

4256 El Camino Real Hotel Project

Draft Environmental Impact Report SCH#2018122054

prepared by City of Palo Alto Planning and Community Environment Department 250 Hamilton Avenue Palo Alto, California 94301 Contact: Samuel J. Gutierrez, Planner

prepared with the assistance of

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

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Executive Summary

This document is an Environmental Impact Report (EIR) analyzing the environmental effects of the proposed 4256 El Camino Real Hotel Project. This section summarizes the characteristics of the proposed project, alternatives to the proposed project, and the environmental impacts and mitigation measures associated with the proposed project.

Project Synopsis

Project Applicant

Randy Popp 210 High Street Palo Alto, California 94303

Lead Agency Contact Person

Samuel J. Gutierrez, Planner City of Palo Alto 250 Hamilton Avenue Palo Alto, California 94301 (650) 329-2225

Project Description

This EIR has been prepared to examine the potential environmental effects of the 4256 El Camino Real Hotel Project. The following is a summary of the full project description, which can be found in Section 2, *Project Description*.

The project site is comprised of one lot located at 4256 El Camino Real in the City of Palo Alto. The project site is relatively flat and rectangular with an area of 25,947 square feet (0.60 acres), and the Assessor Parcel Number is 167-08-042. The site is located in a Service Commercial (CS) zone, as defined by the City's Zoning Ordinance and has a 2030 Comprehensive Plan land use designation of Service Commercial. Uses in the Service Commercial Zone are "intended to create and maintain areas accommodating citywide and regional services that may be inappropriate in neighborhood or pedestrian-oriented shopping areas, and which generally require automotive access for customer convenience, servicing of vehicles or equipment, loading or unloading, or parking of commercial service vehicles" (PAMC Section 18.16.010).The proposed project would not require amendments to the City's 2030 Comprehensive Plan or the Palo Alto Municipal Code (PAMC).

The project site is currently developed with a one-story restaurant building located at 4256 El Camino Real. The one-story building is currently occupied by Su Hong (Chinese restaurant). The building covers an area (building footprint) of 4,070 square feet, approximately 16 percent of the project site. A paved parking lot approximately 5,500 square feet in size is located to the northwest and southwest of the building.

The proposed project would involve demolition of the existing restaurant building and construction of a five-story hotel building, including a subterranean parking garage. The hotel would include 97 guest rooms, some with balconies, underground parking with mechanical lifts, and an exterior courtyard. Hotel amenities would include a fitness room, business center, restaurant/café (with outdoor seating in the exterior courtyard), and a bar. The total gross size of the project would be approximately 51,891.2 square feet. The building roof height would be 50 feet, with mechanical equipment and an associated mechanical screen extending no more than 8 feet above the maximum ridge of the roof. The rear of the building would include an outdoor patio area and dining area with a pedestrian path, seating, a lounge area, and a gathering space with a fire pit for use by hotel guests. Parking would include 85 parking stalls plus 17 valet aisle spaces for a total of 103 vehicle spaces located in a two-level subterranean garage accessible via a driveway from El Camino Real.

The proposed project would require a demolition and building permit. In addition, Planning Commission approval of a discretionary permit/entitlement for Development Plan Review of a new building would be required. This EIR is intended to cover all permits required by the project.

Project Objectives

The objectives for the project include:

- 1. Provide an approximately 97-room hotel with full-service amenities in an area of Palo Alto with high demand.
- 2. Satisfy four-star soft brand criteria and standards including but not limited to providing a fitness center, bar and restaurant, meeting room, room service, and serviceable outdoor dining and garden space.
- 3. Redevelop an available underutilized parcel, currently developed at a floor area ratio (FAR) of 0.34 into a more efficient, economically productive use with an FAR of 2.0.

Alternatives

As required by Section 15126.6 of the *CEQA Guidelines*, this section of the EIR examines a range of reasonable alternatives to the proposed Specific Plan. The following alternatives are evaluated in this EIR:

- Alternative 1: No Project Alternative
- Alternative 2: No Exterior Balconies or Outdoor Restaurant Seating or Exterior Balconies along the Rear of the Project Site

Based on the alternatives analysis, Alternative 2 was determined to be the environmentally superior alternative.

Refer to Section 6, Alternatives, for the complete alternatives analysis.

Areas of Known Controversy

The EIR scoping process identified several areas of known controversy for the proposed project including traffic congestion, noise, land use and planning, aesthetics, and dewatering. Responses to the Notice of Preparation of a Draft EIR are summarized in Section 1, *Introduction*.

Issues to be Resolved

There are no issues to be resolved that have been identified.

Issues Not Studied in Detail in the EIR

As indicated in the Initial Study (Appendix B of this EIR), there is no substantial evidence that significant impacts would occur to the following issue areas: Aesthetics, Agriculture and Forestry Resources, Air Quality, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology/Water Quality, Land Use and Planning, Mineral Resources, Population/Housing, Public Services, Recreation, Utilities/Service Systems, and Energy Conservation. Impacts related to Biological Resources, Cultural Resources, Geology and Soils, Noise, and Transportation were found to be potentially significant and are addressed in this EIR.

Summary of Impacts and Mitigation Measures

Table ES-1 summarizes the environmental impacts of the proposed project, proposed mitigation measures, and residual impacts (the impact after application of mitigation, if required).

- Significant and Unavoidable. An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the CEQA Guidelines.
- Less than Significant with Mitigation Incorporated. An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under §15091 of the CEQA Guidelines.
- Less than Significant. An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact:** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Impact	Mitigation Measure (s)	Residual Impact
Biological Resources		
Impact BIO-1. The project may result in impacts to protected nesting bird species. This impact would be significant but mitigable.	BIO-1 Nesting Bird Surveys and Avoidance. Construction of the project shall be prohibited during the general avian nesting season (February 1 – August 31), if feasible. If nesting season avoidance is not feasible, the applicant shall retain a qualified biologist, as approved by the City of Palo Alto, to conduct a preconstruction nesting bird survey of on-site and adjacent trees to determine the presence/absence, location, and activity status of any active nests. The qualified biologist shall establish the extent of the survey buffer area surrounding the site to ensure that direct and indirect effects to nesting birds are avoided. To avoid the destruction of active nests and to protect the reproductive success of birds protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC), nesting bird surveys shall be performed not more than 14 days prior to scheduled vegetation clearance and structure demolition. In the event that active nests are discovered, a suitable buffer (typically a minimum of 50 feet for passerines and a minimum of 250 feet for raptors) shall be established around such active nests and no construction shall be allowed within the buffer areas until a qualified biologist has determined that the nest is no longer rely on the nest). No ground disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Nesting bird surveys are not required for construction activities occurring between August 31 and February 1.	Less than significant.
Impact BIO-2. The project would not result in impacts to state or federally protected wetlands. This impact would be less than significant.	No mitigation required.	Less than significant without mitigation.
Impact BIO-3. The proposed project would not involve removal of a "protected tree" as defined by the City's Tree Preservation and Management Ordinance. However, construction activities would occur near protected redwood trees such that they could be impacted during construction. Further, the project would involve removal of street trees along the El Camino Real frontage. Compliance with the City's tree protection ordinance and mitigation to protect on-site and adjacent redwood trees during construction would ensure that impacts would be	BIO-2 Tree Protection and Preservation Plan. All protective measures described on pages 14 through 17 of the Tree Protection and Preservation Plan (Rincon Consultants 2018b, Appendix B) shall be incorporated into the project including preconstruction measures (such as protective fencing), during-construction measures (such as avoidance of soil compaction), and maintenance activities (such as maintaining normal irrigation).	Less than significant.

Table ES-1Summary of Environmental Impacts, Mitigation Measures, and ResidualImpacts

less than significant.

