the geology and soils on the project site are common throughout the city and region and are not considered to be unique. While no paleontological resources have been identified on the project site, because the proposed project requires excavation where no such excavation has previously occurred fossils of potential scientific significance that have not been recorded could be encountered. Therefore, ground-disturbing construction associated with development under the proposed project could cause damage to, or destruction of, paleontological resources. Impacts to paleontological resources or site or unique geologic features on-site would be reduced to a *less-than-significant* level with implementation of Mitigation Measure GEO-1, which is not required in the General Plan EIR.

Impact GEO-1: Construction of the proposed project would have the potential to directly or indirectly affect an unknown unique paleontological resource.

Mitigation Measure GEO-1: The construction contractor shall incorporate the following in all grading, demolition, and construction plans:

- In the event that fossils or fossil-bearing deposits are discovered during grading, demolition, or building, excavations within 50 feet of the find shall be temporarily halted or diverted.
- The contractor shall notify the City of Cupertino Building Department and a City-approved qualified paleontologist to examine the discovery.
- The paleontologist shall document the discovery as needed, in accordance with Society of Vertebrate Paleontology standards (Society of Vertebrate Paleontology 1995), evaluate the potential resource, and assess the significance of the finding under the criteria set forth in CEQA Guidelines Section 15064.5.
- The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find.
- If the project applicant determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the proposed project based on the qualities that make the resource important. The excavation plan shall be submitted to the City for review and approval prior to implementation.

VII. GREENHOUSE GAS EMISSIONS

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ENVIRONMENTAL ANALYSIS

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
b) Conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	■	☐

GENERAL PLAN EIR

Chapter 4.7, Greenhouse Gas Emissions, of the General Plan EIR, addressed the impacts from GHG emissions associated with buildout of the General Plan including the redevelopment of the project site with up to 19 dwelling units and a 30-foot height maximum at a program level. GHG emissions impacts under the General Plan EIR were found to be less than significant, and no mitigation measures were required. This section analyzes the types and quantities of GHG emissions from the construction and operation of the proposed project. An update to the background discussion of the GHG regulatory setting and air quality modeling in the General Plan EIR is in Appendix A, Air Quality and Greenhouse Gas Emissions, of this Initial Study.

EXISTING CONDITIONS

The existing commercial uses generate GHG emissions from transportation sources, energy (natural gas and purchased energy), and area sources such as landscaping equipment and architectural coatings. When applying the trip generation rate for a convenience market, the existing land uses generate approximately 1,829 gross average daily weekday trips and 3,800 daily VMT.⁸⁷

DISCUSSION

A background discussion on the GHG regulatory setting and GHG modeling can be found in Appendix A to this Initial Study. For the purpose of this analysis, operational emissions for the proposed project were not quantified. The proposed project would generate GHG emissions from transportation sources, energy use, and area sources as well as indirect GHG emissions from water use and wastewater generation and solid waste disposal. The residential use would result in 85 gross daily trips, a substantial decrease from the 1,829 gross average daily trips from existing uses. Furthermore, BAAQMD has also identified screening criteria for project operation and the project would fall substantially below the screening criteria (e.g., 9 units compared to 451 condominium units). Thus, impacts as a result of the proposed project's operation will be discussed qualitatively.

⁸⁷ Hexagon Transportation Consultants. January 2020. Trip Generation Study for a Residential Project on Stevens Creek Boulevard in Cupertino, CA.

ENVIRONMENTAL ANALYSIS

a) *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

A project does not generate enough GHG emissions on its own to influence global climate change; therefore, this Section measures the proposed project’s contribution to the cumulative environmental impact associated with GHG emissions. Development of the proposed project would contribute to climate change through direct and indirect emissions of GHG from the construction activities needed to implement the project, which would generate a short-term increase in GHG emissions. The net increase in emissions generated by the proposed project was evaluated using CalEEMod, Version 2016.3.2.25. The net increase in GHG emissions associated with the proposed project are shown in Table 4-4.

TABLE 4-4 PROJECT CONSTRUCTION GHG EMISSIONS

Category	GHG Emissions (MTCO ₂ e ^a /Year)
	Project Emissions
Total Construction Emissions	172
30-Year Amortized Construction	6
BAAQMD Emissions Threshold (MTCO₂e)	660
Exceeds BAAQMD Thresholds?	No

Notes: Emissions may not total to 100 percent due to rounding. N/A = not applicable. New buildings would be constructed to the 2019 Building Energy Efficiency Standards (effective January 1, 2020) at a minimum. Existing buildings were constructed prior to the 2005 Building Energy Efficiency Standards; and therefore, the “historic” rates in CalEEMod, which are based on the 2005 Standards, were used to estimate existing building energy use. Transportation emissions include transportation demand management measures, such as the trip reduction program, required under the Bay Area Commuter Benefits Program.

a. MTCO₂e/year = metric tons of carbon dioxide equivalent per year.

Source: California Emissions Estimator Model (CalEEMod), Version 2016.3.2.25.

Construction Impacts

BAAQMD does not have thresholds of significance for construction related GHG emissions, which are one-time, short-term emissions and therefore would not significantly contribute to the long-term cumulative GHG emissions impacts of the proposed project. One-time, short-term emissions are converted to average annual emissions by amortizing them over the service life of a building. For buildings in general, it is reasonable to look at a 30-year time frame, since this is a typical interval before a new building requires the first major renovation.⁸⁸

As shown in Table 4-4, when evaluated over an average 30-year project lifetime, average annual construction emissions from the proposed project would represent a nominal source of GHG emissions and would not exceed the BAAQMD *de minimis* bright-line threshold of 660 MTCO₂e/year.⁸⁹ Accordingly, construction GHG emissions from the proposed project would be *less than significant*.

⁸⁸ International Energy Agency, 2008. Energy Efficiency Requirements in Building Codes, Energy Efficiency Policies for New Buildings.

⁸⁹ California Executive Order B-30-15 requires the state to reduce GHG emission 40% below 1990 levels by 2030. A 40% reduction from BAAQMD’s 1,100 MTCO₂e/year threshold identified in the Bay Area Air Quality Management District, 2017, *California Environmental Quality Act Air Quality Guidelines*, p.2-4, is 660 MTCO₂e/per year.

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Operational Impacts

The proposed project would generate 1,744 fewer daily weekday trips and 3,262 fewer daily VMT than the existing on-site land uses. Because transportation emissions would generate the majority of GHG emissions associated with the proposed project, this reduction in daily trips and VMT would provide a project benefit in reducing GHG emissions. Additionally, the new buildings would be more energy efficient than the existing structures and would be built to achieve the latest Title 24 Building and Energy Efficiency Standards. Operation of the proposed project would result in a net decrease in GHG emissions and would not exceed the BAAQMD bright-line screening threshold of 660 MTCO₂e.⁹⁰ Because long-term GHG emissions associated with the proposed project are anticipated to decrease, resulting in a project benefit to GHGs, impacts would be *less than significant*.

b) *Would the project conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?*

Applicable plans adopted for the purpose of reducing GHG emissions include the CARB Scoping Plan, *Plan Bay Area 2040*, and Cupertino's CAP. A consistency analysis with these plans is presented below.

CARB's Scoping Plan

CARB's *Climate Change Scoping Plan* (Scoping Plan) outlines the State's strategies to reduce GHG emissions in accordance with the targets established under AB 32 and Senate Bill (SB) 32. The Scoping Plan is applicable to State agencies and is not directly applicable to cities/counties and individual projects. Nonetheless, the Scoping Plan has been the primary tool that is used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

Statewide strategies to reduce GHG emissions in the Scoping Plan include: implementing SB 350, which expands the Renewable Portfolio Standard to 50 percent by 2030 and doubles energy efficiency savings; expanding the Low Carbon Fuel Standards to 18 percent by 2030; implementing the *Mobile Source Strategy* to deploy zero-electric vehicle buses and trucks; implementing the *Sustainable Freight Action Plan*; implementing the *Short-Lived Climate Pollutant Reduction Strategy*, which reduces methane and hydrofluorocarbons to 40 percent below 2013 levels by 2030 and black carbon emissions to 50 percent below 2013 levels by 2030; continuing to implement SB 375; creating a post-2020 Cap-and-Trade Program; and developing an *Integrated Natural and Working Lands Action Plan* to secure California's land base as a net carbon sink. Statewide GHG emissions reduction measures that are being implemented as a result of the Scoping Plan would reduce the proposed project's GHG emissions.

The proposed project would be constructed pursuant to the requirements of the California Green Building Standards Code and California Energy Code to achieve the standards in effect at the time of construction permit issuance and would not conflict with statewide programs adopted for the purpose of reducing

⁹⁰ California Executive Order B-30-15. requires the state to reduce GHG emission 40% below 1990 levels by 2030. A 40% reduction from BAAQMD's 1,100 MTCO₂e/year threshold identified in the Bay Area Air Quality Management District, 2017, *California Environmental Quality Act Air Quality Guidelines*, p.2-4, is 660 MTCO₂e/per year.

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GHG emissions. As stated above, while the measures in the State's Scoping Plan are not directly applicable to individual development projects, the project's GHG emissions would be reduced through compliance with statewide measures that have been adopted since AB 32 and SB 32 were adopted. Therefore, the impact would be *less than significant*.

Plan Bay Area

Plan Bay Area 2040, the Bay Area's Regional Transportation Plan (RTP)/Sustainable Community Strategy (SCS) that identifies the sustainable vision for the Bay Area. To achieve MTC's/ABAG's sustainable vision for the Bay Area, the *Plan Bay Area 2040* land use concept plan for the region concentrates the majority of new population and employment growth in the region in Priority Development Areas (PDAs). PDAs are transit-oriented, infill development opportunity areas within existing communities. An overarching goal of the regional plan is to concentrate development in areas where there are existing services and infrastructure rather than allocate new growth to outlying areas where substantial transportation investments would be necessary to achieve the per capita passenger vehicle, vehicle miles traveled, and associated GHG emissions reductions. While the project site is not located in a PDA, as discussed in Section XII, Population and Housing, growth associated with the proposed project is consistent with ABAG projections and would not exceed regional population and employment projections (see Chapter 4, General Plan EIR Consistency Analysis, of this Initial Study). The proposed project is an infill development project that would result in an increase in land use intensity in a portion of the City that has access to existing infrastructure and services, including transit service (see Section XV, Transportation). Therefore, the proposed project would not conflict with the land use concept plan for the City of Cupertino identified in the *Plan Bay Area 2040* and the impact would be *less than significant*.

Cupertino Climate Action Plan

The *Cupertino Climate Action Plan* (CAP) is a strategic planning document that identifies sources of GHG emissions within the City's boundaries, presents current and future emissions estimates, identifies a GHG reduction target for future years, and presents strategic goals, measures, and actions to reduce emissions from the energy, transportation and land use, water, solid waste, and green infrastructure sectors.

The emissions reduction strategies developed by the City followed the BAAQMD's CEQA Guidelines (2011) and the corresponding criteria for a Qualified Greenhouse Gas Emissions Reduction Program as defined by the BAAQMD, which in turn were developed to comply with the requirements of AB 32 and achieve the goals of CARB's *2008 Scoping Plan*. Since the adoption of the CAP in January of 2015, the Legislature adopted SB 32 (September 2016) and CARB adopted the *2017 Climate Change Scoping Plan* (December 2017), aimed at meeting SB 32's GHG reduction goal of 40 percent below 1990 levels by 2030.

Qualified GHG Reduction Strategy

A qualified GHG reduction strategy adopted by a local jurisdiction should include the following elements, described in the State CEQA Guidelines Section 15183.5. BAAQMD's revised CEQA Guidelines provides the methodology to determine if a GHG reduction strategy meets these requirements. The following includes a description of the BAAQMD methodology and how the Cupertino CAP meets the requirement.

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1. Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area.
 - Cupertino's CAP identifies a baseline GHG emissions inventory for year 2010 and business-as-usual forecasts for 2020, 2035, and 2050 for land uses within the City.
2. Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable.
 - Cupertino's CAP has established a goal (or level) of 15 percent below 2005 levels by 2020 and 35 percent below 2005 levels by 2035. The 2020 GHG reduction goal is in line with AB 32. However, the 2030 goal was adopted prior to SB 32.
3. Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area.
 - The GHG emissions sources calculated in the baseline GHG emissions inventory include commercial, residential, and industrial electricity and natural gas use, on-road transportation, solid waste disposal, energy use related to water and wastewater, agricultural off-road equipment and emissions associated with fertilizer application, and off-road equipment use for construction and lawn and garden activities. GHG emissions from these activities were calculated from activity data such as kilowatt hours of electricity, therms of natural gas, tons of waste disposed, and VMT from trips with an origin or destination in Cupertino.
4. Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level.
 - The Cupertino CAP has identified groups of measures and performance standards aimed at achieving these targets: Reduce Energy Use/Improve Facilities; Encourage Alternative Transportation/Convert Vehicle Fleet; Conserve Potable Water; Reduce Solid Waste; and Expand Green Infrastructure. The Cupertino CAP strategies achieve the near-term (i.e., 2020) GHG reduction target. Strategies for the post-2020 targets were not quantified.
5. Establish a mechanism to monitor the plan's progress toward achieving the target GHG emissions level and to require amendment if the plan is not achieving specified levels.
 - The City has a sustainability division that implements and tracks the City's GHG reduction strategies and progress toward GHG reduction targets. The City's sustainability division prepares annual reports on CAP implementation and progress as part of the monitoring program, including projects and policies, data, and metrics, as well as inventory updates to determine if the CAP is achieving its targeted goals.

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- 6. Be adopted in a public process following environmental review.
 - The City’s 2015 addendum to General Plan EIR⁹¹ demonstrated that that adoption of the Cupertino CAP would not create any new or substantially more severe significant effects on the environment that were not analyzed in the General Plan EIR certified in 2014.⁹²

Based on the analysis above, the City’s CAP is a qualified GHG reduction plan for the AB 32 targets.

In addition, a specific project proposal is considered consistent with the Cupertino CAP if it does not conflict with the required GHG reduction measures contained in the adopted CAP. Project consistency with the adopted GHG reduction measures are shown in Table 4-5.

TABLE 4-5 CUPERTINO CLIMATE ACTION PLAN CONSISTENCY MATRIX

Measure	Consistency
<p>Measure C-E-1 Energy Use Data and Analysis</p> <p><i>Increase resident and building owner/tenant/operator knowledge about how, when, and where building energy is used.</i></p> <p><i>2035 GHG Reduction Potential: 850 MT CO₂e/yr</i></p>	<p>Consistent. The City is the responsible party for this measure. This measure is not relevant because the proposed project receives energy through Silicon Valley Clean Energy (SVCE) and therefore utilizes renewable energy for the building. As described in Chapter 3, Project Description, energy conservation measures would be used as part of interior lighting for the new building, such as various glazing treatments on exterior facades and efficient irrigation for landscape to reduce water consumption by 20 percent. The proposed project would not conflict with implementation of this measure.</p>
<p>Measure C-E-2 Retrofit Financing</p> <p><i>Promote existing and support development of new private financing options for home and commercial building retrofits and renewable energy development.</i></p> <p><i>2035 GHG Reduction Potential: 10,525 MT CO₂e/yr</i></p>	<p>Consistent. The City is the responsible party for this measure. The project proposes new residential buildings that would comply with the 2019 Building Energy Efficiency Standards and CALGreen, at minimum, as stated on pages 3-11 and 3-12 of Chapter 3, Project Description. The proposed project would not conflict with implementation of this measure.</p>
<p>Measure C-E-3 Home & Commercial Building Retrofit Outreach</p> <p><i>Develop aggressive outreach program to drive voluntary participation in energy- and water-efficiency retrofits.</i></p> <p><i>Supporting Measure</i></p>	<p>Consistent. The City is the responsible party for this measure. The proposed project includes the construction of new buildings and therefore these measures would not apply as a retrofit. Additionally, the proposed project would comply with the latest building code and utilize energy and water efficient fixtures. The proposed project would not conflict with implementation of this measure.</p>
<p>Measure C-E-4 Energy Assurance Plan</p> <p><i>Develop a long-term community-wide energy conservation plan that considers future opportunities to influence building energy efficiency</i></p>	<p>Consistent. The City is the responsible party for this measure. The proposed project includes buildings that would comply with the 2019 Building Energy Efficiency Standards and CALGreen, at minimum, as stated on pages 3-11 and 3-12 of Chapter 3, Project Description.</p>

⁹¹ City of Cupertino, approved General Plan Amendment, Housing Element Update, and Associated Rezoning EIR Final Addendum, State Clearinghouse Number 2014032007. October 2015.

⁹² City of Cupertino, certified General Plan Amendment, Housing Element Update, and Associated Rezoning EIR, State Clearinghouse Number 2014032007. December 2014.

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TABLE 4-5 CUPERTINO CLIMATE ACTION PLAN CONSISTENCY MATRIX

Measure	Consistency
<i>through additional or enhanced building regulations.</i>	
<i>Supporting Measure</i>	
<p>Measure C-E-5 Community-Wide Solar Photovoltaic Development</p> <p><i>Encourage voluntary community-wide solar photovoltaic development through regulatory barrier reduction and public outreach campaigns.</i></p> <p><i>2035 GHG Reduction Potential: 4,400 MT CO₂e/yr</i></p>	<p>Consistent. The City is the responsible party for this measure. The proposed project would not conflict with implementation of this measure.</p>
<p>Measure C-E-6 Community-Wide Solar Hot Water Development</p> <p><i>Encourage communitywide solar hot water development through regulatory barrier reduction and public outreach campaigns.</i></p> <p><i>2035 GHG Reduction Potential: 925 MT CO₂e/yr</i></p>	<p>Consistent. The City is the responsible party for this measure. The proposed project would not conflict with implementation of this measure.</p>
<p>Measure C-E-7 Community Choice Energy Option</p> <p><i>Partner with other Santa Clara County jurisdictions to evaluate the development of a regional CCE option, including identification of the geographic scope, potential costs to participating jurisdictions and residents, and potential liabilities.</i></p> <p><i>2035 GHG Reduction Potential: 56,875 MT CO₂e/yr</i></p>	<p>Consistent. The City is the responsible party for this measure. The City of Cupertino is a member of Silicon Valley Clean Energy (SVCE) which partners with PG&E to provide clean electricity. The proposed project would receive energy from SVCE. The proposed project would not conflict with implementation of this measure.</p>
<p>Measure C-T-1 Bicycle & Pedestrian Environment Enhancements</p> <p><i>Continue to encourage multi-modal transportation, including walking and biking, through safety and comfort enhancements in the bicycle and pedestrian environment.</i></p> <p><i>Supporting Measure</i></p>	<p>Consistent. The City is the responsible party for this measure. As stated in Section XV, Transportation, of this Initial Study, the proposed project would not remove existing bicycle facilities along Stevens Creek Boulevard, nor would it conflict with the City's 2016 <i>Bicycle Transportation Plan</i>. Pedestrians would also have access to the site via the existing crosswalks on Stevens Creek Boulevard connecting to South Foothill Drive. Therefore, the proposed project would promote these alternative modes of transportation.</p>
<p>Measure C-T-2 Bikeshare Program</p> <p><i>Explore feasibility of developing local bikeshare program.</i></p> <p><i>Supporting Measure</i></p>	<p>Consistent. The City is the responsible party for this measure. The proposed project would not conflict with implementation of this measure. Class II bike lanes currently exist on both sides of South Foothill Boulevard and Stevens Creek Boulevard along the length of the project site. Bicyclists would access the project site from the existing Class II bike lanes via the internal roadway network.</p>
<p>Measure C-T-3 Transportation Demand Management</p>	<p>Consistent. The City is the responsible party for this measure. As described in Section XV, Transportation, of this Initial Study, the</p>

ENVIRONMENTAL ANALYSIS

TABLE 4-5 CUPERTINO CLIMATE ACTION PLAN CONSISTENCY MATRIX

Measure	Consistency
<p><i>Provide informational resources to local businesses subject to SB 1339 transportation demand management program requirements and encourage additional voluntary participation in the program.</i></p>	<p>proposed project is an infill project near transit stations served by VTA bus routes 51. The proposed project would not conflict with implementation of this measure.</p>
<p><i>2035 GHG Reduction Potential: 2,375 MT CO₂e/yr</i></p>	
<p>Measure C-T-5 Transit Priority</p> <p><i>Improve transit service reliability and speed.</i></p> <p><i>Supporting Measure</i></p>	<p>Consistent. The City is the responsible party for this measure. As described in Section XV, Transportation, of this Initial Study, the proposed project is an infill project near transit stations served by VTA bus routes 51. The proposed project would not conflict with implementation of this measure.</p>
<p>Measure C-T-6 Transit-Oriented Development</p> <p><i>Continue to encourage development that takes advantage of its location near local transit options (e.g., major bus stops) through higher densities and intensities to increase ridership potential.</i></p> <p><i>Supporting Measure</i></p>	<p>Consistent. The City is the responsible party for this measure. As described in Section XV, Transportation, of this Initial Study, the proposed project is an infill project near transit stations served by VTA bus routes 51. The proposed project would not conflict with implementation of this measure.</p>
<p>Measure C-W-1 SB-X7-7</p> <p><i>Implement water conservation policies contained within Cupertino’s Urban Water Management Plan to achieve 20 percent per capita water reductions by 2020.</i></p> <p><i>Supporting Measure</i></p>	<p>Consistent. The City is the responsible party for this measure. The proposed project would comply with SB X7-7, which requires California to achieve a 20 percent reduction in urban per capita water use by 2020 and would implement best management practices for water conservation to achieve the City’s water conservation goals. As described in Chapter 3, Project Description, the project incorporates water conservation features for on-site irrigation. All landscape zones would be irrigated as required by the Cupertino Landscape Ordinance, and water uses would be tailored to meet CALGreen Building Standards, which requires water conservation and requires new buildings to reduce water consumption by 20 percent. The proposed project would not conflict with implementation of this measure.</p>
<p>Measure C-W-2 Recycled Water Irrigation Program</p> <p><i>Explore opportunities to use recycled water for irrigation purposes to reduce potable water demands.</i></p> <p><i>Supporting Measure</i></p>	<p>Consistent. The City is the responsible party for this measure. City must build the infrastructure to provide recycled water for projects to use. As described in Chapter 3, Project Description, the project incorporates water conservation features for on-site irrigation. All landscape zones would be irrigated as required by the Cupertino Landscape Ordinance, and water uses would be tailored to meet CALGreen Building Standards, which requires water conservation and requires new buildings to reduce water consumption by 20 percent. The proposed project would not conflict with implementation of this measure.</p>
<p>Measure C-SW-1 Zero Waste Goal</p> <p><i>Maximize solid waste diversion communitywide through preparation of a zero-waste strategic plan.</i></p> <p><i>Supporting Measure</i></p>	<p>Consistent. The City is the responsible party for this measure. As described in Chapter 3, Project Description, this Initial Study, pursuant to CMC Chapter 16.72, Recycling and Diversion of Construction and Demolition Waste, during construction, the project would reduce construction waste and divert materials from landfill and promote recycling of construction waste. The proposed project would not conflict with implementation of this measure.</p>

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TABLE 4-5 CUPERTINO CLIMATE ACTION PLAN CONSISTENCY MATRIX

Measure	Consistency
<p>Measure C-SW-2 Food Scrap and Compostable Paper Diversion</p> <p><i>Continue to promote the collection of food scraps and compostable paper through the City's organics collection program.</i></p> <p><i>2035 GHG Reduction Potential: 750 MT CO₂e/yr</i></p>	<p>Consistent. The City is the responsible party for implementing this measure. The proposed project would include compost and yard waste disposal services through the City's contracts with Recology South Bay. The materials would be collected by the City garbage waste hauler. The proposed project would not conflict with implementation of this measure.</p>
<p>Measure C-SW-3 Construction & Demolition Waste Diversion Program</p> <p><i>Continue to enforce diversion requirements in City's Construction & Demolition Debris Diversion and Green Building Ordinances.</i></p> <p><i>2035 GHG Reduction Potential: 550 MT CO₂e/yr</i></p>	<p>Consistent. The City is the responsible party for this measure. As described in Chapter 3, Project Description, of this Initial Study, the proposed project would comply with the City's Construction and Demolition Debris Diversion Ordinance (CMC Chapter 16.72), which requires applicable construction projects to divert 65 percent of construction waste. Pursuant to CMC Section 16.72.050, Information Required Before Issuance of Permit, the project would create a construction waste management plan to reduce construction waste and divert materials from landfill and promote recycling of construction waste. Prior to receiving a final building inspection, a construction recycling report would be submitted to show the tons recycled and disposed by material type. The proposed project would not conflict with implementation of this measure.</p>
<p>Measure C-G-1 Urban Forest Program</p> <p><i>Support development and maintenance of a healthy, vibrant urban forest through outreach, incentives, and strategic leadership.</i></p> <p><i>2035 GHG Reduction Potential: 725 MT CO₂e/yr</i></p>	<p>Consistent. The City is the responsible party for this measure. As described in Chapter 3, Project Description, of this Initial Study, there are no trees or other landscaping on the project site, and the proposed project would include the planting of approximately 21 trees and 10,608 square feet of landscaping. The new landscaping reduces storm water run-off, increases carbon dioxide plantings, and reduces the heat sink profile of the site. The proposed project would not conflict with implementation of this measure.</p>

Source: City of Cupertino, PlaceWorks, 2020.