Impact	Mitigation Measure (s)	Residual Impact
Impact BIO-4. The project site is not located in an approved Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan. This impact would be less than significant.	No mitigation required.	Less than significant without mitigation.
Cultural Resources		
Impact CR-1. The project would result in the demolition and removal of an existing single-story restaurant building. Due to a lack of significance and integrity, the structure does not meet the eligibility criteria for listing in the CRHR or otherwise constitute historical resources for the purposes of CEQA. Thus, this impact would be less than significant.	No mitigation required.	Less than Significant without mitigation.
Impact CR-2. Project grading and other ground-disturbing activities could result in impacts to previously unidentified archaeological resources. This impact would be significant but mitigable.	CR-1 Worker's Environmental Awareness Program (WEAP). A qualified archaeologist shall be retained who meets the Secretary of the Interior's Professional Qualifications Standards for archaeology to conduct WEAP training for archaeological sensitivity for all construction personnel prior to the commencement of any ground disturbing activities. Archaeological sensitivity training should include a description of the types of cultural resources that may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find. CR-2 Resource Recovery Procedures. In the event that archaeological resources are unearthed during project construction, all earth-disturbing work near the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find. If the discovery proves to be significant under CEQA, additional work such as preservation in place or archaeologist in coordination with City staff and descendants and/or stakeholder groups, as warranted. Once the resource has been properly treated or protected, work in the area may resume. A Native American representative shall be retained to monitor any mitigation work associated with Native American cultural material.	
Impact CR-3. Ground-disturbing activities associated with development under the proposed project have the potential to disturb unidentified human remains. Compliance with existing regulations would ensure impacts remain less than significant.	No mitigation required.	Less than Significant without mitigation.

Impact	Mitigation Measure (s)	Residual Impact
Impact CR-4. Project grading and other ground-disturbing activities could result in impacts to previously unidentified tribal cultural resources. This impact would be significant but mitigable.	CR-3 Unanticipated Discovery of Tribal Cultural Resources. In the event that cultural resources of Native American origin are identified during construction, the applicant shall contact the City. The City shall follow procedures to make sure appropriate monitoring is taking place and appropriate groups are contacted, including consulting with a qualified archaeologist and beginning or continuing Native American consultation procedures. If the City determines the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with Native American groups. The plan would include avoidance of the resource or, if avoidance of the resource is infeasible, the plan would outline the appropriate treatment of the resource in coordination with the archeologist and the appropriate Native American tribal representative.	Less than significant.
Geology and Soils		
Impact GEO-1. The project site contains several layers of soil with moderate expansion potential that could potentially experience liquefaction. The project impacts would be less than significant with mitigation incorporated.	 GEO-1 Geotechnical Design Considerations. The 2018 geotechnical investigation conducted by Cornerstone Earth Group contains comprehensive design recommendations for the project, as well as recommendations for the construction contractor. Feasible recommendations or an equivalent alternative design measure recommended by a qualified engineer and approved by the Chief Building Official shall be incorporated into the proposed project grading and building plans. Measures to be incorporated into the project plans prior to project construction include, but are not limited to: Prior to submitting project grading and building plans for City review, a qualified geotechnical consultant shall be retained to review the geotechnical aspects of the project structural, civil, and landscape plans and specifications, allowing sufficient time to provide the design team with comments. A qualified geotechnical consultant shall be notified at least 48 hours prior to earthwork and construction activities and be present on site to provide geotechnical consultant shall provide a letter to the Chief Building Official at the end of construction, outlining contractor compliance with project plans, specifications, and adherence to project mitigation measures. Groundwater in car lift pit excavation: The car list pit wall shall be waterproof, and the pit foundation and walls shall be designed to include construction joints that are resistant to hydrostatic pressure. Groundwater level of 17 feet below the existing ground surface in structure design shall be used in 	Less than significant.

The construction contractor shall provide a

Impact	Mitigation Measure (s)	Residual Impact
	 construction dewatering plan to the construction monitor prior to commencing pit excavation work during project construction. The dewatering plan shall maintain groundwater at least five feet below the bottom of the mass excavation, and at least two feet below localized excavations such as deepened footings, lift shafts, and utilities. Proximity to garage excavation to existing improvements: Temporary shoring to support the proposed 18- to 26-foot deep excavation adjacent to 4250 and 4260 El Camino Real (adjacent properties to the northwest and southeast, respectively) and shoring for the basement walls near El Camino Real and the property to the southwest shall be implemented during project construction to preserve the structural and geologic integrity of adjacent buildings during project excavation activities. Differential movement from on-grade to on-structure transitions: 	
	 Subslabs shall be included beneath flatwork or pavers that can cantilever at least three feet beyond the underground retaining wall. Retaining wall backfill shall be compacted to 95 percent where surface improvements are planned. Presence of expansive surficial soil: 	
	 At-grade surface improvements outside the basement footprint shall be designed to resist expansive soils. All flatwork (e.g., sidewalks and patios) shall have sufficient reinforcement and be supported on a layer of non-expansive fill. At-grade footings shall extend below the zone of seasonal moisture fluctuation. Moisture changes in the surficial soils shall be limited by using positive drainage away from buildings as well as limiting landscaping watering. Presence of cohesionless (sandy) soil at basement level: Contractors shall form footings where sand with 	
	low fine substrates are encountered, and prepare slab- on-grade subgrade just prior to concrete placement.	
Noise		
Impact N-1. On-site activities associated with project operation, such as noise associated with the balconies, outdoor restaurant seating in the patio area, and mechanical equipment would generate noise	No mitigation required.	Less than Significant without mitigation.

levels that may periodically be audible to existing uses near the project site. The project would also increase traffic noise on area roadways and would generate onand off-site noise from mail and delivery trucks traveling to and from

Impact	Mitigation Measure (s)	Residual Impact
the site. However, these noise levels would not exceed applicable standards. Impacts would be less than significant.		
Impact N-2. Project construction would intermittently generate groundborne vibration on and adjacent to the site. This would affect existing vibration-sensitive receptors near the project site. However, with compliance with existing city requirements this impact would be less than significant.	No mitigation required.	Less than Significant without mitigation.
Impact N-3. Project construction would intermittently generate high noise levels on and adjacent to the site. This would affect existing noise- sensitive receptors near the project site. This impact would be less than significant with mitigation incorporated.	 N-1 Construction-Related Noise Reduction Measures. The applicant shall apply the following measures during construction of the project. Mufflers. Construction equipment shall be properly maintained and all internal combustion engine driven machinery with intake and exhaust mufflers and engine shrouds, as applicable, shall be in good condition and appropriate for the equipment. During construction, all equipment, fixed or mobile, shall be operated with closed engine doors and shall be equipped with properly operating and maintained mufflers, consistent with manufacturers' standards. Electrical Power. Electrical power, rather than diesel equipment, shall be used to run compressors and similar power tools and to power any temporary structures, such as construction trailers or caretaker facilities. Equipment Staging. All stationary equipment (e.g., air compressors, portable generators) shall be staged as far away from sensitive receptors as feasible. Where feasible, construct temporary noise barriers around stationary equipment in a manner that fully blocks the line of sight to residential windows in the adjacent apartment complex. Equipment Iding. Construction vehicles and equipment shall not be left idling for longer than five minutes when not in use. Workers' Radios. All noise from workers' radios shall be controlled to a point that they are not audible at sensitive receptors near construction equipment shall have smart back-up alarms that automatically adjust the sound level of the alarm in response to ambient noise levels. Alternatively, back-up alarms shall be disabled and replaced with human spotters to ensure safety when mobile construction equipment is moving in the reverse direction. Sound Barrier. During the demolition, site preparation, grading, and building phases of construction, temporary sound barriers field tested to reduce noise by at least 15 dBA shall be installed and maintained facing the adjacent residential units. Temporary sound<	Less than significant.

Impact	Mitigation Measure (s)	Residual Impact
	barriers shall block line of sight between noise- generating construction equipment and adjacent residential windows and shall be placed as close to the source equipment as feasible. Mobile sound barriers may be used as appropriate to attenuate construction noise near the source equipment. During the building construction phase, temporary sound barriers shall be applied to generators and cranes used on-site. Disturbance Coordinator. The applicant shall designate a disturbance coordinator who shall be responsible for responding to any local complaints about construction noise. The noise disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler) and shall require that reasonable measures warranted to correct the problem be implemented. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.	
Transportation and Traffic		
Impact T-1. The two proposed driveways on El Camino Real would meet the required site distance requirements and impacts would be less than significant with mitigation incorporated	 T-1 Site Access and Circulation Considerations. The following measures shall be incorporated into the project plans: Convex mirrors shall be placed at the bottom of the ramp down to the garage to assist drivers with the sharp turn by allowing vehicles going up or down the ramp to see each other around the turn. Red curb shall be painted between the two project driveways to prohibit on-street parking and ensure adequate sight distance from project driveways. 	Less than significant with mitigation.
Impact T-2. The project would provide adequate queue storage capacity and impacts would be less than significant.	No mitigation required.	Less than Significant without mitigation.