Development in Cupertino, including the proposed project, is required to adhere to City-adopted policy provisions, including those contained in the adopted CAP. The City ensures that the provisions of the Cupertino CAP are incorporated into projects and permits as part of development review and through conditions of approval. In general, the proposed project represents a net benefit to GHG emissions because the project would reduce transportation related GHG emissions on-site. In general, the proposed project represents a benefit to GHG emissions compared to existing conditions because the mixed-use and infill development would locate housing and residential serving land uses in an existing neighborhood and would replace the older structures with newer, more energy efficient structures that achieve the 2019 Building and Energy Efficiency Standards and water efficiency standards and would decrease GHG emissions. Therefore, the impact would be *less than significant*.

ENVIRONMENTAL ANALYSIS

VIII. HAZARDS AND HAZARDOUS MATERIALS

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project 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 for people living or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

GENERAL PLAN EIR

Chapter 4.7, Hazards and Hazardous Materials, of the General Plan EIR, addressed the hazards and hazardous materials-related associated with buildout of the General Plan including the redevelopment of the project site with up to 19 dwelling units and a 30-foot height maximum at a program level. Impacts were found to be less than significant with mitigation measures to reduce impacts from development on sites with known hazardous contamination. General Plan EIR Mitigation Measures HAZ-4a and HAZ-4b, previously adopted and incorporated into the General Plan, are required to be implemented for sites with known contamination and potential residual contamination.

The following is a summary of Section, 4.7.1.2, Existing Conditions, of Chapter 4.7, and project specific information from the Phase I Environmental Site Assessment (ESA) dated July 29, 2019, and Phase II ESA dated October 17, 2019 both prepared for the project site by Achievement Engineering Corp. (AEC) and reviewed by PlaceWorks and the City. The Phase I ESA and Phase II ESA can be found in Appendix D and Appendix E, respectively, of this Initial Study. The purpose of the Phase I and Phase II ESAs were to evaluate the surface and subsurface conditions at the subject site.

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EXISTING CONDITIONS

Phase I ESA

Based on aerial photos, in 1939 there was an orchard was on the property that can no longer be seen in 1950 aerial photo. Sometime between 1939 and 1950 the orchard was cleared from the project site. While the existence of fertilizers, pesticides and metals are possible in the shallow soil due to this historical land use,⁹³ according to the Department of Toxic Substances and Control (DTSC), when orchards have been removed or became inactive prior to 1950 organic pesticides are not an issue warranting further testing.⁹⁴ Following the removal of the orchards, the historical data and aerial photos available for the project site reveal that the development of the site, as is, took place between 1950 and 1956. The first City directory listing for this property occurred in 1975, as Frank's Liquor and Grocery Store. An interview conducted in 2017 reveals that before 1976, the building was used as a bar. Bateh Brothers Liquors and Mini Mart has been located on the project site since 1980.

The Phase I ESA details that the project site did not have pools or sumps containing possible hazardous substances or petroleum products during the site visitation. No storage tanks or evidence of underground pipelines bisecting the project site were observed. No evidence of above ground gasoline or diesel storage tanks was observed, and the historical and regulatory record review revealed no evidence of any underground storage tanks previously used at the project site. Stormwater from paved surfaces is sloped to a public drain, and no abnormal accumulation of petroleum run-off or foreign material was observed. No wastewater pretreatment or discharge control devices were observed or reported.⁹⁵

The Phase I ESA included a search of hazardous material databases and found the site was not listed in any database. Such databases include the DTSC's EnviroStor database and the GeoTracker. The closest off-site location included in the database search was the neighboring property (Cupertino Beacon) located at 22510 Stevens Creek Boulevard. The Phase I ESA identified that the borings taken at the project site found benzene concentration in soil vapor, which is a recognized environmental condition (REC), to be above the environmental screening levels (ESL). Additionally, it identified that the neighboring property (Cupertino Beacon) has an open Leaking Underground Storage Tank (LUST) case, regulated by the State Water Resources Control Board, as well as documented soil, groundwater, and soil vapor contamination. These represent off-site controlled RECs.⁹⁶

⁹³ Achievement Engineering, 2019. Phase II Environmental Site Assessment, 22690 Stevens Creek Boulevard, Cupertino, California, page 2, October 17.

⁹⁴ California Department of Toxic Substances Control California Environmental Protection Agency, *Interim Guidance for Sampling Agricultural Properties*, page 3, August 7, 2008.

⁹⁵ Achievement Engineering, 2019. Phase I Environmental Site Assessment, 22690 Stevens Creek Boulevard, Cupertino, California, page 21, July 29.

⁹⁶ Achievement Engineering, 2019. Phase I Environmental Site Assessment, 22690 Stevens Creek Boulevard, Cupertino, California, page 26, July 29.

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The limited Phase II ESA subsurface investigation evaluated the soil and water conditions regarding the above-mentioned on- and off-site RECs.⁹⁷ The Phase II ESA found no-risk or significant levels of total petroleum hydrocarbons (TPH) Gasoline, TPH Diesel, TPH Motor Oils, Methyl tert-butyl ether (MTBE), BETEX (a group of volatile organic compounds, comprising benzene, toluene, ethylbenzene, and xylene), Organochlorine Pesticides, and heavy metals in the soil, above the regulatory values. However, the Phase II ESA included recommendations for the preparation and implementation of a routine health and safety plan to ensure the safety and protection of the public and construction workers during construction and the installation of vapor barriers beneath the concrete foundation slab of the proposed buildings to mitigate potential odor risks associated with concentration of vapors. Because the odor risks are a nuisance and not a hazard, this is discussed in Section II, Air Quality, in criterion (d).⁹⁸

Lead-Based Paints and Asbestos-Containing Materials

Development of the project site occurred somewhere between 1950 and 1956, and it is unclear when the building was actually constructed; therefore, the existing buildings may contain asbestos-containing materials (ACM), lead-based paint (LBP), or polychlorinated biphenyls (PCBs), which have only been regulated in construction since the early 1970s. ACMs and LBPs in structures do not qualify as RECs regulated by the DTSC.

Sensitive Receptors

Public schools near the project site are Monta Vista High School to southeast of the project site, Stevens Creek Elementary School to the northeast, and John F. Kennedy Middle School to the southeast of the project site. Each public school is approximately 1 mile from the project site. Private schools near the project site are Saint Joseph of Cupertino School approximately 2 miles to the east, Futures Academy of Cupertino approximately 3 miles to the east, Bethel Lutheran School approximately 3.5 miles to the east, Archbishop Mitty High School approximately 4 miles to the east, Pinewood School approximately 4 miles to the northwest, and Waldorf School of the Peninsula approximately 4 miles to the northwest. Other sensitive⁹⁹ land uses near the project site are the Sunny View Bay Area Retirement Community approximately 0.2 miles to the north, Cupertino Healthcare and Wellness nursing home approximately 0.3 miles to the south, and Cupertino Senior Center approximately 1.3 miles to the east.

Airports

The nearest public airports are San José International Airport, approximately 8 miles to the northeast, and Palo Alto Airport, approximately 9.5 miles to the north. The nearest heliports are McCandless Towers Heliport, approximately 7 miles to the northeast, and County Medical Center Heliport, approximately 7.5

⁹⁷ Achievement Engineering, 2019. Phase II Environmental Site Assessment, 22690 Stevens Creek Boulevard, Cupertino, California, page 2, October 17.

⁹⁸ Achievement Engineering, 2019. Phase II Environmental Site Assessment, 22690 Stevens Creek Boulevard, Cupertino, California, page 9, October 17.

⁹⁹ Sensitive resources in this context refers to uses or receptors that are most vulnerable to air and noise pollution.

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miles to the east. The nearest private (military/corporate) airport is Moffett Federal Airfield, approximately 7 miles to the north. The project site is not within the boundaries of an airport land use plan.

Wildfire

The California Department of Forestry and Fire Projection (CAL FIRE) has designated the project site as a Local Responsibility Area (LRA) and a non-very high fire hazard severity zone. The project site is near lands that CAL FIRE designates as a State Responsibility Area (SRA), which are areas of the state where the State of California is financially responsible for the prevention and suppression of wildfires. SRA's do not include lands within city boundaries or in federal ownership. The SRA is approximately 1 mile to the west of the project site.¹⁰⁰ The project site is located 0.2 miles to the east of the wildland-urban interface, which is an area of transition between wildland (unoccupied land) and land with human development (occupied land).¹⁰¹

DISCUSSION

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

Construction Impacts

Construction activities at the project site would involve the use hazardous materials, such as petroleum-based fuels for maintenance and construction equipment, and coatings used in construction, which would be transported to the site periodically by vehicle and would be present temporarily during construction. These potentially hazardous materials would not be of a type or occur in sufficient quantities to pose a significant hazard to public health and safety or the environment, and their use during construction would be short-term. Compliance with applicable laws and regulations governing the use, storage, and transportation of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts to occur. Consequently, associated impacts from construction of the proposed project would be *less than significant*.

Operational Impacts

The proposed residential development would not involve the routine transport or disposal of hazardous materials. Project operation would involve the use of small amounts of hazardous materials for cleaning and maintenance purposes, such as cleansers, degreasers, pesticides, and fertilizers. These potentially hazardous materials would not be of a type or be present in sufficient quantities to pose a significant hazard to public health and safety or the environment. Furthermore, such substances would be used,

¹⁰⁰ CAL FIRE. 2008. VHSZ Viewer
<https://egis.fire.ca.gov/FHSZ/>

¹⁰¹ CAL FIRE. 2018. Wildland-Urban Interface Fire Threat.
<http://www.arcgis.com/home/item.html?id=d45bf08448354073a26675776f2d09cb>, accessed June 4, 2020.

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transported, stored, and disposed of in accordance with applicable federal, State, and local laws, policies, and regulations. Thus, associated impacts from the operational phase of the proposed project would be *less than significant*.

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

As described above in criterion (a), the construction and operation of the proposed project would involve the storage and use of common cleaning substances, building maintenance products, paints, and solvents, as well as petroleum-based fuels for maintenance and construction equipment, and coatings used in construction. As described in the existing conditions, development of the project site could have occurred before ACMs, LBPs, or PCBs were regulated in construction in the early 1970s.

An impact could occur if construction and operation of the proposed project creates conditions where these hazardous materials could easily contaminate surrounding soil, water, or air and subsequently be exposed to construction worker or the public. The most likely scenarios would be from rainwater runoff spreading contaminated waste. Stormwater runoff is discussed in Section IX, Hydrology and Water Quality, below, of this Initial Study and impacts were found to be less than significant.

Construction Impacts

Petroleum products used during construction activities are required to be handled in accordance with existing federal, State, and local regulations. All spills or leakage are required to be immediately contained, the hazardous material identified, and the material remediated in compliance with applicable State and local regulations. All contaminated waste would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility. Furthermore, strict adherence to all emergency response plan requirements set forth by the Santa Clara County Department of Environmental Health Hazardous Materials Compliance Division would be required through the duration of the construction of the project.¹⁰²

Although the Phase II ESA did not identify any hazardous materials on-site, in the event that removal and handling of hazardous materials would occur, it would be done in accordance with existing federal, State, and local regulations. These regulations include the USEPA's National Emission Standards for Hazardous Air Pollutants (Code of Federal Regulation Part 61), BAAQMD's Regulation 11, Title 8 of the California Codes of Regulations, the Unified Program, and the City's General Plan Health and Safety Element Policy HS-6.1, which would ensure that risks associated with the transport, storage, use, and disposal of such materials would be reduced to the maximum extent practical.

The demolition of the existing building could expose construction workers or the public to ACMs, LBPs, or PCBs. Removal of these types of hazardous materials would be conducted by contractors licensed to

¹⁰² Santa Clara County Ordinance Code, Division B11, Chapter XIII (Hazardous Materials Storage Ordinance), Chapter XIV (Toxic Gas Ordinance).

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remove and handle these materials and in accordance with existing federal, State, and local regulations, including United States Environmental Protection Agency's National Emission Standards for Hazardous Air Pollutants (Code of Federal Regulation Part 61), Bay Area Air Quality Management District's Regulation 11, Title 8 of the California Codes of Regulations, the Unified Program, and the City's General Plan Health and Safety Element Policy HS-6.1, and would ensure that risks associated with demolition and the transport, storage, use, and disposal of such materials would be reduced to the maximum extent practical.

The General Plan EIR found that for any sites with known contamination or potential residual contamination, implementation of Mitigation HAZ-4a would reduce impacts to a less-than-significant level. While the soil testing conducted for the Phase II investigation found no contaminants that exceeded the regulatory screening levels, the Phase II recommended that a routine health and safety plan be implemented to protect construction workers and the public during the construction phase. Therefore, the implementation of Mitigation Measure HAZ-1, which is required pursuant to General Plan EIR Mitigation Measure HAZ-4a, would be required for the project to reduce impacts to a *less-than-significant* level.

Impact HAZ-1: Demolition and construction activities could expose construction workers and the public to hazardous materials during the construction phase.

Mitigation Measure HAZ-1: The project applicant shall prepare an Environmental Site Management Plan (ESMP) in consultation with applicable agencies (e.g., the Regional Water Quality Control Board (RWQCB), the Department of Toxic Substances Control (DTSC), Santa Clara County Department of Environmental Health (SCCDEH), or Santa Clara County Fire Department), if any, or in the alternative to the satisfaction of the City based on a third-party peer review, as appropriate. The purpose of the ESMP is to protect construction workers, the general public, the environment, and future site occupants from subsurface hazardous materials previously identified at the site and to address the possibility of encountering unknown contamination or hazards during demolition, grading, excavation, and construction activities. The ESMP shall summarize soil and groundwater analytical data collected on the project site during past investigations; identify management options for grading, if contaminated media are encountered during grading; and identify monitoring, irrigation, or other wells requiring proper abandonment in compliance with local, State, and federal laws, policies, and regulations.

The ESMP shall include measures for identifying, testing, and managing soil and groundwater suspected of or known to contain hazardous materials. The ESMP shall: 1) provide procedures for evaluating, handling, storing, testing, and disposing of soil and groundwater during project grading; 2) describe required worker health and safety provisions for all workers potentially exposed to hazardous materials in accordance with State and federal worker safety regulations; and 3) designate personnel responsible for implementation of the ESMP.

Operational Impacts

The proposed residential development is not considered the type of project that would create a hazardous materials threat to the users of the site or the surrounding land uses. The Santa Clara County

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Hazardous Materials Compliance Division (HMCD) is the Certified Unified Program Agency (CUPA) for Santa Clara County, including the City of Cupertino, and is responsible for enforcing Chapter 6.95 of the California Health and Safety Code. As the CUPA, Santa Clara County HMCD is required to regulate hazardous materials business plans (HMBP) and chemical inventory, hazardous waste and tiered permitting, underground storage tanks, and risk-management plans. Santa Clara County Department of Environmental Health, Hazardous Materials Compliance Division is required to conduct ongoing routine inspections to ensure compliance with existing laws and regulations; to identify safety hazards that could cause or contribute to an accidental spill or release; and to suggest preventative measures to minimize the risk of a spill or release of hazardous substances. Compliance with these regulations, as necessary, would ensure that the risk of accidents and spills is minimized to the maximum extent practicable during the operation of the proposed project. Consequently, associated impacts would be *less than significant*.

c) *Would the project emit hazardous emissions or handle hazardous materials, substances or waste within 0.25 miles of an existing or proposed school?*

There are no schools within 0.25 miles of the project site, but as described in the existing conditions the Sunny View Bay Area Retirement Community is approximately 0.2 miles to the north, and Cupertino Healthcare and Wellness nursing home is approximately 0.3 miles to the south. As discussed in criterion (a) and (b), the proposed project would not involve the storage, handling, or disposal of hazardous materials in sufficient quantities to pose a significant risk to the public. Thus, *no impact* related to hazardous emissions or hazardous material handling to schools or other sensitive receptors that are within 0.25 miles of the project site would occur and no mitigation measures are required.

Also see Section II, Air Quality, criterion (c), which concludes that the potential for impacts to sensitive receptors due to the release of hazardous materials during construction would be less than significant with mitigation.

d) *Would the project be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?*

As stated in the existing conditions above, the project site was not identified as being on a listed site pursuant to California Government Code Section 65952.5. Therefore, *no impact* would occur.

e) *For a project within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people living or working in the project area?*

The project site is not within an airport land use plan or within 2 miles of a public use airport. Thus, there would be *no impact* related to public airport hazards.

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

The City of Cupertino Office of Emergency Services is responsible for coordinating agency response to disasters or other large-scale emergencies in the City of Cupertino with assistance from the Santa Clara County Office of Emergency Services and the Santa Clara County Fire Department (SCCFD). The Cupertino Emergency Operations Plan (EOP)¹⁰³ establishes policy direction for emergency planning, mitigation, response, and recovery activities within the city. The Cupertino EOP addresses interagency coordination, procedures to maintain communications with county and State emergency response teams, and methods to assess the extent of damage and management of volunteers.

The proposed project would not block roads and would not impede emergency access to surrounding properties or neighborhoods. As described in Chapter 3, Project Description, of this Initial Study, emergency vehicle access would be provided at two points on the project site, with ingress and egress located at both South Foothill Boulevard and Camino Vista Drive, via left or right turn lanes, as shown in Figures 3-4 and 3-5.

During demolition and construction, vehicles, equipment, and materials would be staged and stored on a portion of the project site. The construction site and staging areas would be clearly marked, and construction fencing would be installed to prevent disturbance and safety hazards. No staging would occur in the public right-of-way. A combination of on- and off-site parking facilities for construction workers would be identified during demolition, grading, and construction. The proposed project would not interfere with an adopted emergency response plan, or emergency evacuation plan; therefore, impacts would be *less than significant*.

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

As described in the existing conditions, above, the project site is in an LRA and a non-very high fire hazard severity zone. The project site is located 0.2 miles to the east of the wildland-urban interface.¹⁰⁴ The proposed project would construct additional single-family homes in an urbanized residential area with adequate emergency access, and would not expose people or structures to a significant risk of loss, injury, or death involving wildfires and impacts would be *less than significant*.

¹⁰³ City of Cupertino, Office of Emergency Services. *Emergency Operations Plan*. September 2005.

¹⁰⁴ CAL FIRE. 2018. Wildland-Urban Interface Fire Threat.

<http://www.arcgis.com/home/item.html?id=d45bf08448354073a26675776f2d09cb>, accessed June 18, 2020.

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IX. HYDROLOGY AND WATER QUALITY

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: <ul style="list-style-type: none"> i) Result in substantial erosion or siltation on- or off-site; ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) Impede or redirect flood flows? 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In a flood hazard, tsunami, or seiche zones, risk the release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

GENERAL PLAN EIR

Chapter 4.8, Hydrology and Water Quality, of the General Plan EIR, addressed the hydrology- and water quality-related impacts associated with buildout of the General Plan including the redevelopment of the project site with up to 19 dwelling units and a 30-foot height maximum at a program level. Impacts were found to be less than significant, and no mitigation measures were required. The following is a summary of Section, 4.8.1.2, Existing Conditions, of Chapter 4.8.