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1 Introduction

This document is an Environmental Impact Report (EIR), prepared pursuant to CEQA Guidelines Section 15183, Projects Consistent with a Community Plan or Zoning, for a proposed new hotel located at 4256 El Camino Real in the city of Palo Alto, California. The proposed 4256 El Camino Real Hotel Project (hereafter referred to as the "proposed project" or "project") would be constructed on a site currently occupied by a one-story restaurant building. The project would involve demolition of the existing restaurant building, removal of the paved parking lot and construction of a five-story hotel building with 97 guest rooms. Other components of the project include two levels of subterranean parking, an outdoor patio, bike storage, and a total of 103 parking spaces for building occupants.

This section discusses (1) the project and EIR background; (2) the legal basis for preparing an EIR; (3) the scope and content of the EIR; (4) the lead and responsible agencies; and (5) the environmental review process required under the California Environmental Quality Act (CEQA). The proposed project is described in detail in Section 2, *Project Description*.

1.1 Environmental Impact Report Background

The City of Palo Alto distributed a Notice of Preparation (NOP) of an EIR for a 30-day agency and public review period starting on July 5, 2019 and ending on August 5, 2019. The City received three letters response to the NOP during the public review period. The NOP is presented in Appendix A of this EIR, along the NOP responses received. Table 1-1 summarizes the content of the letters and where the issues raised are addressed in the EIR.

Commenter	Comment/Request	How and Where it was Addressed
Native American Heritage Commission	The commenter summarizes the requirements for Assembly Bill 52 and Senate Bill 18 and other recommendations for analysis of impacts to cultural resources under CEQA	The project does not involve an amendment to the City's Comprehensive Plan and is therefore not subject to the requirements of SB 18. The project's compliance with AB 52 and an analysis of impacts related to cultural resources consistent with the recommendations of the commenter is included in Section 4.2, <i>Cultural</i> <i>Resources</i> , of this EIR.
California Department of Transportation (Caltrans)	The commenter states that tree removal/planning will require a Caltrans landscape review and Encroachment Permit and any work in the Caltrans right- of-way along El Camino Real would require an Encroachment Permit. The commenter states construction vehicles should not operate during the AM and PM peak hours on El Camino Real. The commenter concurs with mitigation measure TRA-1 requiring site improvements. The commenter states the project is an ideal candidate to apply Transportation Management Associate (TMA) policies. The commenter states that the project should be conditioned to contribute a fair share impact fees towards proposed corridor improvement Class IV Bikeway on El Camino Real.	The City recognizes the project would be subject to an encroachment permit for work in the El Camino Real right-of-way. This is stated in Section 2, <i>Project Description</i> , of this EIR. Regarding the comment that the project should contribute fair share impact fees towards proposed bikeway improvements along El Camino Real, at this time the City is not planning bikeway improvements along El Camino Real in the vicinity of this project and the City has not partnered with Caltrans on their District 4 bike plan. Therefore, the project would not be required to contribute funds towards these improvements. However, the project is subject to the Citywide Transportation Impact Fee. All other issues raised by the commenter are addressed in Section 4.5, <i>Transportation</i> , of this EIR and in Section 16, <i>Transportation</i> , of the Initial Study (included in Appendix B of this EIR).
Sharlene Carlson on behalf of Palo Alto Redwoods	The commenter states that issues pertaining to visual character (consistency with the General Plan), dewatering (water quality), and cumulative impacts should be addressed in the EIR.	Issues related to cumulative impacts are addressed for issue area at the end of each EIR section. The list of cumulative projects is included in Section 3, <i>Environmental Setting</i> . Issues related to visual character, consistency with the General Plan, and dewatering were found to be less than significant and are examined in the Initial Study (Appendix B of this EIR).

Table 1-1 NOP Comments and EIR Response

1.2 Purpose and Legal Authority

The proposed project requires the discretionary approval of the City of Palo Alto; therefore, the project is subject to the environmental review requirements of CEQA. In accordance with Section 15121 of the *CEQA Guidelines* (California Code of Regulations, Title 14), the purpose of this EIR is to serve as an informational document that:

"...will inform public agency decision makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project." This EIR has been prepared as a project EIR pursuant to Section 15161 and as an EIR for a project consistent with a community plan or zoning pursuant to Section 15183 of the *CEQA Guidelines*. A Project EIR is appropriate for a specific development project. As stated in the *CEQA Guidelines*:

"This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project, including planning, construction, and operation."

This limited scope EIR includes the Initial Study; the analysis of the environmental impacts not previously analyzed in the Comprehensive Plan EIR or peculiar to the project; and mitigation measures and project alternatives addressing the impacts.

This EIR is intended to serve as an informational document for the public and for the City of Palo Alto decision makers. The process will include public hearings before the Planning and Transportation Commission to consider certification of a Final EIR and approval of the proposed project.

1.3 Scope and Content

The purpose of *CEQA Guidelines* Section 15183 is to streamline the environmental review process for projects that are consistent with existing zoning or an applicable community plan or general plan. This provision of the CEQA Guidelines limits additional environmental review for such a project except as necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site.

CEQA Guidelines Section 15183 provides guidance on the criteria to be used in making a decision as to whether this streamlining option will apply. Specifically, *CEQA Guidelines* Section 15183, subdivision (b), provides as follows:

- (b) In approving a project meeting the requirements of this section, a public agency shall limit its examination of environmental effects to those which the agency determines, in an initial study or other analysis:
 - 1) Are peculiar to the project or the parcel on which the project would be located,
 - 2) Were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent,
 - Are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action, or
 - 4) Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.

Section 15183, subdivision (f), provides guidance as to certain categories of effects that, as a matter of law, are not considered "peculiar" to a project. This provision states in part as follows:

(f) An effect of a project on the environment shall not be considered peculiar to the project or the parcel for the purposes of this section if uniformly applied development policies or standards have been previously adopted by the city or county with a finding that the development policies or standards will substantially mitigate the environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect.

Section 15183, subdivision (d) lists the requirements for projects to be eligible for this streamlining option. Section 15183 only applies to projects which meet the following conditions:

- 1) The project is consistent with:
 - a. A community plan adopted as part of a general plan,
 - b. A zoning action which zoned or designated the parcel on which the project would be located to accommodate a particular density of development, or
 - c. A general plan of a local agency, and
- 2) An EIR was certified by the lead agency for the zoning action, the community plan, or the general plan.

This EIR addresses the issues determined to be potentially significant or peculiar to the project or project site by the City of Palo Alto in the context of the streamlining provisions discussed above. To identify potentially significant environmental issues, the City conducted a review of the project through a modified Initial Study (Appendix B to this EIR), pursuant to *CEQA Guidelines* Section 15183. The Initial Study determined that the project may have potentially significant impacts or impacts peculiar to the project related to the following environmental issues:

- Biological Resources
- Cultural Resources
- Geology and Soils
- Noise
- Transportation and Traffic

Therefore, this EIR addresses potentially significant impacts in these issue areas, including the project's site-specific and cumulative effects. It recommends feasible mitigation measures, where possible, that would eliminate or reduce adverse environmental effects.

In preparing the EIR, use was made of pertinent City policies, ordinances and guidelines; certified EIRs and adopted CEQA documents; and other background documents. A full reference list is contained in Section 7, *References and Preparers*.

The Alternatives section of the EIR (Section 6) was prepared in accordance with Section 15126.6 of the *CEQA Guidelines* and focuses on alternatives that are capable of eliminating or reducing significant adverse effects associated with the project while feasibly attaining most of the basic project objectives. In addition, the alternatives section identifies the "environmentally superior" alternative among the alternatives assessed. The alternatives evaluated include the CEQA-required "No Project" alternative and three alternative development scenarios for the project area.

The level of detail contained throughout this EIR is consistent with the requirements of CEQA and applicable court decisions. Section 15151 of the *CEQA Guidelines* provides the standard of adequacy on which this document is based. The *Guidelines* state:

"An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is

reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure."

While the CEQA review in this EIR has been streamlined to some extent pursuant to CEQA Guidelines Section 15183, project-specific analysis was required for several environmental issues to meet the intent of Section 15183 and to provide the public and decision-makers with up to date and accurate environmental review for the project.

1.4 Lead, Responsible, and Trustee Agencies

The *CEQA Guidelines* define lead, responsible and trustee agencies. The City of Palo Alto is the lead agency for the project because it holds principal responsibility for approving the project.

A responsible agency refers to a public agency other than the lead agency that has discretionary approval over the project. There are no responsible agencies for this project, although the project may require an encroachment permit from Caltrans for work in the El Camino Real right-of-way which is under Caltrans jurisdiction.

A trustee agency refers to a state agency having jurisdiction by law over natural resources affected by a project. There are no trustee agencies for the proposed project.

1.5 Environmental Review Process

The environmental impact review process, as required under CEQA, is summarized below and illustrated in Figure 1-1. The steps are presented in sequential order.

- 1. Determination of Eligibility for CEQA Guidelines Section 15183 Process and Scope. The lead agency may review the proposed project under the applicable sections of the CEQA Guidelines and Statute to determine eligibility for a streamlined EIR process and scope. This includes an analysis for consistency with the applicable zoning, community plan, or general plan.
- 2. Notice of Preparation (NOP). After deciding that an EIR is required, the lead agency (City of Palo Alto) must file a NOP soliciting input on the EIR scope to the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing (*CEQA Guidelines* Section 15082; Public Resources Code Section 21092.2). The NOP must be posted in the County Clerk's office for 30 days. The NOP may be accompanied by an Initial Study that identifies the issue areas for which the proposed project could create significant environmental impacts.
- Draft EIR Prepared. The Draft EIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) discussion of significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) a discussion of alternatives; g) mitigation measures; and h) discussion of irreversible changes.
- 4. Notice of Completion (NOC)/Notice of Availability of a Draft EIR. The lead agency must file a NOC with the State Clearinghouse when it completes a Draft EIR and prepare a Public Notice of Availability of a Draft EIR. The lead agency must place the NOC in the County Clerk's office for 30 days (Public Resources Code Section 21092) and send a copy of the NOC to anyone requesting it (*CEQA Guidelines* Section 15087). Additionally, public notice of Draft EIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants

of contiguous properties. The lead agency must solicit input from other agencies and the public, and respond in writing to all comments received (Public Resources Code Sections 21104 and 21253). The minimum public review period for a Draft EIR is 30 days. When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days unless the State Clearinghouse a shorter period (Public Resources Code 21091).

- 5. **Final EIR.** A Final EIR must include: a) the Draft EIR; b) copies of comments received during public review; c) list of persons and entities commenting; and d) responses to comments.
- 6. **Certification of Final EIR.** Prior to making a decision on a proposed project, the lead agency must certify that: a) the Final EIR has been completed in compliance with CEQA; b) the Final EIR was presented to the decision-making body of the lead agency; and c) the decision making body reviewed and considered the information in the Final EIR prior to approving a project (*CEQA Guidelines* Section 15090).
- Lead Agency Project Decision. The lead agency may a) disapprove the project because of its significant environmental effects; b) require changes to the project to reduce or avoid significant environmental effects; or c) approve the project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (*CEQA Guidelines* Sections 15042 and 15043).
- 8. **Findings/Statement of Overriding Considerations**. For each significant impact of the project identified in the EIR, the lead agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (*CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.
- 9. **Mitigation Monitoring Reporting Program.** When the lead agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
- 10. **Notice of Determination (NOD).** The lead agency must file a NOD after deciding to approve a project for which an EIR is prepared (*CEQA Guidelines* Section 15094). A local agency must file the NOD with the County Clerk. The NOD must be posted for 30 days and sent to anyone previously requesting notice. Posting of the NOD starts a 30 day statute of limitations on CEQA legal challenges (Public Resources Code Section 21167[c]).



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2 **Project Description**

This section describes the proposed project, including the project applicant, the project site and surrounding land uses, major project characteristics, project objectives, and discretionary actions needed for approval.

2.1 Project Applicant

Randy Popp 210 High Street Palo Alto, California 94303

2.2 Lead Agency Contact Person

Samuel J. Gutierrez, Associate Planner City of Palo Alto 250 Hamilton Avenue Palo Alto, California 94301 (650) 329-2225

2.3 Project Location

The project site is located at 4256 El Camino Real in the City of Palo Alto, in Santa Clara County. The project site encompasses approximately 0.60 acres on one assessor's parcel (Assessor's Parcel Number 167-08-042). The site is located along El Camino Real northeast of the intersection of El Camino Real and Dinahs Court and approximately 0.25 miles southeast of the intersection of El Camino Real and Arastradero Road/West Charleston Road. Figure 2-1 shows the regional location of the project site and Figure 2-2 shows the location of the site in its neighborhood context.

2.4 Existing Setting

2.4.1 Current Land Use Designation and Zoning

The project site has a 2030 Comprehensive Plan land use designation of Service Commercial. The City of Palo Alto's Comprehensive Plan 2030 (Comprehensive Plan) Land Use and Community Design Element defines the Service Commercial category as follows:

"...facilities providing citywide and regional services and relying on customers arriving by car... Typical uses include auto services and dealerships, motels, lumberyards, appliance stores and restaurants, including fast service types. In almost all cases, these uses require good automobile and service access so that customers can safely load and unload without impeding traffic. In some locations, residential and mixed-use projects may be appropriate in this land use category." (City of Palo Alto 2017a).



Figure 2-1 Regional Location







Figure 2-2 Project Site Location

The project site is zoned Service Commercial (CS). The Palo Alto Municipal Code (PAMC) defines the CS district as one "intended to create and maintain areas accommodating citywide and regional services that may be inappropriate in neighborhood or pedestrian-oriented shopping areas, and which generally require automotive access for customer convenience, servicing of vehicles or equipment, loading or unloading, or parking of commercial service vehicles" (PAMC Section 18.16.010).

2.4.2 Surrounding Land Uses

The project site is located on El Camino Real in a neighborhood characterized by residential, retail, service commercial, and office development. The project site is bordered by a two-story office building to the southeast, El Camino Real to the east, and a three-story multi-family apartment complex (Palo Alto Redwoods) to the northwest and west. Across El Camino Real to the east are a one-story restaurant (The Sea) and a two-story hotel (Dinah's Garden). Figure 2-3 and Figure 2-4 show photographs of the project site and surrounding development.

2.4.3 Existing Site Characteristics

The project site is approximately 0.60 acres (25,947 square feet) in size and is developed with a onestory, 3,300-square-foot restaurant building currently occupied by Su Hong (a Chinese restaurant), surface parking, and 25 landscaping trees, mostly around the perimeter of the site. These trees are shown on Figure 3 of Appendix C, and include four redwood trees (two in each of the west and south corners of the site). Four street trees (London plane) are located adjacent to the site along the El Camino Real frontage, with a fifth slightly southwest of the project site along El Camino Real. The project site is accessible to vehicles via two driveways on El Camino Real. The site is generally flat and is covered almost entirely with impervious surfaces.

2.5 Project Description

The proposed project would involve demolition of the existing restaurant building and construction of a five-story hotel building, including a subterranean parking garage. The hotel would include 97 guest rooms, some with balconies, underground parking with mechanical lifts, and an exterior courtyard. Hotel amenities would include a fitness room, business center, restaurant/café, and bar. The total gross size of the project would be approximately 51,900 square feet. The building roof height would be 50 feet, with mechanical equipment and an associated mechanical screen extending no more than 8 feet above the maximum ridge of the roof. The rear of the building would include an outdoor patio area with outdoor restaurant seating, a pedestrian path, seating, a lounge area, and a gathering space with a fire pit for use by hotel guests. Parking would include 85 parking stalls plus 17 valet aisle spaces for a total of 103 vehicle spaces located in a two-level subterranean garage accessible via a driveway from El Camino Real.

Figure 2-5 shows the proposed site and landscaping plans, Figure 2-6 shows the proposed front (north) and right (west) side elevations, and Figure 2-7 shows the proposed rear (south) and left (east) side elevations.

Table 2-1 summarizes the characteristics of the proposed hotel building.



Figure 2-3 Photographs of Project Site and Surrounding Development – Photos 1 and 2

Photo 1: View of the existing restaurant and northern driveway on the project site, taken from the northern corner of the site looking southwest.



Photo 2: View of the on-site southern driveway onto El Camino Real, taken from the southern corner of the site looking northeast.



Figure 2-4 Photographs of Project Site and Surrounding Development – Photos 3 and 4

Photo 3: Palo Alto Redwoods apartment complex, located north of the project site along El Camino Real, taken from the north side of the complex looking south along El Camino Real toward the project site.



Photo 4: The Sea restaurant, located directly across El Camino Real from the project site, taken from the project site frontage looking east across El Camino Real.