EXISTING CONDITIONS

The project site lies within the Stevens Creek Watershed,¹⁰⁵ approximately 0.4 miles west of Stevens Creek, and approximately 1.7 miles north of Stevens Creek Reservoir. No creeks or natural drainage features are present on the project site. In addition to the natural drainage system within the watershed, a

¹⁰⁵ City of Cupertino, certified General Plan Amendment, Housing Element Update, and Associated Rezoning EIR, State Clearinghouse Number 2014032007. December 4, 2014, Chapter 4.8, Hydrology and Water Quality, Figure 4.8-1, Watersheds.

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network of storm drains collects runoff from city streets and conveys it to four creeks, including Stevens Creek, with ultimate discharge into San Francisco Bay.

The City of Cupertino Department of Public Works is responsible for the design, construction, and maintenance of City-owned facilities including public streets, sidewalks, curbs, gutters, and storm drains. The capacity of the storm drain facilities within the City of Cupertino was evaluated and documented in the 2018 *Storm Drain Master Plan*, which identifies areas within the system that do not have the capacity to handle runoff during a 10-year storm event, which is the City's design standard.

As described in the 2018 *Storm Drain Master Plan*, the project site is in an area where the storm drains are deficient in conveying water from a 10-year storm. The storm drains beneath Stevens Creek Boulevard and South Foothill Boulevard adjacent to the project site are currently under capacity and are designated as high priority for replacement.¹⁰⁶ The proposed storm drain improvements identified in the 2018 *Storm Drain Master Plan* to reduce flooding impacts along Foothill Boulevard are to increase the pipe size beneath Stevens Creek Boulevard east of South Foothill Boulevard from 36 inches to 60 inches and to increase the pipe size beneath South Foothill Boulevard next to the project site from 30 inches to 48 inches.¹⁰⁷

The project site, as well as the entire city, is within the Santa Clara Subbasin of the Santa Clara Valley Groundwater Basin. In 2017, approximately 42 percent of the water used in Santa Clara County was pumped from groundwater.¹⁰⁸ Three borings advanced to 40 feet below ground surface (bgs) at the site during a Phase II site investigation did not encounter groundwater.¹⁰⁹ However, previous investigations indicated a depth of groundwater from about 21.6 to 29 feet bgs.¹¹⁰ Based on the proposed excavation and type of construction for this project,¹¹¹ construction dewatering would not be required. Most of the water supplied to the County is purchased from the Santa Clara Valley Water District (SCVWD), which receives surface water from the State Water Project (SWP) and the Central Valley Project. Additional details on water usage and local water purveyors are provided in Section XVII, Utilities and Service Systems, of this Initial Study.

The National Pollutant Discharge Elimination System (NPDES) permit program was established by the federal Clean Water Act (CWA) to regulate municipal and industrial discharges to surface waters of the United States from their municipal separate storm sewer systems (MS4s). Municipal storm water discharges in the City of Cupertino are subject to the Waste Discharge Requirements of the Municipal Regional Permit (MRP; Order Number R2-2015-0049) as amended by Order No. R2-2019-0004.

¹⁰⁶ Schaaf & Wheeler Consulting Civil Engineers. 2018. Cupertino Storm Drain Master Plan.

¹⁰⁷ Schaaf & Wheeler Consulting Civil Engineers. 2018. Cupertino Storm Drain Master Plan.

¹⁰⁸ Santa Clara Valley Water District, 2017. Annual Groundwater Report for Calendar Year 2017, page ES-1.

¹⁰⁹ Achievement Engineering, 2019. Phase II Environmental Site Assessment Report. Dated October 17, 2019.

¹¹⁰ Achievement Engineering, 2019. Phase I Environmental Site Assessment, 22690 Stevens Creek Boulevard, Cupertino, California, page 19, July 29.

¹¹¹ Achievement Engineering, 2020. Geotechnical Report for the New Development at 22690 Stevens Creek, Cupertino, CA 95014. Dated March 3, 2020.

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All new development or redevelopment projects that create and/or replace 10,000 square feet or more of impervious surfaces would be required to incorporate source control, site design, and stormwater treatment measures into the project, pursuant to the Santa Clara Valley Urban Runoff Pollution Prevention Program C.3 requirements. The requirements include minimization of impervious surfaces, measures to detain or infiltrate runoff from peak flows, and agreements to ensure that the stormwater treatment and flow control facilities are maintained in perpetuity.

The San Francisco Bay RWQCB monitors surface water quality through implementation of the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) and designates beneficial uses for surface water bodies and groundwater within the Santa Clara Valley. The Basin Plan also contains water quality criteria for groundwater. Groundwater quality in the Santa Clara subbasin is generally considered to be good, and water quality objectives are met in at least 95 percent of the County water supply wells without the use of treatment methods.¹¹²

The project site is not located in a FEMA-designated 100-year floodplain or Special Flood Hazard Area. The project site is not within the dam inundation zone of Stevens Creek Reservoir or any other dams.¹¹³ The City of Cupertino is more than 8 miles south of the San Francisco Bay and is more than 100 feet above mean sea level, which places the City at a distance beyond the impacts of a tsunami.¹¹⁴ There are no large bodies of water within the City of Cupertino or near the project site; thus, the project site would not be impacted by a seiche.

DISCUSSION

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

The proposed project would create and/or replace 10,000 square feet of impervious surfaces, and therefore would be required to incorporate source control, site design, and stormwater treatment measures into the project, pursuant to the Santa Clara Valley Urban Runoff Pollution Prevention Program C.3 requirements. The low impact development (LID) requirements include minimization of impervious surfaces, measures to detain or infiltrate runoff from peak flows, such as bioretention areas, and agreements to ensure that the stormwater treatment and flow control facilities are maintained in perpetuity. The proposed project would include 9,454 square feet of pervious surfaces in the form of landscaping and one on-site bioretention area that would hold and treat stormwater before it is released into the City's off-site storm drain infrastructure. The bioretention area is designed to detain stormwater runoff, filter runoff through biotreatment soil media, remove pollutants such as suspended solids, metals, and nutrients and eventually discharge the runoff to the City's storm drain system. Implementation of

¹¹² Santa Clara Valley Water District, 2016. Santa Clara Valley Water District, 2016. *2016 Groundwater Management Plan*.

¹¹³ Santa Clara County Fire Department. 2012. Joint Stevens Creek Dam Failure Plan.
<https://www.cupertino.org/home/showdocument?id=7424> accessed on September 26, 2019.

¹¹⁴ Association of Bay Area Governments, 2019. *Interactive Tsunami Inundation Map*.
<http://gis.abag.ca.gov/website/Hazards/?hlyr=tsunami>, accessed September 26, 2019.

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these measures and compliance with the C.3 requirements of the MRP would ensure that post-development impacts to water quality would be *less than significant*.

The project must comply with CMC Chapter 9.18, Storm Water Pollution Prevention and Watershed Protection, described above in Section 3.1.4.2, Zoning, which is intended to provide regulations and give legal effect to certain requirements of the MRP permit issued to the City. CMC Chapter 9.18 also ensures ongoing compliance with the most recent version of the MRP regarding municipal storm water and urban runoff requirements and applies to all water entering the storm drain system generated on any private, public, developed, and undeveloped lands within the city. The CMC contains permit requirements for construction projects and new development or redevelopment projects to minimize the discharge of storm water runoff. The City of Cupertino also requires submittal and approval of a Stormwater Management Plan (SMP) prior to the start of construction (CMC Section 9.18.120, Stormwater Management Plan Required for Regulated Projects). The SMP must include the C.3 impervious surface form, LID feasibility worksheets, site design measures to limit impervious surfaces, numeric sizing criteria for stormwater treatment facilities, source control measures to limit the discharge of pollutants to the storm drain system, and an operation and maintenance (O&M) plan, including certification that the treatment measures will be maintained for perpetuity.

The project applicant must also install full trash capture devices to collect litter and debris from the project site, prior to connecting to the City's storm drain system., as per CMC Section 9.18.115, Trash Load Reductions to Storm Drain Collection System. and the provisions of the MRP. A list of approved devices is available from the Public Works Department. The trash capture devices must be located onsite and situated so that trash carried by stormwater from the site is collected onsite does not flow directly into the City's storm drain system. The trash capture devices must be properly designed and sized to ensure that the devices do not cause an obstruction to onsite stormwater flow. The trash capture devices must also be maintained, following manufacturer's recommendations, for the life of the project. Implementation of these measures will improve the water quality of stormwater entering the City's storm drain system.

The project site is not covered under the SWRCB's General Construction Permit, since it is less than one acre in size, and preparation of a Stormwater Pollution Prevention Plan (SWPPP) is not required. However, the project would be required to adhere to the City's Construction Best Management Practices (BMPs),¹¹⁵ and grading activities are typically limited to the dry season (April 15 to October 15). In addition, an interim erosion and sediment control plan, either integrated with the site map/grading plan or submitted separately, must be prepared that shows the location of all erosion control measures that will be implemented and a schedule for their maintenance and upkeep.

Adherence to applicable water quality regulations, implementation of best management practices during construction, preparation of an erosion and sediment control plan, and compliance with the CMC would ensure that water quality standards are not violated during construction. Implementation of stormwater site design, source control and stormwater treatment measures, compliance with C.3 provisions of the

¹¹⁵ City of Cupertino, 2020. Construction Best Management Practices, accessed at <https://www.cupertino.org/home/showdocument?id=12309> on January 10, 2021.

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MRP and the City of Cupertino's stormwater requirements, and preparation of a SMP that describes the installation and operation and maintenance requirements for the bioretention area would result in less-than-significant impacts during operation of the project. Consequently, potential impacts associated with water quality during construction and operation would be *less than significant*.

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

The project would be connected to municipal water supplies and does not propose any groundwater wells on the property. Water is supplied to the site by the San José Water (SJW), which obtains its water from groundwater production (40 percent), purchases of surface water from the SCVWD (50 percent), and local mountain surface water (10 percent).¹¹⁶ The 2015 *Urban Water Management Plan* (UWMP) for the SCVWD, which includes the area for the project site, states that there is sufficient water for SCVWD customers for normal, single-dry, and multiple-dry years until 2025. The SCVWD identifies actions in the water shortage contingency plan in its UWMP that would ensure water demand is met through 2040.¹¹⁷ Therefore, the proposed project would not result in a depletion of groundwater supplies or result in a lowering of groundwater levels. Water supply is discussed in further detail in Section XVII, Utilities and Service Systems.

Groundwater beneath the site is greater than 20 feet bgs. Therefore, no construction dewatering would be required. As a result, development of the proposed project would not interfere with groundwater recharge that takes place in the McClellan Ponds recharge facility located within the City of Cupertino or the creeks and streams that run through the city. Therefore, the project would have a *less-than-significant* impact with respect to groundwater recharge.

The proposed project would be located on a site that is already developed and has about 2,757 square feet of existing impervious surfaces. The proposed project would increase the amount of impervious surfaces by 15,295 square feet. The proposed project would provide 9,454 square feet of pervious surfaces in the form of landscaping and one on-site bioretention area that would contribute to groundwater recharge. The use of site design features required by provision C.3 of the Municipal Regional Permit (MRP) and compliance with the City of Cupertino General Plan policies would reduce the impact of an increase in impervious surfaces on groundwater recharge. Therefore, the proposed project would have a *less-than-significant* impact on groundwater supplies and groundwater recharge, and no mitigation measures are needed.

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

¹¹⁶ San José Water, For Your Information, Education and Safety, Water Supply, https://www.sjwater.com/for_your_information/education_safety/water_supply, accessed on June 19, 2020.

¹¹⁷ Santa Clara Valley Water District, *2015 Urban Water Management Plan*, <https://www.valleywater.org/sites/default/files/SCVWD%202015%20UWMP-Report%20Only.pdf>, accessed on June 19, 2020.

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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?

The proposed project would take place within the boundaries of a developed site that is currently connected to the City's storm drain system. The proposed redevelopment does not involve the alteration of any natural drainage channels or any watercourse.

During construction, the project applicant would be subject to the City of Cupertino's construction BMPs and would be required to implement the erosion and sediment control measures specified in the Interim Erosion and Sediment Control Plan. Once constructed, the requirements for new development or redevelopment projects include source control measures and site design measures that address stormwater runoff and would reduce the potential for erosion or siltation. In addition, Provision C.3 of the MRP would require the project to implement on-site water treatment measures, such as the proposed bioretention area, to contain site runoff, using specific numeric sizing criteria based on volume and flow rate. The bioretention area will filter out sediment from the stormwater runoff.

The project would also be required to install stormwater trash capture devices that meet the requirements of the MRP. The trash capture devices must be located onsite and situated to ensure that trash carried by stormwater is collected onsite and does not flow directly into the City's storm drain system. With implementation of these erosion and sediment control measures, the proposed project would not result in significant increases in erosion and sedimentation and these impacts would be *less than significant*.

As described in the 2018 *Storm Drain Master Plan*, the project site is in an area where the storm drains are deficient in conveying water from a 10-year storm. The storm drains beneath Stevens Creek Boulevard and South Foothill Boulevard adjacent to the project site are currently under capacity and are designated as high priority for replacement.¹¹⁸ The proposed project would minimize the amount of stormwater runoff from the site with the installation of one bioretention area to temporarily detain peak stormwater flow rates. The bioretention area would collect runoff from roof areas, parking lots, and sidewalks for treatment and flow control prior to discharge into the on-site storm drain system, which connects to the City's storm drain system at the southwest corner of the intersection of South Foothill Boulevard and Stevens Creek Boulevard. The on-site stormwater treatment system would exceed the C.3 requirements of the MRP.

To ensure that runoff from the site would not exceed the capacity of the City's storm drain system, the project applicant will prepare a hydrology and hydraulics report for review and approval by the Director of Public Works prior to the start of construction. The hydrology study shall include pre- and post-development flow rates and the ability of the bioretention area to detain peak stormwater flows, reduce the amount of runoff from the site, and improve water quality. Additionally, the trash capture devices

¹¹⁸ Schaaf & Wheeler Consulting Civil Engineers. 2018. Cupertino Storm Drain Master Plan.

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would be designed and sized to ensure that if the devices cause an obstruction to onsite stormwater flow, onsite flooding will not occur.

With compliance with these regulatory requirements, preparation of a hydrology/hydraulics study, and installation of on-site stormwater treatment systems to mitigate peak flows, the proposed project would not contribute to flooding on-site or off-site and impacts would be *less than significant*.

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

The project site is not located near the San Francisco Bay or the Pacific Ocean and is not within a mapped tsunami inundation zone.¹¹⁹ There are no large bodies of water in the vicinity of the project site; therefore, there would be no potential for seiches to impact the project site. The project site is also outside of the Stevens Creek Reservoir dam inundation zone.¹²⁰ In addition, the site is in a relatively flat area of the city and is outside of the ABAG mapped zones for earthquake-induced landslides or debris flow source areas.¹²¹ Therefore, *no impact* would occur with respect to the release of pollutants from these types of natural hazard events.

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

The San Francisco Bay RWQCB monitors surface water quality through implementation of the Water Quality Control Plan for the San Francisco Bay Basin, also referred to as the “Basin Plan,” and designates beneficial uses for surface water bodies and groundwater within the Santa Clara Valley. The Basin Plan also contains water quality criteria for groundwater.

As required by storm water management guidelines discussed under criterion (a), best management practices and LID measures would be implemented across the project site during both construction and operation of the proposed project. These measures would control and prevent the release of sediment, debris, and other pollutants into the storm drain system. Implementation of best management practices during construction would be in accordance with the provisions of the NPDES construction permit requirements and the erosion and sediment control plan, which would minimize the release of sediment, soil, and other pollutants. Operational best management practices would be required to meet the C.3 provisions of the MRP. These best management practices, along with the proposed LID measures, include the incorporation of site design, source control, and treatment control measures to treat and control runoff before it enters the City’s storm drain system. The proposed treatment measures would include the use of one bioretention area to treat and detain runoff prior to discharge to the City’s storm drain system.

¹¹⁹ Association of Bay Area Governments, 2019. *Interactive Tsunami Inundation Map*.
<http://gis.abag.ca.gov/website/Hazards/?hlyr=tsunami> accessed on June 19, 2020.

¹²⁰ Santa Clara County Fire Department. 2012. Joint Stevens Creek Dam Failure Plan.
<https://www.cupertino.org/home/showdocument?id=7424> accessed on June 19, 2020.

¹²¹ Association of Bay Area Governments, 2019. Rainfall-Induced Landslides, Debris Flow Source Areas and Earthquake Induced Landslides. Accessed at <http://resilience.abag.ca.gov/landslides/> on June 19, 2020.

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The project site is within the Santa Clara Valley Groundwater Basin, which is covered under the 2016 Groundwater Management Plan.¹²² The Department of Water Resources characterizes this basin as a medium priority subbasin and therefore is subject to the requirements to develop and implement a Groundwater Sustainability Plan. The Groundwater Management Plan states that the total recharge to the Santa Clara and Llagas subbasins exceeds the total outflow via groundwater pumping and subsurface outflow, with excess groundwater storage of 1,500 acre-feet. This indicates that the subbasins are in long-term balance and meet the criteria for sustainable groundwater conditions. Although SJW does use groundwater as a source of water supply, the Water Supply Evaluation prepared for the General Plan EIR included new development on the project site at a greater number of units than proposed under the project (19 new units as compared to project’s 9 new units plus one accessory unit); therefore, water and groundwater supply impacts were adequately addressed in the General Plan EIR.

As discussed in criterion (b), the project would be connected to municipal water supplies and does not propose any groundwater wells on the property. The depth of groundwater is estimated to be greater than 20 feet below ground surface and the proposed project would not disturb groundwater during construction.

With implementation of these best management practices and LID measures in accordance with City and MRP requirements, the proposed project would not conflict with or obstruct the implementation of the Basin Plan or the Groundwater Management Plan, and potential impacts on water quality would be *less than significant*.

X. LAND USE AND PLANNING

Would the proposed project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a)	Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

GENERAL PLAN EIR

Chapter 4.9, Land Use and Planning, of the General Plan EIR, addressed impacts to land use and planning associated with buildout of the General Plan including the redevelopment of the project site with up to 19 dwelling units and a 30-foot height maximum at a program level. Impacts were determined to be less than significant, and no mitigation measures were required. The following is a summary of Section, 4.9.1.2, Existing Conditions, of Chapter 4.9.

¹²² Santa Clara Valley Water District, 2016 *Groundwater Management Plan*, Santa Clara and Llagas Subbasins.

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EXISTING CONDITIONS

The General Plan land use designation for the project site is Commercial/Residential and the project site is within the (P(CG)) Zoning District. A complete description of the Commercial/Residential land use designation and (P(CG)) Zoning District is presented in Section 3.1.4, Land Use Designation and Zoning, in Chapter 3 of this Initial Study.

DISCUSSION

a) *Would the project physically divide an established community?*

Because the development of the proposed project would occur on a site that is currently developed, would retain existing roadway patterns, and would not introduce any new major roadways or other physical features through existing residential neighborhoods or other communities that would create new barriers, the project would not physically divide an established community. Therefore, *no impact* would occur.

b) *Would the project cause a significant environmental impact due to a conflict with any applicable land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

The proposed project does not include a request for any modification to the existing General Plan land use designation. However, the project does include a request to modify the existing (P(CG)) Zoning District to General Commercial with Residential (CG, Res) Zoning District to allow residential uses on the project site. This request would make the Zoning District for the project site more consistent with the Commercial/Residential General Plan land use designation, which allows for residential uses. The proposed project (at 13.2 units per acres and with a building height of 29 feet and 10.5 inches at the highest point) is within the development parameters evaluated in the General Plan EIR (15 dwelling units per acre and a maximum building height of 30 feet tall) and the General Plan EIR found land use impacts associated with only residential use of the site to be less than significant. The proposed residential development would be consistent with the types of development allowed in the Commercial/Residential land use designations. Accordingly, the proposed project would also result in *less-than-significant* impacts with regard to conflicts with land use plans.

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XI. NOISE

Would the proposed project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

GENERAL PLAN EIR

Chapter 4.10, Noise, of the General Plan EIR addressed the impacts from noise and vibration associated with buildout of the General Plan including the redevelopment of the project site with up to 19 dwelling units and a 30-foot height maximum at a program level. Noise impacts were found to be significant and unavoidable in the General Plan EIR because the project-specific details for future development were not available. No feasible mitigation measures were identified to reduce noise impacts to a less-than-significant level and project-specific noise evaluation is required to assess noise impacts from the proposed redevelopment of the site.

This section includes a summary of Section, 4.10.1.3, Existing Conditions, of Chapter 4.10, and analyzes the noise and vibration that would be generated by the construction and operation of the proposed project at a project level.

EXISTING CONDITIONS

Noise is defined as unwanted sound and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the federal government, State of California, and City of Cupertino have established criteria to protect public health and safety and to prevent disruption of certain human activities. Noise terminology and fundamentals, pertinent existing local regulations, and construction noise modeling can be found in Appendix F, Noise Data, of this Initial Study.

Residences are located directly south, adjacent to the project site, across Stevens Creek Boulevard to the north, across South Foothill Boulevard to the east, and across Camino Vista Drive to the west. The nearest sensitive receptors to the project site are the adjacent single-family residences to the south. The principal

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noise source in the project area is roadway traffic on Stevens Creek Boulevard and South Foothill Boulevard.

The nearest public airports are San José International Airport, approximately 8 miles to the northeast, and Palo Alto Airport, approximately 9.5 miles to the north. The nearest heliports are McCandless Towers Heliport, approximately 7 miles to the northeast, and County Medical Center Heliport, approximately 7.5 miles to the east. The nearest private (military/corporate) airport is Moffett Federal Airfield, approximately 7 miles to the north. The project site is not located within the boundaries of any airport land use plan.

The noise environment in the project area is approximately 60 to 70+ dBA CNEL based on the noise contour map in the General Plan Health and Safety Element (Attachment D. Community Noise), with ambient noise levels decreasing at further distance from Stevens Creek Boulevard and South Foothill Boulevard. It is important to note that with the Supreme Court decision regarding the assessment of the environment's impacts on projects (*California Building Industry Association (CBIA) v. Bay Area Air Quality Management District (BAAQMD)*, 62 Cal. 4th 369 (No. S 213478) issued December 17, 2015) is generally no longer the purview of the CEQA process to evaluate the impact of existing environmental conditions on any given project. As a result, while the noise from existing sources is taken into account as part of the baseline, the direct effects of existing outside (exterior) noise from nearby noise sources as it relates to land use compatibility of the project is no longer a required topic for impact evaluation under CEQA. No determination of significance is required or made in this Initial Study.