Figure 2-5 Proposed Site and Landscaping Plan



Figure 2-6 Proposed Front (North) and Right (West) Side Elevations

North Elevation



West Elevation

Source: Greenwood & Black, 2019



Figure 2-7 Proposed Left (East) Side and Rear (South) Elevations

Table 2-1 Project Characteristics

Project Characteristics	
Site Characteristics	
Address	4256 El Camino Real
APN	167-08-042
Site Size	25,947 sf (0.60 acres)
Building Dimensions	
Height/Stories	50 feet + 12 feet for mechanical screen ¹
	2-5 stories above grade
	2 stories below grade for basement parking
Building Footprint	13,645 sf (52.6 percent)
Floor-Area-Ratio (FAR)	2.0
Lot Coverage	
Hotel Area (Impervious)	13,890 sf
Impervious Paved Area	6,897 sf
Pervious Paved Area	782 sf
Landscape Area (Pervious)	4,377 sf
Floor Area	
B1 and B2 Parking (not counted in FAR)	35,020.5 sf
Parking Levels B1 and B2 Accessory Spaces	1,642.7 sf
Ground Floor	9,510.0 sf
2 nd Floor	9,259.5 sf
3 rd Floor	10,953.2 sf
4 th Floor	10,593.2 sf
5 th Floor	9,572.6 sf
Total Floor Area	51,891.2 sf
Room Breakdown	
Single King	79 rooms
King Suite	4 rooms
King (ADA Compliant)	3 rooms
Queen (ADA Compliant)	2 rooms
Total	97 rooms
Parking	
Mechanical Lift	26 stalls
Regular Non-Lift	54 stalls (including 9 EV)
Shuttle Service	1 stall
Valet	1 stall (and 17 aisle spaces)
ADA Accessible	4 stalls
Total	103 stalls (including Valet)

¹The permitted height is 50 feet. Per PAMC Chapter 18.40.090, exhaust fans, air conditioning equipment, elevator equipment, cooling towers, antennas, and similar architectural utility, or mechanical features may exceed the height limit by up to 15 feet.

2.5.1 Access, Parking, and Transportation

Vehicular access to the site would be provided via two driveways on El Camino Real. The northern driveway would be right-in only to accommodate drop-offs and deliveries, and the southern driveway would be right-in/right-out from El Camino Real, connecting to the subterranean parking garage and to the northern driveway. A light-emitting diode (LED) flashing light and sign at the top of the garage ramp would be installed to alert pedestrians that a vehicle is coming up the garage ramp and approaching the sidewalk. Of the 103 total vehicular parking spaces, 26 would be mechanical lift spaces, 54 would be regular non-lift spaces, one would be for shuttle service parking, one would be for valet parking, four would be accessible spaces compliant with the Americans with Disabilities Act (ADA), and 17 would be valet aisle spaces. Nine of the parking spaces would include electric vehicle charging stations (EVCS) and 17 of the spaces would be EVCS ready by applicable standards. The project would also provide 10 bicycle parking spaces in the form of four bike rack spaces in the courtyard and six bike rack spaces at the front entry. Valet aisle parking could accommodate up to six vehicles on Level B1 and 11 vehicles on Level B2. Additionally, the project would implement a transportation demand management (TDM) plan, which would be approved by the City. The TDM plan would be required to reduce trips by 30 percent. The hotel would be a "boutique hotel" for the purposes of trip generation analysis, as described in Section 16, Transportation. The project's occupancy groups per the Palo Alto Municipal Code are R-1, A-2, B, S-2, and U.

2.5.2 Project Operations

Operation of the proposed hotel is anticipated to require approximately 42 employees to staff the front office, administration office, housing keeping, and restaurant. The proposed hotel would be a business hotel and would not host special events, such as meetings, weddings, or banquets. Although the hotel would include a bar and small conference rooms, these features would only serve as ancillary uses to the hotel. The reception and fitness room hours would be 24 hours a day; restaurant/cafe hours would be 6:00 a.m. to 10:00 p.m.; and bar hours would be 12:00 p.m. to 10:00 p.m. Sunday through Thursday and to 1:00 a.m. on Friday and Saturday. The outdoor courtyard would be available 7:30 a.m. to 9:00 p.m. Sunday through Thursday and until 10:00 p.m. on Friday and Saturday.

2.5.3 Landscaping and Open Space

Four street trees (London plane) are located in the El Camino Real street right-of-way along the project frontage. These four street trees would be relocated to accommodate project driveways; they would be replanted and remain as street trees in the El Camino Real sidewalk right-of-way along the project frontage. A fifth London plane street tree is located adjacent to the project site in front of the building at 4260 El Camino Real. This street tree would be protected during construction.

Twenty-five trees, including coast redwoods, mulberry trees, trees of heaven, and deodar cedars are located along the perimeter of the project site, five of which are in front of or near the site along El Camino Real. Twenty-one of these trees would be removed. Four redwood trees, located in rear corners of the site, would be maintained and protected during construction.

The project would include a total of 4,377 square feet of planters and landscaping, primarily in the outdoor patio area behind the hotel building, including approximately 30 trees and 24 shrubs. A pedestrian path would run generally horizontally through the project site and connect with a path
around the western and southern perimeter of the site that would connect to the sidewalk along El Camino Real, as shown in Figure 2-5. A fence would be located near the northern boundary of the project site along El Camino Real. The pedestrian path and outdoor patio area would include outdoor restaurant seating, a lounge area, a gathering space with a fire pit, a water feature, ground lighting, and landscaping in planters. The outdoor patio area would not be used for large or loud events; rather it is a private courtyard to be used by hotel guests and clients.

2.5.4 Construction Information

Construction of the project would occur over approximately 22 months (including two months each of demolition/grading and excavation), beginning in early 2020. Construction equipment would include standard heavy construction machinery for earth moving during demolition and excavation. All equipment used would conform to California emission and Palo Alto noise regulations. No pile drivers would be used during construction. To complete the construction of the project, including the subterranean parking garage, an estimated 10,930 cubic yards of soil would be exported. The maximum depth of excavation proposed is estimated to be approximately 34 feet below ground surface.¹ The project is projected to be operational by late 2021.

Typical activities related to the construction of any development could include lane narrowing and/or lane closures, sidewalk and pedestrian crosswalk closures, and bike lane closures. Per standard City practice, the project applicant would be required to submit a construction logistics plan for City approval that addresses the construction schedule, street closures and/or detours, construction staging areas and parking, and the planned truck routes. This plan would be reviewed and approved by the City prior to start of construction activities.

2.5.5 Utilities

The City of Palo Alto Utilities Department (CPAU) provides electric, natural gas, refuse, recycled water, storm drain, and wastewater collection, treatment, and disposal. The San Francisco Public Utilities Commission (SFPUC) would provide water. The City of Palo Alto would provide police and fire protection services.

2.5.6 Palo Alto Green Building Checklist

In addition to California Building Code (CBC) requirements, the City of Palo Alto has adopted more stringent green building regulations. The Palo Alto Green Building Ordinance (Ord. 5393, 2017) requires applicants to incorporate sustainable design, construction, and operational requirements into most single-family residential, multi-family residential, and non-residential projects. For non-residential projects, the City has adopted California Green Building Standards Code (CALGreen) Tier 2 for additions and renovations over 1,000 square feet and CALGreen Tier 2 for new construction (City of Palo Alto 2017c, City of Palo Alto 2017d). To achieve Tier 2 status, a project must comply with the requirements identified in CALGreen Appendix A4, Division A4.601.5 and be 10 percent more energy efficient than the base CALGreen requirements. In accordance with the City's Green Building Ordinance, the project would satisfy requirements for CALGreen Tier 2.

¹ Based on project plans, assuming 23 feet depth to bottom of Basement B2 plus additional seven feet to bottom of parking stackers and an additional four feet of excavation for over-excavation and recompaction activities

2.6 Project Objectives

- 1. Provide an approximately 97-room hotel with full-service amenities in an area of Palo Alto with high demand.
- 2. Satisfy four-star soft brand criteria and standards including but not limited to providing a fitness center, bar and restaurant, meeting room, room service, and serviceable outdoor dining and garden space.
- 3. Redevelop an available underutilized parcel, into a more efficient, economically productive use with an FAR of 2.0.

2.7 Required Approvals

The City of Palo Alto is the lead agency with responsibility for approving the proposed project. From the City of Palo Alto, the project would require Major Architectural Review and approval of a Conditional Use Permit for alcoholic beverage service. Discretionary approval from other public agencies is not required, although the project would require landscape architecture review and an encroachment permit from Caltrans for work in the El Camino Real right of way which is under Caltrans jurisdiction.

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3 Environmental Setting

This section provides a general overview of the environmental setting for the proposed project. More detailed descriptions of the environmental setting for each environmental issue area can be found in Section 4, *Environmental Impact Analysis*.

3.1 Regional Setting

The project site is located in the City of Palo Alto, which is located in the southeastern portion of the San Francisco Peninsula in Santa Clara County. Palo Alto covers an area of 25.8 square miles and is bordered by the cities of Menlo Park, East Palo Alto, Mountain View, and Los Altos, as well as the Town of Los Altos Hills, the unincorporated community of Portola Valley, and Stanford University (City of Palo Alto 2017). The project site is located on El Camino Real (State Route [SR] 82), which is a major commercial corridor that spans Palo Alto and connects the city to Menlo Park to the northwest and Los Altos and Mountain View to the southeast. Figure 2 in Section 2, *Project Description*, shows the location of the project site in the region.

A grid system of east-west and north-south roadways, including arterials, collectors, and local streets, provide vehicular access throughout the City. The major roadways include Bayshore Freeway (US 101), Middlefield Road, El Camino Real (SR-82), Junipero Sierra Boulevard, and Junipero Sierra Freeway (I-280). Regional access to Palo Alto is provided by US 101, I-280, and SR 82/El Camino Real. US 101 is located over two miles northeast of the project site and I-280 is located over two miles southwest of the project site. The city is also served by the Caltrain passenger rail network.

The Mediterranean climate of the region and the coastal influence produce moderate to cool temperatures year-round, with rainfall concentrated in the winter months. Although air quality in the area has steadily improved in recent years, the entirety of Santa Clara County remains an Environmental Protection Agency (EPA) nonattainment area for ozone (urban smog). The City of Palo Alto is located approximately sixteen miles inland from the coastline of the Pacific Ocean.

3.2 Project Site Setting

As shown in Figure 3 in Section 2, *Project Description,* the approximately 0.6-acre (25,947-square-foot) project site is bordered by a two-story office building to the southeast, El Camino Real to the east, and a three-story multi-family apartment complex (Palo Alto Redwoods) to the northwest and west. Across El Camino Real to the east are a one-story restaurant (The Sea) and a two-story hotel (Dinah's Garden).

The project site has a Comprehensive Plan land use designation of Service Commercial. The site is zoned Service Commercial, as defined by the City's Zoning Ordinance and the Land Use Element of the Comprehensive Plan. Uses permitted in the Service Commercial designation are "intended to create and maintain areas accommodating citywide and regional services that may be inappropriate in neighborhood or pedestrian-oriented shopping areas, and which generally require automotive

access for customer convenience, servicing of vehicles or equipment, loading or unloading, or parking of commercial service vehicles" (PAMC Section 18.16.010).

The project site is developed with a by a one-story, 3,300-square-foot restaurant building currently occupied by Su Hong, a Chinese food restaurant. The existing restaurant building is situated along the El Camino Real frontage on the eastern portion of the project site. Parking areas and driveways surround the building on the northern, southern, and western portions of the site. The project site is accessible to vehicles via two driveways on El Camino Real. The site is generally flat and is covered almost entirely with impervious surfaces.

A total of 25 trees are located within the project site including Deodar cedar (*Cedrus deodara*), Coast redwood (*Sequoia sempervirens*), Mulberry (*Morus sp.*), Tree of heaven (*Ailanthus altissima*), Prunus sp., Avocado (*Persea americana*), and Podocarpus (*Podocarpus sp.*). Generally, the trees in the project site are located within a landscape planter that runs the perimeter of the existing parking lot. Most of the trees onsite are ornamentals or fruit-bearing trees, though the Coast redwoods are protected trees per City ordinance. Four street trees (London plane) are located adjacent to the site along the El Camino Real frontage, with a fifth slightly southwest of the project site along El Camino Real.

3.3 Cumulative Development

In addition to the specific impacts of individual projects, CEQA requires EIRs to consider potential cumulative impacts of the proposed project. CEQA defines "cumulative impacts" as two or more individual impacts that, when considered together, are substantial or will compound other environmental impacts. Cumulative impacts are the combined changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, traffic impacts of two nearby projects may be less than significant when analyzed separately but could have a significant impact when analyzed together. Cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

CEQA requires cumulative impact analysis in EIRs to consider either a list of planned and pending projects that may contribute to cumulative effects or a forecast of future development potential. Currently planned and pending projects within one mile of the project site are listed in Table 3-1. In particular, the 4190 El Camino Real and 4115 El Camino Real projects are located in close proximity and along the same major arterial as the project site and construction schedules may overlap. These projects are considered in the cumulative analyses in Section 4, *Environmental Impact Analysis*.

Project No.	Project Location ¹	Project Type	Distance from Project Site	
City of Palo Alto				
1	4190 El Camino Real	Car Dealership Expansion Project	0.3 mile to the northwest	
2	3877 El Camino Real	Residential Townhouse Project	1 mile to the northwest	
3	4115 El Camino Real	Mixed-Use Project	0.6 mile to the northwest	
4	693 Arastradero Road	School Project	0.9 mile to the southwest	
City of Los Altos				
5	962 Acacia Avenue	Mixed-Use Project	0.7 mile to the southwest	
6	879 N San Antonio Road	Mixed-Use Project	0.8 mile to the southwest	

Table 3-1 Cumulative Projects List

¹ Cumulative project details were sourced from buildingeye, a citizen-facing mapping interface provided by the City of Palo Alto and available online at https://paloalto.buildingeye.com/planning

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4 Environmental Impact Analysis

This section discusses the possible environmental effects of the 4256 El Camino Real Hotel Project for the specific issue areas that were identified through the scoping process as having the potential to experience significant effects. "Significant effect" is defined by the *CEQA Guidelines* §15382 as:

"...a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant."

The assessment of each issue area begins with a discussion of the environmental setting related to the issue, which is followed by the impact analysis. In the impact analysis, the first subsection identifies the methodologies used and the "significance thresholds," which are those criteria adopted by the City and other agencies, universally recognized, or developed specifically for this analysis to determine whether potential effects are significant. The next subsection describes each impact of the proposed project, mitigation measures for significant impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text with the discussion of the effect and its significance. Each bolded impact statement also contains a statement of the significance determination for the environmental impact as follows:

Significant and Unavoidable. An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the CEQA Guidelines.

Less than Significant with Mitigation Incorporated. An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under §15091 of the CEQA Guidelines.

Less than Significant. An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.

No Impact. The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Following each environmental impact discussion is a list of mitigation measures (if required) and the residual effects or level of significance remaining after implementation of the measure(s). In cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed and evaluated as a secondary impact. The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed project in conjunction with other planned and pending developments in the area listed in Section 3, *Environmental Setting*. The Executive Summary of this EIR summarizes all impacts and mitigation measures that apply to the proposed project.

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4.1 Biological Resources

This section analyzes the proposed project's potential impacts related to biological resources. The analysis in this section is based, in part, on a Tree Preservation Plan prepared for the project by Rincon Consultants, Inc. in October 2018. The full report is provided in Appendix C of this EIR. The City of Palo Alto's 2030 Comprehensive Plan EIR, certified on November 13, 2017, included analysis of impacts related to biological resources at anticipated Comprehensive Plan buildout. Potential project-specific impacts related to biological resources are discussed in Section 4, *Biological Resources*, of the project Initial Study (included in Appendix B of this EIR). Due to the potential for impacts to biological resources peculiar to the project not covered in the 2030 Comprehensive Plan EIR, this section includes an analysis of project-specific impacts to biological resources.

4.1.1 Setting

a. Regulatory Framework

Federal, state, and local authorities under a variety of statutes and guidelines share regulatory authority over biological resources. The primary authority under CEQA for general biological resources lies within the land use control and planning authority of local jurisdictions, which in this instance is the City of Palo Alto. The California Department of Fish and Wildlife (CDFW) is a trustee agency for biological resources throughout the State under CEQA and also has direct jurisdiction under the California Fish and Game Commission, which includes, but is not limited to, resources protected by the State of California under the CESA. Below are discussions of the federal, state, and local regulations that form the regulatory basis for the impact analysis in Section 4.1.2.

Federal

Endangered Species Act

Under the Federal Endangered Species Act (FESA), authorization is required to "take" a listed species. Take is defined under FESA Section 3 as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Under federal regulation (50 CFR Sections 17.3, 222.102); "harm" is further defined to include habitat modification or degradation where it would be expected to result in death or injury to listed wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Critical habitat is a specific geographic area(s) that is essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery. FESA Section 7 outlines procedures for federal interagency cooperation to conserve federally listed species and designated critical habitat.