DISCUSSION

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

A significant stationary-source impact would occur if the activities or equipment at the proposed project site produce noise levels at nearby sensitive receptors in excess of local standards.

With respect to permanent traffic-related increases, noise impacts can be placed into three categories. The first is "audible" impacts, which refer to increases in noise level that are perceptible to humans. Audible increases in general community noise levels generally refer to a change of 3 decibels (dBA) or more since this level has been found to be the threshold of perceptibility in exterior environments. The second category, "potentially audible" impacts, refers to a change in noise level between 1 and 3 dBA. The last category includes changes in noise level of less than 1 dBA that are typically "inaudible" to the human ear except under quiet conditions in controlled environments. Only "audible" changes in noise levels at sensitive receptor locations (i.e., 3 dBA or more) are considered potentially significant. Note that a doubling of traffic flows (i.e., 10,000 vehicles per day to 20,000 per day) would be needed to create a 3 dBA increase in traffic-generated noise levels. For the purposes of this analysis, an increase of 3 dBA CNEL is used as the threshold for a substantial increase.

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Project-Related Construction Noise

In terms of the proposed construction activities, the demolition, site preparation, grading, and paving activities are expected to generate the highest noise levels, since they involve the largest and most powerful equipment. Construction equipment for the proposed project would include equipment such as concrete saws, excavators, dozers, tractors, loaders, backhoes, cranes, forklifts, pavers, and rollers. Two types of short-term noise impacts could occur during construction: (1) mobile-source noise from the transport of workers, material deliveries, and debris/soil hauling and (2) stationary-source noise from use of construction equipment. Construction activities are anticipated to last approximately 10 months. The following discusses construction noise impacts to the off-site sensitive receptors.

Construction Vehicles

The transport of workers and materials to and from the construction site would incrementally increase noise levels along local roadways. Individual construction vehicle pass-bys may create momentary noise levels of up to approximately 85 dBA (L_{max}) at 50 feet from the vehicle, but these occurrences would generally be infrequent and short lived. Therefore, noise impacts from construction-related truck traffic would be *less than significant* at noise-sensitive receptors along the construction routes and no mitigation measures would be required.

Construction Equipment

According to CMC Section 10.48.053, construction is allowed during “daytime hours” (7:00 a.m. to 8:00 p.m. Monday through Friday, and 9:00 a.m. to 6:00 p.m. on weekends) and exempt from the City’s daytime and nighttime maximum noise level limits, provided that such construction activities do not exceed 80 dBA at the nearest affected property or individual equipment items do not exceed 87 dBA at 25 feet. Only one of these two criteria must be met. In addition, construction is prohibited on holidays and within 750 feet of residential areas on weekends, holidays, and during the nighttime, unless a special exception has been granted, and during nighttime hours unless it meets the nighttime noise level standards. Even with these restrictions, project construction would temporarily increase ambient noise. However, noise levels would subside again after construction is completed.

Noise generated by on-site construction equipment is based on the type of equipment used, its location relative to sensitive receptors, and the timing and duration of noise-generating activities. Each stage of construction involves different kinds of equipment and has distinct noise characteristics. Noise levels from construction activities are typically dominated by the loudest several pieces of equipment. The dominant equipment noise source is typically the engine, although work-piece noise (such as dropping of materials) can also be noticeable.

The noise produced at each construction stage is determined by combining the contributions from each piece of equipment used at a given time, while accounting for the on-going time-variations of noise

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emissions (commonly referred to as the usage factor) to determine the L₁₀ and L_{eq} noise levels.¹²³ Heavy equipment, such as a bulldozer, can have maximum, short-duration noise levels of up to 85 dBA at 50 feet. However, overall noise emissions vary considerably, depending on what specific activity is being performed at any given moment. Noise attenuation due to distance, the number and type of equipment, and the load and power requirements to accomplish tasks at each construction phase would result in different noise levels from construction activities at a given receptor. Since noise from construction equipment is intermittent and diminishes at a rate of at least 6 dBA per doubling of distance (conservatively ignoring other attenuation effects from air absorption, ground effects, and/or shielding/scattering effects), the average noise levels at noise-sensitive receptors could vary considerably, because mobile construction equipment would move around the site with different loads and power requirements. Noise levels from project-related construction activities were calculated from the simultaneous use of all applicable construction equipment at spatially averaged distances (i.e., from the acoustical center of the general construction site or phase) to the property line of the nearest receptors. Although construction may occur across the entire phase area, the area around the center of construction activities best represents the potential construction-related noise levels from multiple pieces of equipment at the various sensitive receptors.

The expected construction equipment mix was estimated and categorized by construction activity and the three loudest equipment per activity phase using the Federal Highway Administration Roadway Construction Noise Model (RCNM). The associated, aggregate noise levels, grouped by construction activity, are summarized in Tables 4-6 and 4-7.

TABLE 4-6 PROJECT-RELATED CONSTRUCTION NOISE, L₁₀ NOISE LEVELS, DBA

Construction Activity Phase	Noise Level at the Nearest Receptors			
	Residences (south) ^a	Residences (north) ^b	Residences (southeast) ^c	Residences (west) ^d
Demolition	85.4	79.7	76.9	74.3
Site Preparation	85.1	79.4	76.6	74.0
Grading	84.7	79.0	76.2	73.6
Building Construction	82.6	76.9	74.1	71.5
Paving	87.8	78.3	76.9	74.2

Notes:

a. Approximately 70 feet from the center of construction for demolition, site preparation, grading, and building construction; and approximately 50 feet from the center of paving activities.

b. Approximately 135 feet from the center of construction for demolition, site preparation, grading, and building construction; and approximately 150 feet from the center of paving activities.

c. Approximately 185 feet from the center of construction for demolition, site preparation, grading, and building construction; and approximately 175 feet from the center of paving activities.

d. Approximately 250 feet from the center of construction for demolition, site preparation, grading, and building construction; approximately 240 feet from the center of paving activities.

Source: PlaceWorks, 2020.

¹²³ The L_{eq} is the energy average noise levels and the L₁₀ is the noise level exceeded 10 percent of the time. The CMC defines “sound level” as the “maximum continuous or repeated peak value,” which is interpreted to be the L₁₀ for the purposes of this analysis. L_{eq} noise levels are provided for informational purposes.

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TABLE 4-7 PROJECT-RELATED CONSTRUCTION NOISE, ENERGY-AVERAGE (L_{eq}) NOISE LEVELS, DBA

Construction Activity Phase	Noise Level at Nearest Receptors			
	Residences (south) ^a	Residences (north) ^b	Residences (southeast) ^c	Residences (west) ^d
Demolition	82.4	76.7	73.9	71.3
Site Preparation	82.1	76.4	73.6	71.0
Grading	81.7	76.0	73.2	70.6
Building Construction	79.6	73.9	71.1	68.5
Paving	84.8	75.3	73.9	71.2

Notes:

a. Approximately 70 feet from the center of construction for demolition, site preparation, grading, and building construction; and approximately 50 feet from the center of paving activities.

b. Approximately 135 feet from the center of construction for demolition, site preparation, grading, and building construction; and approximately 150 feet from the center of paving activities.

c. Approximately 185 feet from the center of construction for demolition, site preparation, grading, and building construction; and approximately 175 feet from the center of paving activities.

d. Approximately 250 feet from the center of construction for demolition, site preparation, grading, and building construction; and approximately 240 feet from the center of paving activities.

Source: PlaceWorks, 2020.

As shown in Tables 4-6 and 4-7, construction activities would increase noise levels at and near the proposed project. Construction-related noise levels would range from approximately 82.6 to 87.8 dBA L_{10} and 79.6 to 84.8 dBA L_{eq} at the nearest residences to the south during construction, which would be greater than the 80 dBA limit in CMC Section 10.48.053. Construction noise levels at receptors further away are estimated to be less than 80 dBA. Construction noise levels would create a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of the allowable noise limit. This would be considered a potentially significant impact. With implementation of Mitigation Measure NOISE-1, which is not required in the General Plan EIR, project-related construction noise impacts to the nearby residences would be *less than significant*.

Impact NOISE-1: The proposed project could result in the generation of a substantial temporary increase in ambient noise levels in the vicinity of the project site during the construction phase that would be in excess of standards established in the City of Cupertino Municipal Code.

Mitigation Measure NOISE-1: The following shall be incorporated in all activity phases and construction plans, as required by the Cupertino Municipal Code (CMC). Construction activities shall take place only during daytime hours of 7:00 a.m. and 8:00 p.m. on weekdays and due to the close proximity of the adjacent residential land use to the south, construction may occur on the weekends, holidays or nighttime only if a special exception has been granted by the City. In addition, the construction crew shall adhere to the following best management practices:

- At least 90 days prior to the start of any construction, demolition, or grading activities, all off-site businesses and residents within 300 feet of the project site will be notified of the planned activities. The notification will include a brief description of the project, the activities that would occur, the hours when activity would occur, and the construction period's overall duration. The notification should include the telephone numbers of the contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint.

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- The project applicant and contractors shall prepare and submit a Construction Noise Control Plan to the City's Building Department and Code Enforcement for review and approval prior to issuance of any grading, demolition, and/or building permits. The Construction Noise Plan shall demonstrate compliance with the 80-dBA limit in the CMC. The details of the Construction Noise Control Plan, including those details listed herein, shall be included as part of the permit application drawing set and as part of the construction drawing set, shall be implemented by the on-site Construction Manager, and shall include, but not be limited to, the following available controls to comply with the 80 dBA performance standard:
 - At least 10 days prior to the start of construction activities, a sign will be posted at the entrance(s) to the job site, clearly visible to the public, which includes permitted construction days and hours, as well as the telephone numbers of the City's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint. If the authorized contractor's representative receives a complaint, he/she will investigate, take appropriate corrective action, and report the action to the City.
 - During the entire active construction period, equipment and trucks used for project construction will utilize the best available noise control techniques (e.g., improved mufflers, equipment re-design, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds), wherever feasible.
 - Include noise control requirements for equipment and tools, including concrete saws, to the maximum extent feasible. Such requirements could include, but are not limited to, erecting temporary plywood noise barriers between construction areas and nearby sensitive receptors; performing work in a manner that minimizes noise; and undertaking the noisiest activities during times of least disturbance to nearby sensitive receptors.
 - During the entire active construction period, stationary noise sources will be located as far from sensitive receptors as possible, and they will be muffled and enclosed within temporary sheds, or insulation barriers or other measures will be incorporated to the extent feasible.
 - Select haul routes that avoid the greatest amount of sensitive use areas and submit to the City of Cupertino Public Works Department for approval prior to the start of the construction phase.
 - Signs will be posted at the job site entrance(s), within the on-site construction zones, and along queueing lanes (if any) to reinforce the prohibition of unnecessary engine idling. All other equipment will be turned off if not in use for more than 5 minutes.
 - During the entire active construction period and to the extent feasible, the use of noise producing signals, including horns, whistles, alarms, and bells will be for safety warning purposes only. The construction manager will use smart back-up alarms, which automatically adjust the alarm level based on the background noise level or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and law.
 - Prior to start of construction, erect a temporary noise barrier/curtain between the construction zone and adjacent residences along the boundary (see Figure 4-1, Temporary Noise Barrier Locations, of the Initial Study). The temporary sound barrier shall have a minimum height of 12 feet and be free of gaps and holes. The barrier can be (a) a ¾-inch-thick plywood wall OR (b) a hanging blanket/curtain with a surface density of at least 2 pounds per square foot.

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Source: Dahlin, 2020.



Temporary Noise Barrier

Figure 4-1
Temporary Noise Barrier Location

Project-Related Operational Noise

Stationary-Source Noise

Noise from sources such as people talking and using outdoor common areas, or property maintenance may contribute to the total noise environment within the direct vicinity of the proposed project site. However, these types of noise are commonly associated with uses that already exist on the project site and surrounding uses. Noise associated with landscape maintenance activities is exempted from the provisions of the CMC, provided said activities take place between the hours of 8:00 a.m. to 8:00 p.m. on weekdays, and 9:00 a.m. to 6:00 p.m. on weekends and holidays. Therefore, impacts from occasional property maintenance activities associated with the proposed project would be *less than significant*.

The 1,475 square foot common space area is approximately 20 feet, as measured from the center, from the adjacent single-family homes to the south. A typical conversation between two people 3 feet apart is 60 dBA.¹²⁴ At a distance of 20 feet, noise levels would attenuate to approximately 44 dBA. Noise from typical use of the open space area would result in noise levels less than the CMC, Section 10.48.040 50 dBA limit. Therefore, impacts from the proposed common outdoor use area would be *less than significant*.

The nine single-family attached residential units are anticipated to have mechanical HVAC equipment on the ground next to units and a common open space area on the south portion of the project site. The exterior mechanical and HVAC equipment associated with the proposed use are expected to be similar to the existing commercial uses or quieter. Because mechanical specifications for these proposed units are not yet available, it is conservatively assumed that noise from these units would be up to 75 dBA L_{eq} at a distance of 3 feet and that they could be located within approximately 30 feet from the nearest residential property lines to the south. At this distance, the sound pressure level associated with a common HVAC unit would be approximately 55 dBA. Therefore, the noise level associated with HVAC in the backyards of the future residential units could exceed the CMC Section 10.48.040 standards, which limit nighttime noise to 50 dBA at nearby residential uses. Therefore, this impact would be potentially significant. With implementation of Mitigation Measure NOISE-2, project-related operational noise impacts would be *less than significant*.

Impact NOISE-2: The proposed project could result in the generation of a substantial permanent increase in ambient noise levels in the vicinity of the project during the operation phase that could be in excess of standards established in the City of Cupertino Municipal Code.

Mitigation Measure NOISE-2: Mechanical equipment shall be selected and designed to reduce impacts on surrounding uses to meet the Cupertino Municipal Code noise limits of 60 dBA and 50 dBA at residential uses during daytime and nighttime, respectively, and 65 dBA and 55 dBA at non-residential sensitive uses during daytime and nighttime, respectively. A qualified acoustical consultant

¹²⁴ Engineering Toolbox, 2005. Voice Level at Distance. Accessed June 19, 2020.
https://www.engineeringtoolbox.com/voice-level-d_938.html

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shall be retained to review mechanical noise as these systems are selected to determine specific noise reduction measures necessary to reduce noise to comply with the City’s noise level requirements. Mechanical equipment shall be selected and designed to reduce impacts on surrounding uses to meet the City’s noise level requirements. Noise reduction measures could include, but are not limited to:

- Selection of equipment that emits low noise levels;
- Installation of noise dampening techniques, such as enclosures and parapet walls, to block the line-of-sight between the noise source and the nearest receptors; or
- Locating equipment in less noise-sensitive areas, where feasible.

Mobile-Source Noise

The proposed project is anticipated to result in a net decrease in traffic trips when compared to existing traffic trips associated with the existing commercial building. The trip generation associated with the previous use is estimated to be 1,829 gross daily trips. The proposed project is estimated to result in 85 gross daily trips, which is a net decrease of 1,744 daily trips. Therefore, since the project would result in a net decrease in trips, no increase from traffic noise would occur and impacts would be *less than significant*.

b) *Would the project expose people to or generate excessive groundborne vibration or ground borne noise levels?*

Operational Vibration

Operation of the proposed project would not generate substantial levels of vibration because there are no known sources of vibrational energy associated with the proposed project, such as industrial machinery or railroad operations. Thus, vibration effects or impacts from operations sources would be *less than significant* and no mitigation measures would be required.

Construction Vibration

Construction activities generate varying degrees of ground vibration, depending on the construction procedures, construction equipment used, and proximity to vibration-sensitive uses. The generation of vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight damage at the highest levels. Table 4-8 lists reference vibration levels for different types of commonly used construction equipment.

TABLE 4-8 CONSTRUCTION EQUIPMENT VIBRATION LEVELS

Equipment	Approximate PPV Velocity at 25 Feet (in/sec)
Vibratory Roller	0.210
Large Bulldozer	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozer	0.003

Notes: PPV = Peak Particle Velocity in inches per second

Source: Federal Transit Administration (FTA), *Transit Noise and Vibration Impact Assessment*, 2018.

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Proposed construction would include demolition and grading, which would include equipment such as loaders and bulldozers. Paving activities may also generate construction vibration and would include equipment such as pavers and rollers. Using the vibration source level of construction equipment provided in Table 4-8 and the construction vibration assessment guidelines published by the Federal Transit Administration's (FTA), the vibration impacts associated with the proposed project were assessed in terms of potential architectural damage due to vibration.

The City does not have specific, vibration-related standards. Thus, project-related construction vibration was evaluated for its potential to cause minor architectural damage based on FTA's architectural damage criteria. The term 'architectural damage' is defined as minor surface cracks (in plaster, drywall, tile, or stucco) or the sticking of doors and windows. This is below the severity of 'structural damage' which entails the compromising of structural soundness or the threatening the basic integrity of the building shell. Building damage is typically not a concern for most projects, with the occasional exception of blasting and pile driving during construction. No blasting, pile driving, or hard rock ripping/crushing activities would be required during project construction. Since vibration-induced architectural damage could result from an instantaneous vibration event, distances are measured from the receptor facade to the nearest location of potential construction activities.

A peak particle velocity (PPV) of 0.2 inches/second (in/sec) is used as the threshold for "non-engineered timber and masonry buildings" (which would apply to the surrounding structures).¹²⁵ Proposed driveways would be paved within 25 feet of nearby residential structures to the south and, therefore, could exceed the 0.2 in/sec PPV threshold if vibratory rollers are used. If grading equipment such as a large dozer operates within approximately 15 feet of a nearby residential structure, the 0.2 in/sec PPV threshold may be exceeded. This is considered a potentially significant impact. With implementation of Mitigation Measure NOISE-3, project-related construction vibration impacts to the adjacent residences to the south would be *less than significant*.

Impact NOISE-3: The proposed project could result in the generation of excessive groundborne vibration in the vicinity of the project during the construction phase that would be in excess of established thresholds.

Mitigation Measure NOISE-3: If paving activity during construction is required within 25 feet of nearby residential structures, the use of a static roller in lieu of a vibratory roller shall be employed. Grading and earthwork activities within 15 feet of adjacent residential structures shall be conducted with off-road equipment that is limited to 100 horsepower or less. This mitigation measure shall be identified on the permit application drawing set and as part of the construction drawing set, and shall be implemented by the on-site Construction Manager.

¹²⁵ Federal Transit Administration (FTA), *Transit Noise and Vibration Impact Assessment*, 2018.

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

As discussed above, the proposed project is not located within an airport land use plan or within 2 miles of an airport. The project would not expose people residing or working in the project area to excessive aircraft noise levels. There would be *no impact*.

XII. POPULATION AND HOUSING

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Induce substantial unexpected population growth or growth for which inadequate planning has occurred, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

GENERAL PLAN EIR

Chapter 4.11, Population and Housing, of the General Plan EIR, addressed the impacts to population growth and displacement associated with buildout of the General Plan including the redevelopment of the project site with up to 19 dwelling units and a 30-foot height maximum at a program level. Impacts were determined to be less than significant, and no mitigation measures were required.

As discussed in the General Plan EIR, the General Plan would introduce approximately 12,998 new residents¹²⁶ and 16,855 new jobs¹²⁷ to Cupertino. These new residents and jobs combined with existing conditions would result in 71,200 residents, 24,040 households, and 33,110 jobs at the 2040 buildout horizon.¹²⁸ The proposed project is anticipated to be complete in 2022. As discussed in the General Plan EIR, according to the Association of Bay Area Governments (ABAG), Cupertino is projected to have 62,500 residents and 30,110 jobs by 2020 and 66,800 residents and 31,370 jobs by 2030.

¹²⁶ Population is calculated by 4,421 units times 2.94 persons per household, which is the ABAG 2040 estimated generation rate.

¹²⁷ Jobs are calculated applying the City's generation rates as follows; 4,040,231 square feet of office allocation divided by 300 square feet equals 13,467 jobs; 1,343,679 square feet of commercial allocation divided by 450 square feet equals 2,986 jobs; and 1,339 hotel rooms at .3 jobs per room equals 402 jobs for a total of 16,855 jobs.

¹²⁸ City of Cupertino, 2015. Cupertino General Plan Community Vision 2015-2040, Housing Element, Table HE-2.

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EXISTING CONDITIONS

The site is currently developed with a commercial use serving as a convenience store. Applying a generation rate of 1 job to 450 square feet for commercial land uses to the existing 2,400 square feet of commercial building, the existing business is capable of generating approximately 6 jobs.¹²⁹

DISCUSSION

a) *Would the project induce substantial unexpected population growth or growth for which inadequate planning has occurred, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

The proposed project would construct nine single-family residential units, and one accessory dwelling unit, which would not result in any additional new population growth or employment growth beyond what was accounted for in the General Plan EIR. Table 4-11 in Section XIX, Mandatory Findings of Significance, shows the relationship to the proposed project to the other reasonably foreseeable projects in Cupertino and illustrates that the proposed when combined with the other reasonably foreseeable projects in Cupertino would not exceed the maximum buildout potential evaluated in the General Plan EIR.

The future homeowner's association, required by the City, could employ landscape and maintenance personnel for the common areas of the development, which would likely come from Cupertino and surrounding Bay Area communities. As described above, the existing commercial building is capable of supporting approximately 6 employees. Construction of the proposed project would result in a decrease of 6 permanent employees on the project site.

The proposed project would directly contribute to housing through the construction of residential units. Based on a projected average household size of 2.87 persons for single-family units and 1.5 persons for accessory dwelling units,^{130,131} it is assumed the proposed project would introduce 28 new residents¹³² to the project site, which would increase the number of residents on the site from zero residents to approximately 28 residents at project buildout in 2022.