Section 7(a)(2) of FESA and its implementing regulations require federal agencies to consult with USFWS or National Marine Fisheries Service (NMFS) to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species, or result in the destruction or adverse modification of critical habitat. For projects where federal action is not involved and take of a listed species may occur, the project proponent may seek to obtain an incidental take permit under FESA Section 10(a). Section 10(a) allows USFWS to

permit the incidental take of listed species if such take is accompanied by an HCP that includes components to minimize and mitigate impacts associated with the take.

The USFWS and NMFS share responsibility and regulatory authority for implementing the FESA (7 USC Section 136, 16 USC Section 1531 et seq.).

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) authorizes the Secretary of the Interior to regulate the taking of migratory birds. The act provides that it is unlawful, except as permitted by regulations, "to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, [...] any migratory bird, or any part, nest, or egg of any such bird" (16 USC Section 703[a]). The Bald and Golden Eagle Protection Act (BGEPA) is the primary law protecting eagles, including individuals and their nests and eggs. The USFWS implements the MBTA (16 United States Code [USC] Section 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668). Under the Act's Eagle Permit Rule (50 CFR 22.26), USFWS may issue permits to authorize limited, non-purposeful take of bald eagles and golden eagles.

Clean Water Act

Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (USACE), with EPA oversight, has authority to regulate activities that result in discharge of dredged or fill material into wetlands or other "waters of the United States." Perennial and intermittent creeks are considered waters of the United States if they are hydrologically connected to other jurisdictional waters. In achieving the goals of the Clean Water Act, the USACE seeks to avoid adverse impacts and offset unavoidable adverse impacts on existing aquatic resources. Any discharge of dredged or fill material into jurisdictional wetlands or other jurisdictional "waters of the United States" would require a Section 404 permit from the USACE prior to the start of work. Typically, when a project involves impacts to waters of the United States, the goal of no net loss of wetlands is met by compensatory mitigation; in general, the type and location options for compensatory mitigation should comply with the hierarchy established by the Corp/EPA 2008 Mitigation Rule (in descending order): (1) mitigation banks; (2) in-lieu fee programs; and (3) permittee-responsible compensatory mitigation. Also, in accordance with Section 401 of the Clean Water Act, applicants for a Section 404 permit must obtain water quality certification from the appropriate RWQCB.

The USACE, RWQCB, and CDFW typically take jurisdiction over wetlands that exhibit three parameters: suitable wetland hydrology, hydric soils, and hydrophytic vegetation. The RWQCB will also consider features with saturated, anaerobic conditions wetlands.

State

Endangered Species Act

The California Endangered Species Act (CESA; Fish and Game Code Section 2050 et. seq.) prohibits take of State-listed threatened and endangered species without a CDFW incidental take permit. Take under CESA is restricted to direct harm of a listed species and does not prohibit indirect harm by way of habitat modification.

Protection of fully protected species is described in Fish and Game Code Sections 3511, 4700, 5050 and 5515. These statutes prohibit take or possession of fully protected species. Incidental take of fully protected species may be authorized under an approved NCCP.

California Fish and Game Code sections 3503, 3503.5 and 3511

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

Native Plant Protection Act

The CDFW also has authority to administer the Native Plant Protection Act (NPPA) (CFGC Section 1900 et seq.). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under Section 1913(c) of the NPPA, the owner of land where a rare or endangered native plant is growing is required to notify the department at least 10 days in advance of changing the land use to allow for salvage of the plant(s).

Section 1600 et seq. of the California Fish and Game Code

Section 1600 et seq. of the CFGC prohibits, without prior notification to CDFW, the substantial diversion or obstruction of the natural flow of, or substantial change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. In order for these activities to occur, the CDFW must receive written notification regarding the activity in the manner prescribed by the department, and may require a lake or streambed alteration agreement. Lakes, ponds, perennial and intermittent streams and associated riparian vegetation, when present, are subject to this regulation.

Natural Community Conservation Planning Act

The Natural Communities Conservation Planning (NCCP) Act was established by the California Legislature, is directed by the CDFW, and is implemented by the state, as well as public and private partnerships as a means to protect habitat in California. The NCCP Act takes a regional approach to preserving habitat. An NCCP identifies and provides for the regional protection of plants, animals and their habitats, while allowing compatible and appropriate economic activity. Once an NCCP has been approved, CDFW may provide take authorization for all covered species, including fully protected species, Section 2835 of the CFGC.

Porter-Cologne Water Quality Control Act

The State Water Resources Control Board (SWRCB) and each of nine local Regional Water Quality Control Boards (RWQCB) has jurisdiction over "waters of the State" pursuant to the Porter-Cologne Water Quality Control Act which are defined as any surface water or groundwater, including saline waters, within the boundaries of the State. The SWRCB has issued general Waste Discharge Requirements (WDRs) regarding discharges to "isolated" waters of the State (Water Quality Order No. 2004-0004-DWQ, Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction). The local RWQCB (the Central Coast RWQCB for the AMBAG region) implements this general order for isolated waters not subject to federal jurisdiction, and is also responsible for the issuance of water quality certifications pursuant to Section 401 of the CWA for waters subject to federal jurisdiction.

City of Palo Alto

2030 Comprehensive Plan

The Natural Environment Element of the City's 2030 Comprehensive Plan (City of Palo Alto 2017a) contains several goals and policies aimed at efficient management of open land and natural resources in Palo Alto. The following policies and programs apply to the project:

- Policy N-1.4: Protect special-status species and plant communities, including those listed by State and federal agencies and recognized organizations from the impacts of development and incompatible activities.
- **Policy N-2.8:** Require new commercial, multi-unit, and single-family housing projects to provide street trees and irrigation systems.
- **Policy N-2.9:** Minimize removal of, and damage to, trees due to construction-related activities such as trenching, excavation, soil compacting and release of toxins.
- Policy N-2.10: Preserve and protect Regulated Trees, such as native oaks and other significant trees, on public and private property, including landscape trees as part of a development review process and consider strategies for expanding tree protection in Palo Alto.
 - **Program N-2.10.1**: Continue to require replacement of trees, including street trees lost to new development.

According to Figure 4.3-2, Vegetation and Habitat Types, of the 2030 Comprehensive Plan EIR, the project site is an area categorized as "urban forest." Policies N-2.1-N-2.14 of the 2030 Comprehensive Plan Natural Resources Element (listed above in Section 4.1.1(a)) support the City's goal to ensure a thriving urban forest that provides public health, ecological, economic, and aesthetic benefits for Palo Alto. Policies applicable to the project include:

- Policy N-2.1: Recognize the importance of the urban forest as a vital part of the city's natural and green infrastructure network that contributes to public health, resiliency, habitat values, appreciation of natural systems and an attractive visual character which must be protected and enhanced.
- Policy N-2.3: Enhance the ecological resilience of the urban forest by increasing and diversifying native species in the public right-of-way, protecting the health of soils and understory vegetation, encouraging property owners to do the same and discouraging the planting of invasive species.
- Policy N-2.4: Protect soils in both urban and natural areas as the foundation of a healthy urban forest. Recognize that healthy soils are necessary to filter air and water, sustain plants and animals and support buildings and infrastructure.
- Policy N-2.5: Enhance tree health and the appearance of streets and other public spaces through regular maintenance as well as tree and landscape planting and care of the existing canopy.
- Policy N-2.6: Improve the overall distribution of citywide canopy cover, so that neighborhoods in all areas of Palo Alto enjoy the benefits of a healthy urban canopy.
- Policy N-2.7: Strive toward the aspirational, long-term goal of achieving a 50 percent tree canopy cover across the city.

- Policy N-2.8: Require new commercial, multi-unit and single-family housing projects to provide street trees and related irrigation systems.
- Policy N-2.9: Minimize removal of, and damage to, trees due to construction-related activities such as trenching, excavation, soil compacting and release of toxins.
- Policy N-2.10: Preserve and protect Regulated Trees, such as native oaks and other significant trees, on public and private property, including landscape trees approved as part of a development review process and consider strategies for expanding tree protection in Palo Alto.

While the Natural Resources Element includes three policies regarding tree canopy, the Land Use and Community Design Element also contains a relevant tree canopy policy:

• **Policy L-9.9:** Involve the Urban Forester, or appropriate City staff, in development review.

Palo Alto Municipal Code

The Palo Alto community has long valued the environmental, aesthetic, and functional benefits of trees as recognized by the Palo Alto Municipal Code, Chapter 8.10 (Tree Ordinance) and Palo Alto's status as "Tree City USA." Chapter 8.10 protects specified trees in Palo Alto and establishes a standard for removal, maintenance, and planting of trees in the city, with the goal of preserving the city's trees. It also provides rules for the protection of trees, designation of heritage trees, and for when trees can be removed.