The 28 residents in combination with other future projects would not increase the overall City buildout beyond the year 2040 projections (see Table 4-11, Reasonably Foreseeable Development Projects in Cupertino, in Section XIX, Mandatory Findings of Significance). Therefore, the proposed project is well within the population projections considered in the General Plan EIR and adopted General Plan Housing

¹²⁹ 2,400 square feet divided by 450 square feet equals 5.3 employees.

¹³⁰ This analysis is based on the Association of Bay Area Governments (ABAG) 2019 projections of the average household size of 2.87 persons for Cupertino in 2020. This is the standard approach for population and housing analysis in Cupertino.

¹³¹ Based on a study completed by the Center for Community Innovation at University of California Berkeley in five Bay Area communities, accessory dwelling units have an average household size of 1.5 persons per unit.

¹³² (9 new units multiplied by 2.87 persons per unit equals 25.83 new residents) plus (1 ADU multiplied by 1.5 equals 1.5 new residents) equals 27.33 new residents.

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Element. The growth occurring as a result of the project would be limited to the project site, and the project does not include infrastructure to allow indirect off-site development.

As discussed in Section X, Land Use and Planning, the project is consistent with the General Plan land use designation for the site (Commercial/Residential), but would require a Zoning Map amendment rezoning the site from P(CG) to P(CG, Res) to make the zoning consistent with the General Plan land use designation. Accordingly, there would be *no impacts* related to substantial unexpected population growth or growth for which inadequate planning has occurred.

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

The project site is currently used for commercial uses and does not include any existing housing on site. The project proposes the construction of nine single-family residential units on-site, which would not necessitate the construction of housing elsewhere. Therefore, the project would have *no impact* associated with the displacement of substantial numbers of housing.

XIII. PUBLIC SERVICES

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Result in substantial adverse physical impacts associated with the provision of 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:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Libraries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

GENERAL PLAN EIR

Chapter 4.12, Public Services and Recreation, of the General Plan EIR, addressed the impacts to public service providers and public parks associated with buildout of the General Plan including the redevelopment of the project site with up to 19 dwelling units and a 30-foot height maximum at a

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program level. The General Plan EIR estimated that and 56 new residents¹³³ could occupy the project site by 2040. Impacts were determined to be less than significant, and no mitigation measures were required.

EXISTING CONDITIONS

The public service providers for the project site are as follows:

- The City of Cupertino contracts with the Santa Clara County Fire District (SCCFD) for fire protection, emergency, medical, and hazardous material services.
- The City of Cupertino contracts with the Santa Clara County Sheriff's Office (Sheriff's Office) and West Valley Patrol Division for police protection services.
- The project site is within the Fremont Union High School District (FUHSD). The project site is in attendance area of the Monta Vista High School, which is located approximately 1 mile to the southeast of the project site.¹³⁴
- The project site is within the Cupertino Union School District (CUSD) which includes all elementary and middle schools in the city. The project site is in attendance area of the Stevens Creek Elementary School, located approximately 1 mile to the northeast of the project site, and John F. Kennedy Middle School, located approximately 1 mile to the southeast of the project site.¹³⁵
- The Santa Clara County Library District governs and administers seven community libraries, one branch library, two bookmobiles, the Home Service Library, and the online library for all library users. The closest library to the project site is the Cupertino Library located at 10800 Torre Avenue in Cupertino.

A discussion of the existing conditions for each of these service providers is included in Chapter 4.12 of the General Plan EIR.

DISCUSSION

- a) *Would the project result in substantial adverse physical impacts associated with the provision of 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: fire protection, police protection, schools, and libraries?*

The primary purpose of the public services impact analysis is to examine the impacts associated with physical improvements to public service facilities required to maintain acceptable service ratios, response

¹³³ 19 units times 2.94 persons per household for Cupertino in 2040 equals 55.86 persons. Note that the 2.94 persons per household rate for year 2040 was applied in the General Plan EIR. Applying the ABAG rates for population estimates is the standard approach for population and housing analysis in Cupertino.

¹³⁴ Fremont Union High School District, District Boundary Maps, Monta Vista High School Attendance Boundary, <https://www.fuhsd.org/about-us/general-information/district-boundry-maps>, accessed June 18, 2020.

¹³⁵ Cupertino Union School District, <https://www.cusdk8.org/domain/96>, accessed June 18, 2020.

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times or other performance objectives. Public service facilities need improvements (i.e., construction, renovation, or expansion) as demand for services increase. Increased demand is typically driven by increases in population. The proposed project would have a significant environmental impact if it would exceed the ability of public service providers to adequately serve residents, thereby requiring construction of new facilities or modification of existing facilities.

As discussed in Section XII, Population and Housing, above, the proposed project would result in a net increase of nine single-family dwelling units and approximately 28 residents, which is the approximate number of dwelling units and residents anticipated and discussed in the General Plan EIR. As described in the General Plan EIR, the proposed project would include the payment of residential development impact fees, prior to issuance of construction permits, that provide support to public services to offset the project’s fair share of impacts to public service providers. Because impacts to public service providers were determined to be less than significant in the General Plan EIR and the proposed project would result in a similar number of residents and residential density considered in the General Plan EIR, impacts to public service providers as a result of the proposed project would also be *less than significant* and no mitigation measures would be required.

XIV. PARKS AND RECREATION

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial adverse physical impacts associated with the provision of new or physically altered park and recreational facilities, or result in the need for new or physically altered park and recreational facilities, the construction of which could cause significant environmental impacts?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

GENERAL PLAN EIR

Chapter 4.12, Public Services and Recreation, of the General Plan EIR, addressed the impacts to public service providers and public parks associated with buildout of the General Plan including the redevelopment of the project site with up to 19 dwelling units and 56 new residents¹³⁶ on the site at a program level. Impacts were determined to be less than significant, and no mitigation measures were required.

EXISTING CONDITIONS

¹³⁶ 19 units times 2.94 persons per household for Cupertino in 2040 equals 55.86 persons. Note that the 2.94 persons per household rate for year 2040 was applied in the General Plan EIR. Applying the ABAG rates for population estimates is the standard approach for population and housing analysis in Cupertino.

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The City of Cupertino Recreation and Community Services and the Public Works Department Grounds Division is responsible for the operation and maintenance of the City's recreational facilities within the city boundary. The City of Cupertino owns or manages 224 acres of parks, trails, creek corridors, sports fields, and recreation facilities at 32 sites.¹³⁷ The City of Cupertino has an adopted parkland dedication standard of three acres of parkland for every 1,000 residents. According to the October 2019 *City of Cupertino Parks and Recreation System Master Plan* there is approximately 3.7 acres per 1,000 residents.¹³⁸

The parks nearest to the project site are Monta Vista Park, located approximately 0.2 miles to the south, Varian Park, located approximately 0.5 miles to the northeast; McClellan Ranch Preserve approximately 0.5 miles to the southeast, and Linda Vista Park approximately 1.7 miles to the southeast.

Regional park facilities operated by the Midpeninsula Regional Open Space District (MROSD) and the Santa Clara County Parks could be used by residents of the project site. The closest Midpeninsula Regional Open Space District parks to Cupertino are the Fremont Older, Picchetti Ranch, and Rancho San Antonia, which are located just west of the city boundaries. Santa Clara County Park facilities that serve Cupertino include Rancho San Antonio County Park located south of I-280 and west of Foothill Boulevard, and the Stevens Creek County Park. Both County Parks are roughly 1 mile from the project site.

DISCUSSION

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

As discussed in Chapter 3, Project Description, of this Initial Study, the project includes usable common open space available to residents. The proposed project includes 1,475 square feet of common open space located at the southeast corner of the site (0.04 acres).

As discussed in Section XIII, Population and Housing, above, the proposed project would result in nine new residential units, and one accessory dwelling unit, and 28 new residents at the project site, which is similar to, though less than what was considered in the General Plan EIR. The City's parkland-to-resident ratio is three acres of parkland for every 1,000 residents¹³⁹ Although the proposed project is not required to provide on-site parkland, the proposed project would include the payment of City-required impact fees to contribute to the City's parks and recreation fund. As discussed in the General Plan EIR, the proposed project would be required to comply with Cupertino Municipal Code Chapter 14.05, Park Maintenance Fee, Chapter 13.08, Park Land Dedication Fee, and Chapter 18.24, Dedications and Reservations, which require the payment of impact fees to maintain existing parks and recreation facilities and offset the project's fair share of impacts to parklands. Therefore, considering the proposed project's provision of 1,475 square feet (0.04 acres) of residential common open space, in conjunction with the collection of

¹³⁷ *City of Cupertino Parks and Recreation System Master Plan, October 2019 (adopted by the City Council on February 18, 2020), page 4.*

¹³⁸ *City of Cupertino Parks and Recreation System Master Plan, October 2019 (adopted by the City Council on February 18, 2020), page 51.*

¹³⁹ Cupertino General Plan Community Vision 2015 to 2040, Chapter 9: Recreation, Parks and Community Services Element, "Park Standards."

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impact fees that support the City's parks and recreation fund, the impacts to the City's recreational facilities would be *less than significant* and no mitigation measures would be required.

New residents of the project site would also be expected to use the regional park facilities operated by the MROSD and the Santa Clara County Parks. According to the MROSD's Budget and Action Plan for Fiscal Year 2019-20, a portion of the District's financing is provided by property taxes, which the project is required to pay. Because the project site would pay property taxes that fund the MROSD, the use of regional parks by the relatively small number of new residents of the proposed project would not result in substantial deterioration of those parks. The increase in usage that could potentially result from the proposed project is not likely to require the construction of new park facilities over and above the facilities already foreseen in the long-range planning completed for the regional parks in the vicinity of the project site. Therefore, a *less-than-significant* impact to regional parks would occur and no mitigation measures would be required.

b) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered park and recreational facilities, or result in the need for new or physically altered park and recreational facilities, the construction of which could cause significant environmental impacts?*

As discussed in criterion (a) above, the proposed project includes open space features and would be required to pay impact fees that support the City's parks and recreation fund, which would create less-than-significant impacts to the City's recreational facilities. The project does not propose the construction of a park or any physical alterations to an existing park or recreational facilities; however, the payment of impact fees would go toward supporting the City's park fund that could be applied to the construction or expansion of recreational facilities that could have an adverse physical effect on the environment. It is not known at what time or location such facilities would be required or what the exact nature of these facilities would be, so it cannot be determined what specific environmental impacts would occur from their construction and operation. Because the payment of impact fees is the City requirement to offset the project's fair share of impacts to parklands, the City would be responsible for any environmental review in accordance with CEQA, as necessary, which would ensure that any environmental impacts are disclosed and mitigated to the extent possible for any future City project related to the expansion of or improvement to a City recreational facility. Accordingly, impacts to park and recreational facilities as a result of the proposed project would be *less than significant* and no mitigation measures would be required.

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XV. TRANSPORTATION

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

GENERAL PLAN EIR

Chapter 4.13, Transportation and Circulation, of the General Plan EIR, addressed the impacts to the transportation network in the Cupertino area associated with buildout of the General Plan including the redevelopment of the project site with up to 19 dwelling units and a 30-foot height maximum at a program level. The General Plan EIR estimated that and 56 new residents¹⁴⁰ could occupy the project site by 2040. Impacts related to pedestrians, bicycles, transit, and emergency access were found to be less than significant and no mitigation measures were required. The General Plan EIR also found that the implementation of the General Plan would support and would not conflict with plans, programs and policies regarding bicycle or pedestrian facilities, or decrease the performance and safety of such facilities. As discussed in the General Plan EIR, the VMT per capita is projected to increase from 10.5 (2013) to 10.9 (2040).

METHODOLOGY

The following discussion of impacts is based in part on the transportation memo dated January 10, 2020, prepared for the proposed project by Hexagon Transportation Consultants, Inc, a transportation consulting firm, and reviewed and approved by the City of Cupertino Transportation Division. The study is included in Appendix G, Transportation Data, of this Initial Study.

EXISTING CONDITIONS

This section describes existing conditions in the immediate project site vicinity, including bicycle and pedestrian facilities, transit facilities, and VMT.

¹⁴⁰ 19 units times 2.94 persons per household for Cupertino in 2040 equals 55.86 persons. Note that the 2.94 persons per household rate for year 2040 was applied in the General Plan EIR. Applying the ABAG rates for population estimates is the standard approach for population and housing analysis in Cupertino.

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Pedestrian Facilities

Walkability is defined as the ability to travel easily and safely between various origins and destinations without having to rely on automobiles or other motorized travel. The ideal “walkable” community includes wide sidewalks, a mix of land uses such as residential, employment, and shopping opportunities, a limited number of conflict points with vehicle traffic, and easy access to transit facilities and services.

Pedestrian facilities consist of crosswalks, sidewalks, pedestrian signals, and off-street paths, which provide safe and convenient routes for pedestrians to access destinations such as institutions, businesses, public transportation, and recreation facilities.

The project site does not have adequate pedestrian access, because sidewalks are not present along Stevens Creek Boulevard, South Foothill Boulevard, or Camino Vista Drive within the project vicinity. The *2018 Cupertino Pedestrian Transportation Plan* (Pedestrian Plan) contains goals, policies, and specific recommendations to increase the walkability of Cupertino, including the Pedestrian Guidelines. The Pedestrian Plan is a companion document to the *City of Cupertino Bicycle Transportation Plan* (discussed below). It includes specific recommendations to improve pedestrian conditions. Consistent with the Pedestrian Plan and any other applicable recommendations, the project applicant would be required to contribute to implementing any recommended pedestrian improvements in the project area. The Pedestrian Plan does not include specific pedestrian improvements in the project area.

Bicycle Facilities

Bicycle facilities near the project site include Class II bike lanes, which are lanes on roadways designated for use by bicycles through striping, pavement legends, and signs. The Class II bike lanes are provided along both sides of South Foothill Boulevard and on the north side of Stevens Creek Boulevard along the length of the project site. There is not adequate signage for the bicyclists to maneuver without confusion along the length of the project site fronting Stevens Creek Boulevard. Overall, existing bicycle facilities provide adequate connectivity between the proposed project site and the adjacent residential neighborhoods.

In 2016, the City of Cupertino adopted the *Bicycle Transportation Plan* (Bike Plan), which is a citywide plan to encourage bicycling as a safe, practical, and healthy alternative to the use of the family car. The Bike Plan illustrates Cupertino’s current bicycle network, identifies gaps in the network, and proposes improvement projects to address the identified gaps.¹⁴¹ The Bike Plan includes standards for engineering, encouragement, education, and enforcement intended to improve the bicycle infrastructure in the city to enable people to bike to work and school, to utilize a bicycle to run errands, and to enjoy the health and environmental benefits that bicycling provides cyclists of every age. The Bike Plan recommends that the existing Class II Bike Lane on Stevens Creek Boulevard through the project area be improved to a Class IV Separated Bikeway and the existing Class II Bike Lane on South Foothill Boulevard through the project area be improved to a Class II Buffered Bike Lane.

¹⁴¹ City of Cupertino, 2016 Bicycle Transportation Plan, Figure 3-7: Bikeway projects.

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The VTA adopted the *Santa Clara Countywide Bicycle Plan (CBP)*. The CBP guides the development of major bicycle facilities in the County by identifying Cross County Bicycle Corridors and other bicycle projects of countywide or intercity significance. The CBP maps one on-street Cross-County Bicycle Corridor (CCBC) along South Foothill Boulevard in the project area. This CCBC is not a high-priority corridor.

Transit Facilities

VTA operates bus services in the City of Cupertino and in the project vicinity. The closest bus stop is located within a 15-minute walk (about 300 feet to the east) to and from the project site, providing access to local bus route 51. Bus route 51 provides transportation between Moffett Field/Ames Center and West Valley. Bus route 51 operates from 6:14 a.m. to 6:20 p.m. and has a peak headway of 50 minutes to 1 hour depending on the stop and direction.¹⁴²

Vehicles Miles Traveled

The project site currently contains a 2,400 square-foot commercial building, which generates an annual VMT of 1,387,000, or a daily VMT of 3,800.¹⁴³

Daily Trips

The current land use generates approximately 1,829 gross average daily trips.¹⁴⁴

DISCUSSION

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

Roadway Facilities

Operational Traffic

CEQA Guidelines Section 15064.3, which took effect on July 1, 2020, contains new requirements for evaluating a project's transportation impacts. As of July 1, 2020, impacts on auto delay or level of service are no longer be considered a significant impact under CEQA for land use projects.

VMT measures the overall effects of a project on the transportation system. VMT is the sum of all of the vehicle trips generated by a project multiplied by the lengths of their trips to and from the site on an

¹⁴² Operating hours consider earliest and latest stop at each bus lines closest stop to the project site. Headways are defined as the time interval between two transit vehicles traveling in the same direction over the same route.

¹⁴³ Hexagon Transportation Consultants. January 2020. Trip Generation Study for a Residential Project on Stevens Creek Boulevard in Cupertino, CA.

¹⁴⁴ Hexagon Transportation Consultants. January 2020. Trip Generation Study for a Residential Project on Stevens Creek Boulevard in Cupertino, CA.

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average weekday. A vehicle driven 1 mile is 1 VMT. Therefore, a project with a higher VMT would have a greater environmental effect than a project with a lower VMT.

The trip lengths vary by the land use type and the trip purpose. For example, a trip from a residence to a job may be longer than the trip from a residence to a neighborhood school. The VMT values stated below represent the full length of a given trip, and are not truncated at city, county, or region boundaries.

Many factors affect travel behavior and trip lengths such as density of land use, diversity of land uses, design of the transportation network, distance to high-quality transit, and demographics. Low-density development separated from other land uses and located in areas with poor access to transit generates more automobile travel and higher VMT compared to development located in urban areas with more access to transit.

As previously discussed, development of the project would not exceed the 15 du/ac currently permitted in the General Plan or the 35 du/ac maximum that was evaluated in the General Plan EIR. Therefore, the proposed project would not directly result in any additional new population growth or employment growth beyond what was analyzed in the General Plan EIR. As stated in Section II, Air Quality, and Section, VII, Greenhouse Gas Emissions, the proposed project is not considered a regionally significant project under CEQA Guidelines Section 15206 that would affect regional VMT and warrant intergovernmental review by ABAG and MTC.

The current land uses generate approximately 1,829 gross average daily weekday trips, 3,800 daily VMT, and 1,387,000 annual VMT. The proposed project would generate 85 gross daily weekday trips, 538 daily VMT, and 196,370 annual VMT. Therefore, the project would generate fewer daily trips and fewer VMT than existing conditions and would have a net benefit with respect to roadway facilities.

The Governor's Office of Planning and Research's (OPR) *Technical Advisory On Evaluating Transportation Impacts in CEQA*¹⁴⁵ and the City's White Paper *SB 743 Implementation Decisions for the City of Cupertino*¹⁴⁶ provide guidance on evaluating transportation impacts for small projects, such as the proposed project. According to these guiding documents a project that generates less than 110 daily trips may be assumed to cause a less-than-significant transportation impact.¹⁴⁷ This threshold is based on CEQA's categorical exemption¹⁴⁸ for existing facilities (Class 1), including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area.

¹⁴⁵ Governor's Office of Planning and Research, *Technical Advisory On Evaluating Transportation Impacts in CEQA*, December 2018.

¹⁴⁶ City of Cupertino White Paper *SB 743 Implementation Decisions for the City of Cupertino, Appendix E: Appendix E, Small Project Screening for SB 743*, February 2021.

¹⁴⁷ Governor's Office of Planning and Research, *Technical Advisory On Evaluating Transportation Impacts in CEQA*, December 2018, page 12 and City of Cupertino White Paper *SB 743 Implementation Decisions for the City of Cupertino, Appendix E: Small Project Screening for SB 743*, February 2021, pages 138 and 139.

¹⁴⁸ Section 15300 of the CEQA Guidelines, Categorical Exemptions, states that Section 21084 of the Public Resources Code requires these Guidelines to include a list of classes of projects which have been determined not to have a significant effect on the environment and which shall, therefore, be exempt from the provisions of CEQA.

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(CEQA Guidelines Section 15301(e)(2).) Typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110 to 124 average daily trips or 836 VMT per 10,000 square feet. A 20-unit housing project generates an equivalent number of VMT to a 10,000-square-foot non-residential.¹⁴⁹ Therefore, absent substantial evidence otherwise, OPR and the City determined that it is reasonable to conclude that the addition of 20 housing units or 10,000 square feet of non-residential space could be considered a less-than-significant impact.

Furthermore, the OPR's *Technical Advisory On Evaluating Transportation Impacts in CEQA* also recognizes that for redevelopment projects on infill sites, such as the proposed project, where a project replaces existing VMT-generating land uses, if the replacement leads to a net overall decrease in VMT, the project would lead to a less-than-significant transportation impact.¹⁵⁰ This is consistent with CEQA Guidelines Section 15064.3(b), which states that projects that decrease VMT in the project area compared to existing conditions should be presumed to have a less-than-significant transportation impact.

On February 16, 2021, the City adopted CMC Chapter 17.08, Evaluation of Transportation Impacts Under the California Environmental Quality Act, which provides screening criteria and VMT thresholds for land-use development projects, transportation projects, and other projects pursuant to the CEQA. CMC Chapter 17.08 went into effect on April 1, 2021. Under CMC Chapter 17.08, a project would be screened out from more detailed VMT analysis if the project is consistent with applicable General Plan policies and supported by substantial evidence demonstrating cumulative VMT is declining. Project screening may be used for projects that meet one or more of the following criteria:

- A project located within one-quarter mile of a High-Quality Transit Corridor or transit stop as defined by CEQA;
- Local-serving retail of 50,000 square feet or less; or
- Land-use projects consisting of 100 percent affordable housing.

Under CMC Chapter 17.08, a project would have a significant impact if:

- The total project generated VMT per service population would exceed the City's target VMT reduction of 14.4 percent below the citywide baseline VMT rate, and
- If the project increases total countywide VMT compared to baseline conditions.

As described in Section X, Land Use and Planning, the proposed project is consistent with the General Plan and applicable policies. The proposed project, an infill redevelopment project currently served by existing public infrastructure and not in an environmentally sensitive area, would generate less than 836 daily VMT (i.e., 538 VMT), which as described above is equivalent to the standards applied to a project qualifying for

¹⁴⁹ Using statewide average data from the 2012 California Household Travel Survey (CHTS), the amount of daily VMT associated with 10,000 square feet of non-residential space is 836 VMT. Also using statewide average CHTS data, this level of VMT is associated with 20 housing units.

¹⁵⁰ Governor's Office of Planning and Research, *Technical Advisory On Evaluating Transportation Impacts in CEQA*, page 17, December 2018.

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a CEQA exemption. The proposed project would generate significantly fewer VMT than existing conditions (proposed 538 daily VMT and 196,370 annual VMT compared to existing 3,800 daily VMT and 1,387,000 annual VMT), which demonstrates a contribution to a decline in cumulative VMT. Accordingly, the proposed project would meet the standards to be screened out from detailed VMT evaluation under the City's standards as well as CEQA Guidelines Section 15064.3(b), and transportation impacts during operation of the proposed project would be less than significant.

Construction Traffic

Demolition and construction would take place over a 10-month period, which is anticipated to begin in June 2021 and end in March 2022, subject to regulatory approval. During this period, the project would result in changes to existing transportation conditions. New traffic would be generated by construction employees and construction activities, including haul trucks. Construction traffic is temporary and would generate fewer daily VMT than existing conditions and the projected VMT during project operation. During demolition and construction, vehicle, equipment, and materials would be staged and stored on a portion of the project site. The construction site and staging areas would be clearly marked, and construction fencing would be installed to prevent disturbance and safety hazards. No staging would occur in the public right-of-way. Therefore, no hazards for vehicle, pedestrians, and/or cyclists in the area would occur during this phase.

Bicycle and Pedestrian Facilities

Class II bike lanes currently exist on both sides of South Foothill Boulevard and on the north side of Stevens Creek Boulevard along the length of the project site. The proposed project would include the extension of a new Class II bike lane along the southern side of Stevens Creek Boulevard along the length of the project site.¹⁵¹ The proposed project would include construction of sidewalks along the perimeter of the project site, alongside Stevens Creek Boulevard, Camino Vista Drive, and South Foothill Boulevard. Figures 3-4 and 3-5 show site perspectives of the proposed site along with placement of the proposed sidewalks. These sidewalks would provide pedestrian access to the site. Pedestrians would also have access to the site via the existing crosswalks on Stevens Creek Boulevard connecting to South Foothill Drive.

Transit Facilities

VTA operates bus services in the City of Cupertino and in the project vicinity. The closest bus stop is located within 300 feet of the project site, providing access to local bus route 51. The VTA has not established policies or significance criteria related to transit vehicle delay. The 28 residents that would result from construction and operation of the proposed project are anticipated to come from Cupertino and surrounding Bay Area communities and would not introduce new riders to the VTA operated bus

¹⁵¹ Class II Bikeways are bike lanes for bicyclists that are generally adjacent to the outer vehicle travel lanes and have special lane markings, pavement legends, and signage. Class III Bike Routes are designated roadways for bicycle use by signs or other markings may or may not include additional pavement width for cyclists.

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services that serve the project area. Therefore, the new transit trips generated by the proposed project are not expected to create a significant demand in excess of the capacity of the transit service that is currently provided.

Conclusion

In summary, the nine-unit residential project would be expected to generate 1,744 fewer daily vehicle trips and 3,262 fewer daily VMT than the existing use. The proposed project would not displace modify or interfere with any sidewalk, bicycle lanes, or sidewalks. In addition, the project would not generate a demand for transit that would exceed the capacity of the system. Therefore, the project would not conflict with adopted policies, plans, or programs regarding pedestrian, bicycle, or pedestrian facilities. Accordingly, impacts would be *less than significant*.

b) *Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?*

As discussed in criterion (a), above, the existing 2,400 square foot convenience market on-site has a daily VMT of 3,800 and an annual VMT of 1,387,000. The proposed nine-unit residential project would produce an approximate daily VMT of 538 and annual VMT of 196,370. Therefore, the proposed project would result in a daily reduction of 3,262 VMT and annual reduction of 57,670 VMT for the project site.

The proposed project would reduce VMT from the existing conditions at the project site by 86 percent. Therefore, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b) and impacts would be *less than significant*.

c) *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

The project proposes a two-way, two-lane entrance/exit circulation pattern with the access points on Camino Vista Drive and South Foothill Boulevard. Entering and exiting the project site via these access points would be accomplished through left or right turns. Access to the project site would not modify the existing three-way (or "t") intersection at Stevens Creek Boulevard/Camino Vista Drive or the intersection at Stevens Creek Boulevard/South Foothill Boulevard. The proposed project would not create a significant impact on the expected left-turn or right-turn queues at the study intersections.

The proposed project would not modify any design features to a public road or introduce a potentially unsafe feature that would increase hazards. *No impacts* would occur, and no mitigation measures would be required.

d) *Would the project result in inadequate emergency access?*

The proposed project is located in a predominately residential neighborhood with residential driveways and neighborhood streets adjacent and in close proximity to the project site. Emergency access would occur the same way that standard vehicle access would occur for the proposed project. Emergency access to the proposed internal roadway on the project site would be from Camino Vista Drive to the west off of

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Stevens Creek Boulevard and from South Foothill Boulevard to the east. The internal roadway would have a two-way, two-lane entrance/exit circulation pattern between these two access points on South Foothill Boulevard and Camino Vista Drive. Drivers could enter or exist via left or right turns onto South Foothill Boulevard or Camino Vista Drive. The project access points would not modify the existing three-way intersection at Stevens Creek Boulevard/Camino Vista Drive or the four-way intersection at Stevens Creek Boulevard/South Foothill Boulevard.

All circulation aisles would be 20 feet wide, and the turning radii would be adequate for emergency and service vehicles. The SCCFD and City of Cupertino Building Division coordinate the review of building permits. All access driveways would be designed in accordance with City of Cupertino standards and would have to be reviewed and approved by SCCFD.

Project plans include approved fire and emergency access through all phases of construction and operation. Compliance with the provisions of the Cupertino Fire Code and the Cupertino Building Code would ensure that adequate access would be provided. Therefore, the proposed project would not result in inadequate emergency access, *no impacts* would occur, and no mitigation measures would be required.

XVI. TRIBAL CULTURAL RESOURCES

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is: <ul style="list-style-type: none"> i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resource Code Section 5024.1. In applying the criteria set forth in subdivision (c) of the Public Resource Code Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance to a California Native American tribe. 	☐	■	☐	☐

ENVIRONMENTAL ANALYSIS**GENERAL PLAN EIR**

As described above in Section IV, Cultural Resources, the General Plan EIR addressed impacts to cultural resources associated with associated with buildout of the General Plan including the redevelopment of the project site with up to 19 dwelling units and a 30-foot height maximum at a program level. The impacts were found to be less than significant, and no mitigation measures were required. The cultural resources study prepared for the General Plan EIR consists of archival research at the Northwest Information Center at Sonoma State University, examination of the library and files, field inspection, and contact with the Native American community. The cultural resources study addressed impacts associated with archeological resources, including those of Native Americans. As shown in Table 4.4-2, *Cultural Resources in the Project Study Area and Vicinity*, and on Figure 4.4-1, *Cultural Resources*, of the General Plan EIR, there are no identified cultural resources, including those affiliated with Native Americans, present on the project site.

EXISTING CONDITIONS

CEQA Sections 21074 and 21084.2 contain CEQA standards of significance that relate to Native American consultation and added “tribal cultural resources” to the specific cultural resources protected under CEQA. CEQA sections 21080.3.1 requires the CEQA lead agency to begin consultation with any California Native American Tribe that is traditionally and culturally affiliated with the geographic area of a proposed project if the Tribe requests in writing, to be informed by the lead agency through formal notification of the proposed projects in the area. The consultation is required before the determination of whether a negative declaration, mitigated negative declaration, or EIR is required. In addition, CEQA Section 21080.3.1 includes time limits for certain responses regarding consultation. Pursuant to CEQA Section 21084.3, public agencies shall, when feasible, avoid damaging effects to any tribal cultural resources. Information shared by tribes as a result of consultation shall be documented in a confidential file, as necessary, and made part of a lead agency’s administrative record. The City of Cupertino has not received a request from any Tribes in the geographic area with which it is traditionally and culturally affiliated with or otherwise to be notified about projects in the city.

CEQA Section 21074.3(a) defines a tribal cultural resource as a site, feature, place, cultural landscape that is geographically defined in terms of size and scope, sacred place, and object with cultural value to a California Native American tribe that is either included or eligible for inclusion in the California Register of Historic Resources or included a local register of historical resources, or if the City, acting as the lead agency, supported by substantial evidence, chooses at its discretion to treat the resource as a tribal cultural resource.

DISCUSSION

- a) *Would the proposed 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*

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landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:

- i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or*
- ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resource Code Section 5024.1. In applying the criteria set forth in subdivision (c) of the Public Resource Code Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance to a California Native American tribe?*

The discussion in Section IV, Cultural Resources, is applicable to impacts to tribal cultural resources. As discussed under criteria (b) and (c) in Section IV, Cultural Resources, no known archeological resources, ethnographic sites, or Native American remains are located on the project site. As discussed under criterion (b), implementation of Mitigation Measure CULT-1 would reduce impacts to unknown archaeological deposits, including tribal cultural resources, to a less-than-significant level. As discussed under criterion (c), compliance with State and federal regulations would reduce the likelihood of disturbing or discovering human remains, including those of Native Americans. Therefore, implementation of Mitigation Measure CULT-1, which is not a General Plan EIR mitigation measure, and compliance with State and federal regulations related to the protection of human remains would reduce impacts to tribal cultural resources to a *less-than-significant* level.

Impact TRC-1: The proposed project could cause a substantial adverse impact to an unknown Tribal Cultural Resource.

Mitigation Measure TCR-1: Implement Mitigation Measure CULT-1.

XVII. UTILITIES AND SERVICE SYSTEMS

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

GENERAL PLAN EIR

Chapter 4.14, Utilities and Services Systems, of the General Plan EIR, addressed the impacts to water supply, wastewater, and solid waste associated with buildout of the General Plan including the redevelopment of the project site with up to 19 dwelling units and a 30-foot height maximum at a program level. Impacts were found to be less than significant with mitigation. The City is required to implement General Plan Mitigation Measures UTIL-6a through UTIL-6c, and UTIL-8, which were previously adopted and incorporated into the General Plan, to ensure impacts related to wastewater and solid waste are less than significant. General Plan Mitigation Measures UTIL-6a through UTIL-6c require the City to work with the Cupertino Sanitary District (CSD) to increase the available citywide treatment and transmission capacity, identify appropriate and current wastewater generation rates that are approved by CSD and establish a monitoring and tracking system for wastewater generation to better understand the City’s need for potential capacity upgrades from CSD. General Plan Mitigation Measure UTIL-8 requires the City to continue current recycling and zero-waste practices, monitor solid waste generation, and seek new landfill sites to replace the Altamont and Newby Island landfills, at such time that these landfills are closed. These mitigation measures, which were previously adopted by the City and incorporated into the General Plan, will be implemented by the City.

EXISTING CONDITIONS

The existing conditions for each of the utility providers is listed below:

- The Santa Clara Valley Water District (SCVWD) is the primary water resources agency for Santa Clara County. The project site is within the San José Water (SJW) service area until 2022. SJW would supply water to the project site. Water supply for the SJW is a combination of groundwater from wells in the Santa Clara Groundwater Basin, treated water purchased from SCVWD, and local mountain surface water from the Santa Cruz Mountains.
- Cupertino Sanitary District (CSD) provides sanitary sewer services for the project site. Wastewater would be treated at the San José /Santa Clara Water Pollution Control Plant (SJ/SCWPCP).
- Recology South Bay (Recology) would provide curbside recycling, garbage, and compost and yard waste service to the residents of the project. The City has a contract with Newby Island Sanitary

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Landfill (NISL)¹⁵² until 2023, which, according to CalRecycle, had a remaining capacity of 21,200,000 cubic yards as of October 31, 2014, and permitted maximum disposal capacity of 4,000 tons per day.¹⁵³ The landfill is scheduled to operate until 2041. In 2019, the landfill accepted 582,174 tons of waste, which equates to approximately 1,940 tons/day.¹⁵⁴ This results in a residual capacity of about 2,060 tons/day.

- Electricity and natural gas would be supplied to the project site via infrastructure maintained by Pacific Gas & Electric (PG&E). Electricity would be supplied by Silicon Valley Clean Energy.
- Telephone service would be provided by AT&T and other providers. Cable television service would be available from numerous providers, including Comcast.

DISCUSSION

- a) *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?*

Water Treatment Facilities

The Santa Clara Valley Water District (SCVWD) operates three treatment plants. The Rinconada Water Treatment Plant, which serves the project site, draws water from the South Bay Aqueduct and the San Luis Reservoir, which is treated and supplied to residential and commercial water dealers, such as SJW, which serves the site. The plant can provide up to 80 million gallons of water per day. The water treatment plant is currently under renovation to modernize the system and will result in an increased capacity of 100 million gallons per day as well as improved water quality and greater seismic stability.¹⁵⁵

As discussed in the General Plan EIR and criterion b) below, buildout of the General Plan including the proposed project would not result in insufficient water supplies from SJW under normal year conditions or during single-dry year and multiple-dry years, with the proposed and existing water conservation regulations and measures in place. Therefore, implementation of the project would not require any new water treatment facilities or improvements other than those currently under construction.

Wastewater Treatment Facilities

Wastewater from the project site would be discharged to the CSD sewer collection system, which then conveys it to the SJ/SCWPCP, which is jointly owned by the cities of San José and Santa Clara. The NPDES permit for this facility (NPDES No. CA0037842) is currently in the process of being renewed by the San Francisco Bay RWQCB (Tentative Order No. R2-2020-XXXX). The NPDES permit currently allows dry

¹⁵² City of Cupertino, Garbage and Recycling Services Fact Sheet, <http://www.recyclestuff.org/Guides/CityGuideCupertino.pdf>, accessed June 8, 2020.

¹⁵³ CalRecycle website, <http://www.calrecycle.ca.gov/SWFacilities/Directory/43-AN-0003/Detail/>, accessed July 15, 2020.

¹⁵⁴ Assuming 300 operational days/year; the landfill is open six days a week.

¹⁵⁵ Santa Clara Valley Water District, 2020. Rinconada Water Treatment Plant. Accessed at <https://www.valleywater.org/node/98> on January 11, 2021.

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weather discharges of up to 167 million gallons per day (mgd) with full tertiary treatment. The plant is designed to route fully treated secondary effluent in excess of the filtration design capacity around the filters (250 mgd) during extreme wet weather flow events and recombine it with filter effluent prior to disinfection. As discussed below in criterion (c), future demands from the proposed project would not exceed the design or permitted capacity of the SJ/SCWPCP that serves the project site. Future wastewater treatment demand was assessed in consultation with the City of Cupertino and includes consideration of development in the city through the 2040 buildout horizon of the General Plan. Therefore, development of the proposed project would not require any improvements not already considered and the impact of the proposed project on SJ/SCWPCP would be *less than significant*.

Stormwater Drainage

Municipal stormwater discharges in the City of Cupertino are subject to the Waste Discharge Requirements of the Municipal Regional Permit (MRP; Order Number R2-2015-0049, as amended by Order No. R2-2019-0004) and NPDES Permit No. CAS612008. As previously discussed in Section IX, Hydrology and Water Quality, the proposed project would be subject to Provision C.3 guidelines for stormwater control. Through C.3 compliance, the proposed project would minimize runoff from the project site as described in Section IX, Hydrology and Water Quality. The project also would comply with CMC Chapter 9.18, described in Section 3.1.4.2, Zoning, which implements the requirements of the NPDES permit issued to the City. Additionally, the project would submit an SMP to the City for review and approval prior to the start of construction that describes the stormwater treatment measures that would be implemented to reduce stormwater runoff to the City's storm drain system.

The project site is within an area where the storm drains are deficient in conveying the water from a 10-year storm based on the 2018 *Storm Drain Master Plan*. The lines on Stevens Creek Boulevard and South Foothill Boulevard adjacent to the project site are currently under capacity and designated as high priority for replacement.¹⁵⁶ The proposed project would provide one bioretention area for the project site. This would collect runoff from roof areas, parking lots, sidewalks, and streets for treatment and flow control prior to discharge into the internal storm drain system, which connects to the City's storm drain system at the southwest corner of the intersection of Stevens Creek Boulevard and South Foothill Boulevard. The on-site stormwater treatment area would exceed the C.3 requirements of the MRP. In addition, to ensure that the stormwater runoff from the site does not exceed the capacity of the City's storm drain system, a hydrology and hydraulics report will be prepared for submittal and review by the Director of Public Works prior to the start of construction.

The proposed project would not require the expansion of existing stormwater facilities or the construction of new facilities, the construction of which could otherwise have significant impacts. Therefore, impacts would be *less than significant*, and no mitigation measures would be required.

¹⁵⁶ Schaaf & Wheeler Consulting Civil Engineers. 2018. Cupertino Storm Drain Master Plan.

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Other Utility Facilities

Other utility facilities that serve the project site include electric power, natural gas, and telecommunications facilities. PG&E would supply natural gas and electricity infrastructure and Silicon Valley Clean Energy would provide electricity to the project site. AT&T and other providers would provide telephone service. Cable television service would be available from various providers, including Comcast.

The proposed project is an infill development project that would result in an increase in land use intensity in a portion of the city that has access to existing infrastructure and services, which was accounted for in the General Plan EIR. The proposed project would include appropriate on-site infrastructure to connect to the existing PG&E and telecommunication systems and would not require new off-site facilities and distribution infrastructure or capacity enhancing alterations to any existing facilities. Accordingly, impacts would be *less than significant*.

b) *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

As described in the General Plan EIR in Chapter 4.14, the water supply for the City of Cupertino at project buildout year 2022 would be 13,078 acre-feet¹⁵⁷ per year (afy) and at General Plan buildout year 2040 would be 16,984 afy. Buildout associated with the General Plan would result in sufficient water supplies from SJW under normal year conditions or during single-dry year and multiple-dry years, with the proposed and existing water conservation regulations and measures. The Water Supply Evaluation prepared for the General Plan EIR included new development on the project site at a greater number of units than proposed under the project (19 new units compared to nine net new units and one accessory unit); therefore, water supply impacts were adequately addressed in the General Plan EIR.

The proposed project's water demand was calculated using Cupertino Sanitary District's *Flow Modeling Analysis*.¹⁵⁸ For the residential component of the project, a total indoor residential water demand of 155 gallons/day/unit was calculated. The irrigation demand was based on the Maximum Applied Water Allowance (MAWA) as per the Water Efficient Landscape Ordinance. This conservatively assumes that all the pervious area at the site will be irrigated; actual irrigation water usage will most likely be less than the calculated amount. The results are provided in Table 4-9.

¹⁵⁷ One *acre-foot* equals about 326,000 gallons, or enough water to cover an *acre* of land, about the size of a football field, one *foot* deep.

¹⁵⁸ Mark Thomas & Co. Inc., December 6, 2019, Cupertino Sanitary District Flow Modeling Analysis Homestead Flume Outfall to City of Santa Clara.

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TABLE 4-9 WATER DEMAND FOR THE PROPOSED PROJECT

Development Type	Water Demand Factor ^a	Size	Water Demand
Residential	155 gpd/unit	9 units	1,395 gpd
Irrigation	Based on ETWU	10,608 sq ft of landscaping	326 gpd
Total Water Demand			1,721 gpd

Notes: ETWU = Estimated Total Water Use

a. Water demand factor calculated as 60 gal/resident/day x 2.87 residents per unit x 10 percent reduction for new construction and low-flow fixtures

Source: Mark Thomas & Company, Inc., 2019. Cupertino Sanitary District, Flow Modeling Analysis, Homestead Flume Outfall to City of Santa Clara.

The projected water demand for the project would be approximately 1,721 gpd or 1.93 afy. This is less than 0.01 percent of Cupertino’s water supply at the buildout year of 2040 and the project was accounted for in the General Plan at a higher density land use and thus a higher water demand rate. Accordingly, the water demand under the proposed project would not exceed the available water supply in 2022 at project buildout or General Plan buildout by year 2040 and impacts to water supply would be *less than significant*.

c) *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?*

The calculated wastewater demand for the proposed project is provided in Table 4-10. The proposed project with nine housing units would generate approximately 1,323 gallons/day of wastewater, or 0.0011 mgd of wastewater. The wastewater demand calculations are based on the residential water demand factor of 155 gpd/unit and the assumption that 95 percent of the water demand would result in wastewater generation.

TABLE 4-10 WASTEWATER DEMAND FOR THE PROPOSED PROJECT

Development Type	Wastewater Demand Factor	Size	Wastewater Demand
Residential	147 gpd/unit ^a	9 units	1,323 gpd

Notes:

a. Water demand factor of 155 gpd/unit x 95 percent (amount of water demand that becomes wastewater).

Source: Mark Thomas & Company, Inc, 2019. Cupertino Sanitary District, Flow Modeling Analysis, Homestead Flume Outfall to City of Santa Clara.

The wastewater demand under existing conditions was also calculated to determine the net increase in wastewater demand with implementation of the proposed project. Based on the CSD’s Flow Modeling Analysis, the wastewater demand factor for retail and commercial uses of 0.073 gpd per square foot, and assuming that the existing commercial buildings total 2,400 square feet, the current wastewater demand would be 175 gpd or approximately 0.0002 mgd of wastewater. The proposed project would generate up

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to 1,323 gpd or approximately 0.0011 mgd of wastewater.¹⁵⁹ Therefore, the proposed project would increase wastewater generation at the site by 1,148 gpd or 0.0011 mgd of wastewater.¹⁶⁰ However, the project wastewater demand would be much less than was assumed for the proposed buildout of the site in the General Plan, which presumed 19 new units for a wastewater demand of 2,793 gpd. These wastewater demand calculations are conservative, because no credit is taken for water conservation measures that would be applicable with new construction, thus reducing the amount of wastewater generated.

The SJ/SCWPCP's projected peak wet weather capacity stated in *The San Jose Santa Clara Water Pollution Control Plant Master Plan*, November 2013, is 450 mgd. The proposed project's wastewater generation (0.0011 mgd) and the existing wastewater generated in the SJ/SCWPCP's service area (110 mgd) would not exceed the SJ/SCWPCP's current total peak wet weather capacity of 450 mgd. The ADWF capacity is 167 mgd pursuant to the most recent National Pollutant Discharge Elimination System (NPDES) permit for the SJ/SCWPCP (Order No. R2-2014-0034, NPDES No. CA0037842). Combined, the proposed project's wastewater generation (0.0011 mgd) and the existing wastewater generated (110 mgd) would not exceed the SJ/SCWPCP's current ADWF capacity limits.

The CSD has a contractual maximum treatment allocation of 7.85 mgd with the SJ/SCWPCP. At the time of the General Plan EIR, the CSD estimated the existing wastewater generation for the City of Cupertino to be 5.3 mgd and the proposed General Plan build-out would generate 7.2 mgd of wastewater.¹⁶¹ Combined, the existing wastewater flow (5.3 mgd) plus the proposed project (0.0011 mgd) would not exceed the City's contractual allocation limits (7.85 mgd). Furthermore, the proposed nine-unit residential development with one accessory unit is within the 4,421 residential units evaluated in the General Plan EIR. Furthermore, as demonstrated in Table 1.1 in Section 1.2, Tiering Process, the project site was originally proposed for 19 units. Therefore, the project would not result in an exceedance of the City's contractual agreement with SJ/SCWPCP and there would be no significant impact with respect to wastewater treatment capacity.

However, the CSD wastewater flows through a portion of the City of Santa Clara's sewer system. The contractual agreement between CSD and the City of Santa Clara, for this portion of the Santa Clara sewer system, allows the City 13.8 mgd of capacity in the sewer system during peak wet weather flows. The existing CSD peak wet weather flow into the Santa Clara system is 13.14 mgd.¹⁶² However, the estimated wastewater generation from the proposed project and from other potential projects in Cupertino, as established by the General Plan and other approved projects, is approximately 14.61 mgd, which is the

¹⁵⁹ Mark Thomas & Co. Inc., December 6, 2019, *Cupertino Sanitary District Flow Modeling Analysis Homestead Flume Outfall to City of Santa Clara*.

¹⁶⁰ Mark Thomas & Co. Inc., December 6, 2019, *Cupertino Sanitary District Flow Modeling Analysis Homestead Flume Outfall to City of Santa Clara*.

¹⁶¹ City of Cupertino, General Plan (Community Vision 2015–2040, Appendix B: Housing Element Technical Report, 4.3 Environmental, Infrastructure & Public Service Constraints, page B-93.

¹⁶² Mark Thomas & Co. Inc., December 6, 2019, *Cupertino Sanitary District Flow Modeling Analysis Homestead Flume Outfall to City of Santa Clara*.

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total capacity needed to serve the General Plan buildout.¹⁶³ Therefore, the proposed project, and other approved and potential projects as established by the General Plan buildout, will require a reduction in sewer generation from the CSD system prior to flowing into the City of Santa Clara system, or additional capacity rights will need to be acquired from the City of Santa Clara.

Until such corrections to the system can occur, future projects in Cupertino, including of the proposed project would exceed the 13.8 mgd contractual limit through the City of Santa Clara sewer system resulting in a potentially significant impact.

Impact UTIL-1: Implementation of the proposed project may result in a determination by the wastewater treatment provider, which serves or may serve the proposed project, that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Mitigation Measure UTIL-1: No building permits shall be issued by the City for the proposed 22690 Stevens Creek Boulevard Project that would result in exceeding the permitted peak wet weather flow capacity of 13.8 mgd through the Santa Clara sanitary sewer system. The project applicant shall demonstrate, to the satisfaction of the City of Cupertino and Cupertino Sanitary District (CSD), that the proposed project would not exceed the peak wet weather flow capacity of the Santa Clara sanitary sewer system by implementing one or more of the following methods:

1. Reduce inflow and infiltration in the CSD system to reduce peak wet weather flows; or
2. Increase on-site water reuse, such as increased grey water use, or reduce water consumption of the fixtures used within the proposed project, or other methods that are measurable and reduce sewer generation rates to acceptable levels, to the satisfaction of the CSD.

The proposed project's estimated wastewater generation shall be calculated using the generation rates used by the CSD in the *Flow Modeling Analysis for the Homestead Flume Outfall to the City of Santa Clara*, prepared by Mark Thomas & Co. Inc. dated December 6, 2019, unless alternative (i.e., lower) generation rates achieved by the proposed project are substantiated by the project applicant based on evidence to the satisfaction of the CSD. To calculate the peak wet weather flow for a 10-year storm event, the average daily flow rate shall be multiplied by a factor of 2.95 as required by CSD pursuant to their December 2019 flow modeling analysis.

If the prior agreement between CSD and the City of Santa Clara that currently limits the permitted peak wet weather flow capacity of 13.8 mgd through the Santa Clara sanitary sewer system were to be updated to increase the permitted peak wet weather flow, this impact would then be less than significant. If this were to occur prior to the City's approval of building permits, then Mitigation Measure UTIL-1 would no longer be required to be implemented.

Significance With Mitigation: Less than significant. Implementation of the Mitigation Measure UTIL-1 would guarantee that no development on the project site could occur that would exceed 13.8 mgd peak

¹⁶³ Mark Thomas & Co. Inc, December 6, 2019, Cupertino Sanitary District Flow Modeling Analysis Homestead Flume Outfall to City of Santa Clara.

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wet weather flow contractual limit through the City of Santa Clara and CSD by ensuring that no building permit would be issued for any structures or units that result in the contractual limit being exceeded until: (1) additional capacity is available through the City of Santa Clara's sewer system; (2) improvements would be made to the CSD sewer system that reduce the peak wet weather flows that enter the City of Santa Clara system; (3) improvements would be made on the project site that ensure the contractual limit is not exceed; or (4) the completion of any combination of these approaches that adequately addresses potential capacity issues. Accordingly, impacts would be *less than significant with mitigation*.

d) *Would the project 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?*

The City contracts with Recology to provide solid waste collection services to residents and businesses in the city. The City has a contract with Newby Island Sanitary Landfill (NISL) until 2023 but has not secured a new landfill contract for landfill disposal after that date. However, according to the Integrated Waste Management Plan, the landfills in the County (including NISL where the City's collected solid waste is currently being landfilled) have adequate disposal capacity beyond 2026 and NISL's operational life has recently been extended to 2041.¹⁶⁴ The City, therefore, has options for landfill service once the City's existing contract with NISL ends in 2023. In addition to the Newby Island Landfill, solid waste generated in Cupertino can also be disposed of at the Altamont Landfill and Resource Recovery facility, the Corinda Los Trancos Landfill, Forward Landfill Inc., Guadalupe Sanitary Landfill, Kirby Canyon Recycling and Disposal Facility, the Monterey Peninsula Landfill, Recology Hay Road, the Vasco Road Sanitary Landfill, the Zanker Material Processing Facility, and the Zanker Road Class III Landfill.

Waste management for the proposed project includes recycling and composting. Solid waste generated by construction of the proposed project would largely consist of demolition waste from the existing building as well as construction debris. The project would be required to comply with CMC Chapter 16.72, Recycling and Diversion of Construction and Demolition Waste, and the City's Zero Waste Policy, which requires the recycling or diversion of at least 65 percent of all construction and demolition (C&D) waste by salvage or by transfer to an approved facility.^{165,166} Prior to the issuance of any demolition, grading, and/or building permits, the applicant is required to submit a properly completed Waste Management Plan to the Cupertino Public Works Department, Environmental Programs Division. The Waste Management Plan shall do the following:

- Identify the materials to be diverted from disposal by recycling, reused on the project, or salvaged for future use or sale.
- Specify if materials would be sorted on-site or mixed for transportation to a diversion facility.
- Identify the diversion facility where the material collected will be taken.

¹⁶⁴ Santa Clara County Integrated Waste Management Plan, County of Santa Clara Environmental Resources Agency, 1996.

¹⁶⁵ Cupertino Municipal Code, Title 16, Buildings and Construction, Chapter 16.72, Recycling and Diversion of Construction and Demolition Waste, Section 16.72.040, Diversion Requirement.

¹⁶⁶ City of Cupertino, Public Works, Garbage & Recycling, <https://www.cupertino.org/our-city/departments/environment-sustainability/waste>, accessed July 15, 2020.

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- Identify construction methods employed to reduce the amount of waste generated.
- Specify that the amount of materials diverted shall be calculated by weight or volume, but not by both.

Compliance with CMC Chapter 16.72 and the City's Zero Waste Policy would reduce solid waste and construction-related impacts on landfill capacity.

Once the project is operational, there will be approximately 28 residents on the site. In 2019, the City of Cupertino's disposal rate for residents was 3.5 pounds per day (PPD), which is much lower than CalRecycle's target rate of 4.3 PPD for residents.¹⁶⁷ The City of Cupertino's disposal rates for residents have been below target rates and steadily decreasing since 2007, with the exception of 2014, when the rate (9.8 PPD) exceeded the target (8.10 PPD).¹⁶⁸ Applying these disposal rates, the project would generate approximately 98 PPD or 0.049 tons per day of new waste. The Newby Island Sanitary Landfill has a maximum permitted daily disposal capacity of 4,000 tons per day and in 2019, the average daily disposal rate was approximately 1,940 tons/day. Therefore, the residual daily landfill capacity of 2,060 tons/day is more than sufficient to meet the solid waste generation rate for the project of 0.049 tons/day. The project would also comply with the City's current recycling ordinances and zero-waste policies, which would further reduce solid waste disposed of in the landfill. Therefore, implementation of the project would not generate solid waste that exceeds State or local standards, or exceeds the capacity of the landfill, or otherwise impairs the attainment of solid waste reduction goals. Impacts would be *less than significant*.

e) *Would the project comply with federal, state, and local statutes and regulations related to solid waste?*

The City's per capita disposal rate for residents in 2019 was 3.5 PPD, which is below the 4.3 PPD target rate established by CalRecycle.¹⁶⁹ As part of the *Countywide Integrated Waste Management Plan* to address waste management conditions within Santa Clara County, Cupertino adopted a Source Reduction and Recycling Element (SRRE)¹⁷⁰ and Household Hazardous Waste Element (HHWE)¹⁷¹ in compliance with the California Integrated Waste Management Act.¹⁷² The City has gone beyond the SRRE by implementing several programs, including the City's and Recology's organics or food waste collection program, and Environmental Recycling Day events offered to residents three times per year by Recology.

¹⁶⁷ CalRecycle. 2017. Jurisdiction Per Capita Disposal Trends.

<https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/DisposalRateCalculator>, accessed July 15, 2020.

¹⁶⁸ CalRecycle. 2017. Jurisdiction Per Capita Disposal Trends.

<https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/ReviewReports>, accessed July 15, 2020.

¹⁶⁹ CalRecycle. 2017. Disposal Rate Calculator.

<https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/DisposalRateCalculator>, accessed May 30, 2019.

¹⁷⁰ City of Cupertino, Public Works. 1992. Source Reduction and Recycling Element, September 21, 1992.

¹⁷¹ City of Cupertino, Public Works. 1992. Household Hazardous Waste Element, September 21, 1992.

¹⁷² Cupertino Municipal Code, Title 9, Health and Sanitation, Chapter 9.6, Solid Waste, Non-Organic Recycling and Recycling Areas, Section 9.16.010(a), Purpose.

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In December 2017, the City adopted a Zero Waste Policy.¹⁷³ According to the Zero Waste Policy, the City will require, through the City’s waste hauling franchise agreement, steadfast and ongoing efforts by the City’s franchisee to maintain a minimum residential and commercial waste diversion rate of 75 percent with a goal of reaching and maintaining 80 percent by 2025. In 2019, the City’s solid waste diversion rate was 69 percent. These programs will be sufficient to ensure that future development in Cupertino, including the proposed project, would not compromise the ability to meet or exceed the State mandated target.

Construction and any demolition debris associated with the project would be subject to CMC Chapter 16.72, requiring that a minimum of 65 percent of C&D debris be diverted from landfill.¹⁷⁴ In addition, the City’s Zero Waste Policy requires that all private construction projects that come through the City’s permitting process, and all City projects (through contract requirements), recover and divert at least 65 percent of the construction waste generated by the project. Compliance with applicable statutes and regulations would ensure that the impact would be *less than significant*, and no mitigation measures would be required.

XVIII. WILDFIRE

If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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Chapter 4.7, Hazards and Hazardous Materials, of the General Plan EIR, addressed the impacts to wildfire hazards associated with buildout of the General Plan including the redevelopment of the project site with up to 19 dwelling units and a 30-foot height maximum at a program level. Impacts were found to be less

¹⁷³ City of Cupertino, Public Works, Garbage & Recycling, <https://www.cupertino.org/our-city/departments/environment-sustainability/waste>, accessed May 30, 2019.

¹⁷⁴ Cupertino Municipal Code, Title 16, Buildings and Construction, Chapter 16.72, Recycling and Diversion of Construction and Demolition Waste, Section 16.72.040, Diversion Requirement.

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than significant, and no mitigation measures were required. This section of the Initial Study also addresses additional questions regarding wildfire related impacts pursuant to the updated CEQA Guidelines that were adopted by the California Natural Resource Agency in December 2018.

EXISTING CONDITIONS

Wildland fire protection in California is the responsibility of either the State, local government, or the federal government. State Responsibility Areas (SRA) are the areas where the State of California has the primary financial responsibility for the prevention and suppression of wildland fires. The SRA includes a 31-million-acre area, in which the State Department of Forestry and Fire Protection (CAL FIRE) provides a basic level of wildland fire prevention and protection services. Local Responsibility Areas (LRA) include lands within incorporated cities, cultivated agriculture lands, and portions of the desert. LRA fire protection is typically provided by city fire departments, fire protection districts, counties, or by CAL FIRE under contract to local government.¹⁷⁵ CAL FIRE determines fire hazard zones within the LRA using an extension of the SRA Fire Hazard Severity Zone model as the basis. The LRA hazard rating reflects flame and ember intrusion from adjacent wildlands and from flammable vegetation in the urban area.

CAL FIRE designates fire hazard severity zones (FHSZs) as authorized under California Government Code Sections 51175 et seq. CAL FIRE considers many factors such as fire history, existing and potential fuel (natural vegetation), flame length, blowing embers, terrain, and typical weather for the area. There are three types of FHSZs: moderate, high, and very high.

According to the California Office of Emergency Services, a Wildland-Urban Interface (WUI) is defined as any area where structures and other human development meet or intermingle within wildland vegetation.¹⁷⁶ Developments in the wildland-urban interface exacerbate fire occurrence and fire spread in several ways, including:

- Increased numbers of human-caused wildfires.
- Wildfires become harder to fight.
- Firefighting resources are diverted from containing the wildfire to protecting lives and homes.
- Letting natural fires burn becomes impossible; leading to buildup of fuel, increasing wildfire hazard further.¹⁷⁷

The project site is located within an LRA and the SCCFD currently provides fire protection and emergency medical services to the city and project site. The nearest SRA is approximately 1 mile to the west and is designated as a High FHSZ. The nearest Very High FHSZ within the Cupertino LRA is located approximately 2 miles to the southeast. The project site is not located within the Cupertino designated WUI.¹⁷⁸ However, it is located within the CalOES defined WUI, which is an area of transition between wildland (unoccupied

¹⁷⁵ California Department of Forestry and Fire Prevention (CAL FIRE). Frequently Asked Questions. http://www.fire.ca.gov/firepreventionfee/sra_faqs, accessed June 19, 2020.

¹⁷⁶ Cal OES. 2018. California State Hazard Mitigation Plan.

¹⁷⁷ Radeloff, Volker; Helmers, David; Kramer, H., et al. 2018. Rapid Growth of the US Wildland-Urban Interface Raises Wildfire Risk. Proceedings of the National Academy of Sciences (PNAS): Volume 115 No. 13. Accessed June 18, 2020 at <https://www.pnas.org/content/pnas/115/13/3314.full.pdf>.

¹⁷⁸ Cupertino Municipal Code, Section 16.74, Wildland Urban Interface Fire Area.

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land) and land with human development (occupied land);¹⁷⁹ therefore, impacts related to wildfire are discussed below.

DISCUSSION

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

The City of Cupertino Office of Emergency Services is responsible for coordinating agency response to disasters or other large-scale emergencies in the City of Cupertino with assistance from the Santa Clara County Office of Emergency Services and the SCCFD. The Cupertino EOP establishes emergency planning, mitigation, response, and recovery policies within the city.

As described in Section VIII, Hazards and Hazardous Materials, emergency vehicle access would be provided at two points on the project site and the proposed project would not block roads or impede emergency access to surrounding properties or neighborhoods during either construction or operation of the project. The Emergency Circulation Plan includes a fire truck circulation route in addition to designated fireman access routes to reach the rear of the structures. During demolition and construction, vehicles, equipment, and materials would be staged and stored on a portion of the project site and no staging would occur in the public right-of-way.

As stated in Section VIII, Hazards and Hazardous Materials, the proposed project would not interfere or impair with an adopted emergency response plan, or emergency evacuation plan; therefore, impacts would be *less than significant*.

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

As stated in Section 3, Project Description, of this Initial Study, the project site is classified as “urban area” under the CALVEG classification system and is surrounded by residential and other urban uses. The site is characterized as generally flat and surrounding by low topographic relief. Prevailing winds in Cupertino derive from the west from February to November, and from the north from November to February, with the windier part of the year occurring from March to July with wind speeds averaging 7.6 miles per hour.¹⁸⁰ The project site is not located within an SRA or Very High FHSZ in an LRA. The project site also is not located within the Cupertino Wildland Urban Interface Fire Area as defined in CMC Chapter 16.74, Wildland Urban Interface Area Adopted.

The proposed landscaping includes a variety of low water use plants with shrubs and trees surrounding the exterior of the site, as shown in Figure 3-10. The proposed buildings and landscaping would be required to comply with CMC Chapter 9.22.020, Property Maintenance, which requires the upkeep of vegetation and landscaping on the properties to prevent fire and health hazards. CMC Chapter 16.40, Fire

¹⁷⁹ CAL FIRE. 2018. Wildland-Urban Interface Fire Threat.

<http://www.arcgis.com/home/item.html?id=d45bf08448354073a26675776f2d09cb>, accessed July 30, 2020.

¹⁸⁰ Weather Spark. 2019. <https://weatherspark.com/y/504/Average-Weather-in-Cupertino-California-United-States-Year-Round>, accessed June 19, 2020.

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Code, would also require the proposed project to comply with the 2019 California Fire Code and 2015 International Fire Code, which provide specific regulations governing conditions hazardous to life and property from fire or explosion. Therefore, the proposed project would have fire prevention and management measures and would not expose occupants and the surrounding neighborhoods to pollutant concentrations or the uncontrolled spread of wildfire. Impacts would be *less than significant*, and no mitigation would be required.

c) *Require the installation of 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?*

As discussed in Section 3.1.3.1, Site Character, of the Project Description, the site is currently developed with a single-story, approximately 2,400 square-foot commercial building with a convenience store and an associated paved and unpaved surface parking adjacent to South Foothill Boulevard. The remainder of the property is an undeveloped and unpaved (dirt and gravel) lot. Utility infrastructure already serves the project site. The proposed project would not include new roads, fuel breaks, or sources of emergency water. Overhead power lines are currently located above the northern and eastern edges of the project site, and new power lines are not proposed as part of the project. Minor alterations such as water, natural gas, and sewer line piping would be installed to connect existing utilities to the proposed residential units. Therefore, installation and maintenance of infrastructure would not exacerbate wildfire risks and new infrastructure would not cause temporary or ongoing impacts on the environment. Impacts would be *less than significant*, and no mitigation measures would be required.

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

As stated in criterion b), the project site is characterized as generally flat and is surrounded by low topographic relief. The project site is not located within a floodplain or an area that has a high potential for landslides. As discussed in Section IX, Hydrology and Water Quality, the proposed project would result in 18,052 square feet of impervious coverage, compared to approximately 2,757 square feet of impervious coverage in existing conditions, this would be an increase of 15,295 square feet. The proposed project would, however, include 9,454 square feet of pervious surfaces in the form of landscaping and one on-site bioretention area that would hold and treat stormwater before it is released into the City's off-site storm drain infrastructure, which will reduce runoff on the project site. Therefore, the proposed project would not expose people or structures to flooding or landslides that result from post-fire instability and runoff, and impacts would be *less than significant*.

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XIX. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DISCUSSION

a) *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

The project site is in an urbanized and developed area of Cupertino. The project site is currently developed with a single-story, approximately 2,400 square-foot commercial building with a convenience store and associated paved and unpaved surface parking adjacent to South Foothill Boulevard. The remainder of the property is an undeveloped and unpaved (dirt and gravel) lot. The surrounding area is entirely built out with residential and office uses to the north, residential uses and a gas service station with an auto repair shop to the east, residential uses to the south, and residential uses and the Monta Vista Fire Station to the west. There is no existing landscaping on-site. There are no identified sensitive natural communities, no areas of sensitive habitat, and no areas of critical habitat on the project site. In addition, there are no buildings currently listed or eligible for listing on the California Register of Historical Resources, no recorded archaeological sites, and no known paleontological resources located on the project site. The implementation of Mitigation Measures AQ-1, AQ-2, AQ-3, BIO-1, CULT-1, GEO-1, and TCR-1 would serve to protect the quality of the air, nesting birds, and unknown cultural and tribal resources, as well as ensure adequate services are provided and that no additional physical impacts would occur elsewhere. Therefore, implementation of the proposed project would result in a *less-than-*

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significant impact to the quality of the environment, wildlife, and major periods of California history or prehistory.

- b) *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

CEQA Guidelines Section 15355 defines cumulative impacts as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Cumulative impacts may result from individually minor, but collectively significant projects taking place over a period of time. CEQA Guidelines Section 15130(b) advises that a discussion of cumulative impacts should reflect both the severity of the impacts and the likelihood of their occurrence. To accomplish these two objectives, CEQA Guidelines Section 15130 permits two different methods for completion of a cumulative impact analysis and allows for a reasonable combination of the two approaches:

- The ‘list’ approach permits the use of a list of past, present, and probable future projects producing related or cumulative impacts, including projects both within and outside the city; and
- The ‘projections’ approach allows the use of a summary of projections contained in an adopted plan or related planning document, such as a regional transportation plan, or in an EIR prepared for such a plan. The projections may be supplemented with additional information such as regional modeling.

The General Plan EIR evaluated the cumulative effects of the General Plan Amendments, Housing Element Update, and Associated Rezoning using the summary of projections approach provided for in CEQA Guidelines Section 15130(b)(1)(B). The General Plan EIR took into account growth from the General Plan within the Cupertino city boundary and Sphere of Influence (SOI), in combination with projected growth in the rest of Santa Clara County and the surrounding region, as forecast by ABAG.

As provided for by CEQA Guidelines Section 15130, the cumulative context considered in the General Plan EIR varies, depending on the nature of the issue being studied, to best assess each issue’s geographic extent. For example, the cumulative impacts on water and air quality can be best analyzed within the boundaries of the affected resources, such as water bodies and air basins. For other cumulative impacts, such as hazard risks, traffic, and the need for new public service facilities, the cumulative impact is best analyzed within the context of the population growth and associated development that are expected to occur in the region or the public service providers’ jurisdiction.

Table 4-11 shows the other reasonably foreseeable projects in Cupertino and how they relate to the maximum buildout potential evaluated in the General Plan EIR.

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TABLE 4-11 REASONABLY FORESEEABLE DEVELOPMENT PROJECTS IN CUPERTINO

	Hotel	Residential	Commercial	Office
General Plan EIR: Maximum Development Potential	1,339	4,421	1,343,679	4,040,231
<i>Reasonably Foreseeable Projects</i>				
<i>Marina Plaza^a</i>	<i>122</i>	<i>188</i>	<i>23,000</i>	
<i>The Hamptons Redevelopment^a</i>		<i>600</i>		
<i>The Forum^a</i>		<i>23</i>		
<i>The Village Hotel^a</i>	<i>185</i>			
<i>De Anza Hotel^a</i>	<i>155</i>			
<i>Westport^a</i>		<i>267</i>	<i>20,000</i>	
<i>Public Storage^{a, d}</i>			<i>209,485</i>	
<i>Scandinavian Design^a</i>			<i>2,235</i>	
<i>Vallco^{a, c}</i>		<i>2,402</i>	<i>400,000</i>	<i>1,810,000</i>
<i>Loc-N-Stor^{b, d}</i>			<i>96,432</i>	
<i>Canyon Crossings</i>		<i>18</i>	<i>4,536</i>	
Total Foreseeable Development	462	3,498	755,688	1,810,000
General Plan EIR: Remaining Development Potential	877	923	587,991	2,230,231

Notes:

- a. The project has been approved or is under construction.
- b. The project is under review.
- c. The buildout numbers are for the Vallco SB 35 Application (0 hotel rooms, 2,402 units, 1,810,000 square feet commercial, and 400,000 square feet commercial).
- d. The storage facility sites currently have existing storage facilities and the square footage shown in this table is the net new.

Source: City of Cupertino, 2021.

The General Plan EIR included an assessment of the redevelopment of the project site with commercial and residential projects. The residential assumptions included a residential density of 35 dwelling units per acres with a 30-foot height maximum, which would result in up to 19 residential units. Therefore, as shown in Table 4-11, when combined with the other reasonably foreseeable projects in Cupertino the project would not exceed the maximum buildout potential evaluated in the General Plan EIR. The impact discussions in Section I through Section XVIII, above, describe the proposed project relationship to and consistency with the scope of development, land use designations, population projections, and cumulative impacts analyses contained in the General Plan EIR. As shown, the proposed project cumulative impacts were determined to be less than significant or less than significant with mitigation in the cumulative context.

Since the certification of the General Plan EIR, the City has considered new development at the Vallco project site. While, as shown in Table 4-11, this development at the Vallco site is consistent with the maximum buildout potential in the General Plan EIR for citywide cumulative discussions (e.g., population and housing, water supply, etc.), the General Plan EIR did not evaluate the specific amount of buildout at the Vallco site that is shown in Table 4-11, therefore, localized cumulative impacts such as traffic, traffic related noise, and utilities infrastructure were not captured in the General Plan EIR. Due to the distance between the proposed 22690 Stevens Creek Boulevard Project and the Vallco project site, the proposed

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project impacts would result in no localized cumulative impacts related traffic, noise, or utilities in combination with development of the Vallco site.

As described in the environmental checklist, the impacts of the proposed project would be mitigated to *less-than-significant* levels. The proposed project would incrementally contribute to, but would not exceed, the cumulative impacts analyses included in the General Plan EIR. Therefore, the proposed project would not be expected to contribute to significant cumulative impacts when considered along with other impacts under the General Plan.

c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

As discussed previously, the proposed project would not result in a significant impact that could not be mitigated to a less-than-significant level, thus the proposed project's environmental effects would be *less than significant*.

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5. Mitigation Monitoring and Reporting Program

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the 22690 Stevens Creek Boulevard Project. The purpose of the MMRP is to ensure the implementation of project-specific mitigation measures identified as part of the environmental review for the proposed project. The MMRP includes the following information:

- The full text of the mitigation measures;
- The party responsible for implementing the mitigation measures;
- The timing for implementation of the mitigation measure;
- The agency responsible for monitoring the implementation; and
- The monitoring action and frequency.

The City of Cupertino must adopt this MMRP, or an equally effective program, if it approves the proposed project with the mitigation measures that were adopted or made conditions of project approval.

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 5-1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
AIR QUALITY					
<p>Mitigation Measure AQ-1: The project’s construction contractor shall comply with the following best management practices for reducing construction emissions of fugitive dust (PM₁₀ and PM_{2.5}) as required by the Bay Area Air Quality Management District Revised California Environmental Quality Act Air Quality Guidelines:</p> <ul style="list-style-type: none"> ▪ Water all active construction areas at least twice daily, or as often as needed to control dust emissions. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible. ▪ Pave, apply water twice daily or as often as necessary to control dust, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites. ▪ Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer). ▪ Sweep daily (with water sweepers using reclaimed water if possible) or as often as needed all paved access roads, parking areas and staging areas at the construction site to control dust. ▪ Sweep public streets daily (with water sweepers using reclaimed water if possible) in the vicinity of the project site, or as often as needed, to keep streets free of visible soil material. ▪ Hydroseed or apply non-toxic soil stabilizers to inactive construction areas. ▪ Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt/sand). ▪ Limit vehicle traffic speeds on unpaved roads to 15 miles per hour. ▪ Vegetative ground cover shall be planted in disturbed areas as soon as possible and watered appropriately until the vegetation is established. 	Applicant	During construction	City of Cupertino Public Works Department And Building Department	Plan Review and Approval	During scheduled construction site inspections

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 5-1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
<ul style="list-style-type: none"> ■ Install sandbags or other erosion control measures to prevent silt runoff from public roadways. ■ All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe. 					
<p>Mitigation Measure AQ-2: During construction, the construction contractor(s) shall:</p> <ul style="list-style-type: none"> ■ Use construction equipment that have engines that meet either United State Environmental Protection Agency (USEPA) or California Air Resources Board (CARB) Tier 4 Interim emission standards for off-road diesel-powered construction equipment with more than 25 horsepower, unless it can be demonstrated to the City of Cupertino Building Division that such equipment is not available. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by Tier 4 Interim emissions standards for a similarly sized engine, as defined by the CARB’s regulations. ■ Prior to issuance of any construction permit, ensure that all construction plans submitted to the City of Cupertino Planning Department and/or Building Division clearly show the requirement for Tier 4 Interim emission standards for construction equipment over 25 horsepower. ■ Maintain a list of all operating equipment in use on the project site for verification by the City of Cupertino Building Division official or his/her designee. The construction equipment list shall state the makes, models, and number of construction equipment on-site. ■ Ensure that all equipment shall be properly serviced and maintained in accordance with manufacturer recommendations. ■ Communicate with all sub-contractors in contracts and construction documents that all nonessential idling of construction equipment is restricted to 5 minutes or less in compliance with CARB Rule 2449 and is responsible for ensuring that this requirement is met. 	Applicant	During construction	City of Cupertino Public Works Planning & Building Department	Plan Review and Approval	During scheduled construction site inspections

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TABLE 5-1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
<p>Mitigation Measure AQ-3: The project applicant shall install a vapor barrier beneath the concrete foundation slab of the proposed residential buildings at the project site to mitigate potential odor risks associated with concentration of non-hazardous soil vapor contamination. This mitigation measure shall be identified on the permit application drawing set and as part of the construction drawing set, and shall be implemented by the on-site Construction Manager.</p>	Applicant	During construction	City of Cupertino Public Works Planning & Building Department	Site inspection	Once to ensure completion
BIOLOGICAL RESOURCES					
<p>Mitigation Measure BIO-1: Nests of raptors and other birds shall be protected when in active use, as required by the federal Migratory Bird Treaty Act and the California Department of Fish and Game Code. The construction contractor shall indicate the following on all construction plans, if construction activities occur during the breeding season (February 1 and August 31).</p> <ul style="list-style-type: none"> ■ Preconstruction surveys shall: <ul style="list-style-type: none"> ■ Be coordinated with the owner’s and/or residents of the residential properties directly south of the project site. ■ Be conducted by a qualified biologist prior to tree removal or grading, demolition, or construction activities. Note that preconstruction surveys are not required for tree removal or construction, grading, or demolition activities outside the nesting period. ■ Be conducted no more than 14 days prior to the start of construction. ■ Be repeated at 14-day intervals until construction has been initiated in the area after which surveys can be stopped. ■ Document locations of active nests containing viable eggs or young birds. ■ Protective measures for active nests containing viable eggs or young birds shall be implemented under the direction of the qualified biologist until the nests no longer contain eggs or young birds, and the young have left the nest and are foraging 	Applicant	Prior to construction During construction	Qualifying biologist in consultation with California Department of Fish and Wildlife as needed	Preconstruction Survey	Once for survey; ongoing if nesting birds identified and until they have left the nest

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Mitigation Measures	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
<p>independently or the nest is no longer active. Protective measures shall include:</p> <ul style="list-style-type: none"> ▪ Establishment of clearly delineated exclusion zones (i.e., demarcated by identifiable fencing, such as orange construction fencing or equivalent) around each nest location as determined by the qualified biologist, taking into account the species of birds nesting, their tolerance for disturbance and proximity to existing development. In general, exclusion zones shall be a minimum of 300 feet for raptors and 75 feet for passerines and other birds. ▪ Monitoring active nests within an exclusion zone on a weekly basis throughout the nesting season to identify signs of disturbance and confirm nesting status. ▪ An increase in the radius of an exclusion zone by the qualified biologist if project activities are determined to be adversely affecting the nesting birds. Exclusion zones may be reduced by the qualified biologist only in consultation with the California Department of Fish and Wildlife. 					
CULTURAL RESOURCES					
<p><u>Mitigation Measure CULT-1: A tribal representative shall be permitted on-site at all times during ground disturbance (including grading, demolition and/or construction) to monitor for potential prehistoric or historic subsurface cultural resources. Notice shall be given to the Tribe in a manner requested by the Tribe at least 48 hours before any ground disturbing activity. Prior to ground disturbance activities, construction workers conducting the ground disturbing activities shall undergo cultural resource sensitivity training conducted by the on-site tribal representative.</u></p> <p>If any prehistoric or historic subsurface cultural resources are discovered during ground-disturbing (including grading, demolition and/or construction) activities:</p>	Applicant	During construction	Consulting archeologist and City of Cupertino Public Works & Building Department	Plan Review and Approval	As needed if resources are unearthed

MITIGATION MONITORING AND REPORTING PROGRAM

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Mitigation Measures	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
<ul style="list-style-type: none"> ▪ All work within 50 feet of the resources shall be halted, the City shall be notified, and a qualified archaeologist <u>and tribal representative</u> shall be consulted. The contractor shall cooperate in the recovery of the materials. Work may proceed on other parts of the project site while mitigation for tribal cultural resources, historical resources or unique archaeological resources is being carried out. ▪ The qualified archaeologist shall prepare a report for the evaluation of the resource to the California Register of Historical Places and the City Building Department. The report shall also include appropriate recommendations <u>in collaboration with a tribal representative</u> regarding the significance of the find and appropriate mitigations as follows: <ul style="list-style-type: none"> ▪ If the resource is a non-tribal resource, the archaeologist shall assess the significance of the find according to CEQA Guidelines Section 15064.5. ▪ If the resource is a tribal resource – whether historic or prehistoric – the consulting archaeologist shall consult with the appropriate tribe(s) to evaluate the significance of the resource and to recommend appropriate and feasible avoidance, testing, preservation or mitigation measures, in light of factors such as the significance of the find, proposed project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) may be implemented. ▪ All significant non-tribal cultural materials recovered shall be, as necessary, and at the discretion of the consulting archaeologist, subject to scientific analysis, professional museum curation, and documentation according to current professional standards. 					
GEOLOGY AND SOILS					
Mitigation Measure GEO-1: The construction contractor shall incorporate the following in all grading, demolition, and construction plans:	Applicant	During construction	City of Cupertino Public Works & Building Department	Plan Review and Approval	During scheduled construction site inspections

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 5-1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
<ul style="list-style-type: none"> ■ In the event that fossils or fossil-bearing deposits are discovered during grading, demolition, or building, excavations within 50 feet of the find shall be temporarily halted or diverted. ■ The contractor shall notify the City of Cupertino Building Department and a City-approved qualified paleontologist to examine the discovery. ■ The paleontologist shall document the discovery as needed, in accordance with Society of Vertebrate Paleontology standards (Society of Vertebrate Paleontology 1995), evaluate the potential resource, and assess the significance of the finding under the criteria set forth in CEQA Guidelines Section 15064.5. ■ The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. ■ If the project applicant determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the proposed project based on the qualities that make the resource important. The excavation plan shall be submitted to the City for review and approval prior to implementation. 					
HAZARDS AND HAZARDOUS MATERIALS					
<p>Mitigation Measure HAZ-1: The project applicant shall prepare an Environmental Site Management Plan (ESMP) in consultation with applicable agencies (e.g., the Regional Water Quality Control Board (RWQCB), the Department of Toxic Substances Control (DTSC), Santa Clara County Department of Environmental Health (SCCDEH), or Santa Clara County Fire Department), if any, or in the alternative to the satisfaction of the City based on a third-party peer review, as appropriate. The purpose of the ESMP is to protect construction workers, the general public, the environment, and future site occupants from subsurface hazardous materials previously identified at the site and to address the possibility of encountering unknown contamination or hazards during demolition, grading, excavation, and construction activities. The ESMP shall summarize soil and groundwater analytical</p>	Applicant	Prior issuance of building permit	City of Cupertino Public Works & Building Department	Plan Review and Approval	During scheduled construction site inspections

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Mitigation Measures	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
<p>data collected on the project site during past investigations; identify management options for grading, if contaminated media are encountered during grading; and identify monitoring, irrigation, or other wells requiring proper abandonment in compliance with local, State, and federal laws, policies, and regulations.</p> <p>The ESMP shall include measures for identifying, testing, and managing soil and groundwater suspected of or known to contain hazardous materials. The ESMP shall: 1) provide procedures for evaluating, handling, storing, testing, and disposing of soil and groundwater during project grading; 2) describe required worker health and safety provisions for all workers potentially exposed to hazardous materials in accordance with State and federal worker safety regulations; and 3) designate personnel responsible for implementation of the ESMP.</p>					
NOISE					
<p>Mitigation Measure NOISE-1: The following shall be incorporated in all activity phases and construction plans, as required by the Cupertino Municipal Code (CMC). Construction activities shall take place only during daytime hours of 7:00 a.m. and 8:00 p.m. on weekdays and due to the close proximity of the adjacent residential land use to the south, construction may occur on the weekends, holidays or nighttime only if a special exception has been granted by the City. In addition, the construction crew shall adhere to the following best management practices:</p> <ul style="list-style-type: none"> ▪ At least 90 days prior to the start of any construction, demolition or grading activities, all off-site businesses and residents within 300 feet of the project site will be notified of the planned activities. The notification will include a brief description of the project, the activities that would occur, the hours when activity would occur, and the construction period’s overall duration. The notification should include the telephone numbers of the contractor’s authorized representatives that are assigned to respond in the event of a noise or vibration complaint. ▪ The project applicant and contractors shall prepare and submit a Construction Noise Control Plan to the City’s Building Department 	Applicant	Prior to issuance of building permits	City of Cupertino Public Works Department	Plan review and approval/site inspections	Once for plan review/ during scheduled construction site inspections

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Mitigation Measures	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
<p>and Code Enforcement for review and approval prior to issuance of any grading, demolition, and/or building permits. The Construction Noise Plan shall demonstrate compliance with the 80-dBA limit in the CMC. The details of the Construction Noise Control Plan, including those details listed herein, shall be included as part of the permit application drawing set and as part of the construction drawing set, shall be implemented by the on-site Construction Manager, and shall include, but not be limited to, the following available controls to comply with the 80 dBA performance standard:</p> <ul style="list-style-type: none"> ■ At least 10 days prior to the start of construction activities, a sign will be posted at the entrance(s) to the job site, clearly visible to the public, which includes permitted construction days and hours, as well as the telephone numbers of the City’s and contractor’s authorized representatives that are assigned to respond in the event of a noise or vibration complaint. If the authorized contractor’s representative receives a complaint, he/she will investigate, take appropriate corrective action, and report the action to the City. ■ During the entire active construction period, equipment and trucks used for project construction will utilize the best available noise control techniques (e.g., improved mufflers, equipment re-design, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds), wherever feasible. ■ Include noise control requirements for equipment and tools, including concrete saws, to the maximum extent feasible. Such requirements could include, but are not limited to, erecting temporary plywood noise barriers between construction areas and nearby sensitive receptors; performing work in a manner that minimizes noise; and undertaking the noisiest activities during times of least disturbance to nearby sensitive receptors. 					

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Mitigation Measures	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
<ul style="list-style-type: none"> ■ During the entire active construction period, stationary noise sources will be located as far from sensitive receptors as possible, and they will be muffled and enclosed within temporary sheds, or insulation barriers or other measures will be incorporated to the extent feasible. ■ Select haul routes that avoid the greatest amount of sensitive use areas and submit to the City of Cupertino Public Works Department for approval prior to the start of the construction phase. ■ Signs will be posted at the job site entrance(s), within the on-site construction zones, and along queueing lanes (if any) to reinforce the prohibition of unnecessary engine idling. All other equipment will be turned off if not in use for more than 5 minutes. ■ During the entire active construction period and to the extent feasible, the use of noise producing signals, including horns, whistles, alarms, and bells will be for safety warning purposes only. The construction manager will use smart back-up alarms, which automatically adjust the alarm level based on the background noise level or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and law. ■ Prior to start of construction, erect a temporary noise barrier/curtain between the construction zone and adjacent residences along the boundary (see Figure 4-1, Temporary Noise Barrier Locations, of the Initial Study). The temporary sound barrier shall have a minimum height of 12 feet and be free of gaps and holes. The barrier can be (a) a ¾-inch-thick plywood wall OR (b) a hanging blanket/curtain with a surface density or at least 2 pounds per square foot. 					
<p>Mitigation Measure NOISE-2: Mechanical equipment shall be selected and designed to reduce impacts on surrounding uses to meet the Cupertino Municipal Code noise limits of 60 dBA and 50 dBA at residential uses during daytime and nighttime, respectively, and 65 dBA and 55 dBA at non-residential sensitive uses during daytime and</p>	Applicant	Prior to and during construction	Qualified acoustical consultant and City of Cupertino Public Works & Building Department	Plan review and approval/site inspections	Once for plan review/ during scheduled construction site inspections

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<p>nighttime, respectively. A qualified acoustical consultant shall be retained to review mechanical noise as these systems are selected to determine specific noise reduction measures necessary to reduce noise to comply with the City’s noise level requirements. Mechanical equipment shall be selected and designed to reduce impacts on surrounding uses to meet the City’s noise level requirements. Noise reduction measures could include, but are not limited to:</p> <ul style="list-style-type: none"> ▪ Selection of equipment that emits low noise levels; ▪ Installation of noise dampening techniques, such as enclosures and parapet walls, to block the line-of-sight between the noise source and the nearest receptors; ▪ Locating equipment in less noise-sensitive areas, where feasible. 		During construction	Qualified acoustical consultant and City of Cupertino Public Works & Building Department	Plan review and approval/site inspections	Once for plan review/ during scheduled construction site inspections
TRIBAL CULTURAL RESOURCES					
Mitigation Measure TCR-1: Implement Mitigation Measure CULT-1.	Applicant	During construction	Consulting archeologist and City of Cupertino Public Works Department	Plan Review and Approval	As needed if resources are unearthed
UTILITIES AND SERVICE SYSTEMS					
Mitigation Measure UTIL-1: No building permits shall be issued by the City for the proposed 22690 Stevens Creek Boulevard Project that would result in exceeding the permitted peak wet weather flow capacity of 13.8 mgd through the Santa Clara sanitary sewer system. The project applicant shall demonstrate, to the satisfaction of the City of Cupertino	Applicant	Prior to issuance of building permits	Cupertino Sanitary District, City of Cupertino Public Works and Building Departments	Plan Review and Approval	During scheduled construction site inspections

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<p>and Cupertino Sanitary District (CSD), that the proposed project would not exceed the peak wet weather flow capacity of the Santa Clara sanitary sewer system by implementing one or more of the following methods:</p> <ol style="list-style-type: none"> 1. Reduce inflow and infiltration in the CSD system to reduce peak wet weather flows; or 2. Increase on-site water reuse, such as increased grey water use, or reduce water consumption of the fixtures used within the proposed project, or other methods that are measurable and reduce sewer generation rates to acceptable levels, to the satisfaction of the CSD. <p>The proposed project’s estimated wastewater generation shall be calculated using the generation rates used by the CSD in the <i>Flow Modeling Analysis for the Homestead Flume Outfall to the City of Santa Clara</i>, prepared by Mark Thomas & Co. Inc. dated December 6, 2019, unless alternative (i.e., lower) generation rates achieved by the proposed project are substantiated by the project applicant based on evidence to the satisfaction of the CSD. To calculate the peak wet weather flow for a 10-year storm event, the average daily flow rate shall be multiplied by a factor of 2.95 as required by CSD pursuant to their December 2019 flow modeling analysis.</p>					

6. Organizations and Persons Consulted

This Initial Study was prepared by the following individuals:

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