The Tree Ordinance regulates specific types of trees on public and private property for the purpose of avoiding their removal or disfigurement without first being reviewed and permitted by the City's Planning or Public Works Departments. Three categories within the status of regulated trees include protected trees (PAMC Chapter 8.10), public trees (PAMC Chapter 8.04) and designated trees (PAMC Title 18), when so provisioned to be saved and protected by a discretionary approval.

- Protected Trees. Includes all coast live oak (*Quercus agrifolia*) and valley oak (*Quercus lobate*) trees 11.5 inches or greater in diameter (36 inches in circumference), coast redwood (*Sequoia sempervirens*) trees 18 inches (57 inches in circumference) or greater in diameter at standard height (when measured 54 inches above natural grade), and heritage trees designated by the City Council according to any of the following provisions: it is an outstanding specimen of a desirable species; it is one of the largest or oldest trees in Palo Alto; or it possesses distinctive form, size, age, location, and/or historical significance.
- Public Trees. Includes City-owned street trees (all trees growing within the street right-ofway, outside of private property). Because street trees are primarily a visual resource, they are not described in detail in this section (See Aesthetic Resources.)
- Designated Trees. Designated or amenity trees are established by the City when a project is subject to discretionary design review process by the Architecture Review Board. Municipal Code Title 18, Chapter 18.76.020(d) (11) includes as part of the findings of review, "whether natural features are appropriately preserved and integrated with the project." An amenity tree or grouping of trees may be "designated" if it has a particular significance because of its screening function or as a unique natural or other feature that contributes to the existing site, neighborhood, or community area. Designated trees may be established by the City if a project is subject to a discretionary environmental or design review process, such as Architectural Review. Outstanding tree specimens contributing to the existing site,

neighborhood or community, and that have a rating of "High" Suitability for Preservation would constitute a typical designated tree.

Additionally, the City has established tree preservation guidelines. For all development projects within the City of Palo Alto, discretionary or ministerial, a Tree Disclosure Statement (TDS) is part of the submittal checklist to establish and verify trees that exist on the site, trees that overhang the site originating on an adjacent property, and trees that are growing in a City easement, parkway, or publicly owned land. The TDS stipulates that a Tree Survey is required (for multiple trees) when a Tree Preservation Report is required (for development within the dripline of a Regulated Tree), and specifies who may prepare these documents. The City of Palo Alto Tree Technical Manual (Tree Technical Manual) describes acceptable procedures and standards to preserve Regulated Trees, including:

- The protection of trees during construction;
- If allowed to be removed, the acceptable replacement strategy;
- Maintenance of protected trees (such as pruning guidelines);
- Format and procedures for tree reports; and
- Criteria for determining whether a tree is a hazard.

2030 Comprehensive Plan EIR Summary

The City's 2030 Comprehensive Plan EIR analyzes impacts to biological resources in Section 4, *Biological Resources*, and identified the following impacts related to biological resources:

- Impact BIO-1: The proposed Plan would not have a substantial adverse effect, either directly or through habitat modifications, on special-status species. (Less than Significant)
- Impact BIO-2: The proposed Plan would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, including federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. (Less than Significant)
- Impact BIO-3: The proposed Plan would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. (Less than Significant)
- Impact BIO-4: The proposed Plan would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Chapter 8.10). (Less than Significant)
- Impact BIO-5: The proposed Plan would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. (Less than Significant)
- Impact BIO-6: Implementation of the proposed Plan, in combination with past, present, and reasonably foreseeable projects, would not result in a significant cumulative impact with respect to biological resources. (Less than Significant)

b. Existing Conditions

Palo Alto encompasses a variety of natural plant communities amidst a densely built environment. The plant communities provide habitat for wildlife species. The city limits extend from the San Francisco bay wetlands to the Santa Cruz mountains, including several microclimates and, as a result, several habitats. The undeveloped land near San Francisco Bay (in the area known as the "Baylands") and undeveloped land in the western hills contain undisturbed plant communities and habitat for a variety of species. The natural vegetation has been substantially altered in the developed areas of the city, leaving the urban forest as the dominant habitat.

The project site is currently developed and occupied by a restaurant building and surrounding paved parking lot and driveways. A total of 25 trees are located within the project site including deodar cedar (*Cedrus deodara*), coast redwood (*Sequoia sempervirens*), mulberry (*Morus sp.*), tree of heaven (*Ailanthus altissima*), prunus sp., avocado (*Persea americana*), and podocarpus (*Podocarpus sp.*). Generally, the trees in the project site are located within a landscape planter that runs the perimeter of the existing parking lot. Most of the trees onsite are ornamentals or fruit-bearing trees.

4.1.2 Impact Analysis

a. Methodology and Significance Thresholds

As listed in Appendix G of the CEQA Guidelines, a project is considered to have a significant impact on biological resources if it would:

- 1. A substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- 2. A substantial adverse effect, on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- 3. A substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- 4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- 5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- 6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

b. Project Impacts and Mitigation

Threshold 1:	Would the project have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	
Threshold 2:	Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	
Threshold 4:	Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	

Impact BIO-1 THE PROJECT MAY RESULT IN IMPACTS TO PROTECTED NESTING BIRD SPECIES. THIS IMPACT WOULD BE SIGNIFICANT BUT MITIGABLE.

The project site is located in an urbanized area of Palo Alto and is developed with a single-story commercial building, surface parking lot, and perimeter landscaping trees. According to Figure 4.3-2, Vegetation and Habitat Types, of the 2030 Comprehensive Plan EIR, the project site is an area categorized as "urban forest." This urban forest (a habitat type that covers most of Palo Alto east of Interstate 280, even sites completely devoid of trees) is comprised of "street trees, trees in parks, landscaping trees planted around public facilities, and trees on private property throughout the city." The urban forest, in locations with tree cover or significant vegetation, provides cover, forage, and habitat for common wildlife, such as nesting birds.

The project site does not contain riparian habitat or sensitive natural communities (U.S. Fish and Wildlife Service [USFWS] 2018a) and is not located in a known regional wildlife movement corridor or other sensitive biological area as indicated by the USFWS Critical Habitat portal (USFWS 2018b). Based on the developed nature of the site and lack of native or riparian habitat located on or around the site, no federal- or state-listed endangered, threatened, rare, or otherwise sensitive flora or fauna are anticipated to be located on site.

The project site contains 25 trees and five street trees are located in front of or near the project site along El Camino Real (Appendix C). Twenty-one on-site trees would be removed and four street trees would be relocated. There are also a number of trees near the project site on adjacent properties to the north, east, and south. These trees could contain bird nests and birds protected under the MBTA. Protected birds include all common songbirds, waterfowl, shorebirds, hawks, owls, eagles, ravens, crows, native doves and pigeons, swifts, martins, swallows, and others, including their body parts (feathers, plumes etc.), nests, and eggs. Therefore, impacts to nesting birds would be potentially significant. There are no mitigation measures from the Comprehensive Plan EIR or uniformly applicable development policies available to mitigate this impact. Therefore, project-specific Mitigation Measure BIO-1 is required to protect nesting birds.

Mitigation Measures

The following mitigation measure is required.

BIO-1 Nesting Bird Surveys and Avoidance

Construction of the project shall be prohibited during the general avian nesting season (February 1 -August 31), if feasible. If nesting season avoidance is not feasible, the applicant shall retain a qualified biologist, as approved by the City of Palo Alto, to conduct a preconstruction nesting bird survey of on-site and adjacent trees to determine the presence/absence, location, and activity status of any active nests. The qualified biologist shall establish the extent of the survey buffer area surrounding the site to ensure that direct and indirect effects to nesting birds are avoided. To avoid the destruction of active nests and to protect the reproductive success of birds protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC), nesting bird surveys shall be performed not more than 14 days prior to scheduled vegetation clearance and structure demolition. In the event that active nests are discovered, a suitable buffer (typically a minimum of 50 feet for passerines and a minimum of 250 feet for raptors) shall be established around such active nests and no construction shall be allowed within the buffer areas until a qualified biologist has determined that the nest is no longer active (i.e., the nestlings have fledged and no longer rely on the nest). No ground disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Nesting bird surveys are not required for construction activities occurring between August 31 and February 1.

Significance After Mitigation

Implementation of Mitigation Measure BIO-1 would ensure protection of nesting birds that may be affected during construction activities. This measure would reduce the potentially significant impact to special-status species to a less than significant level.

Threshold 3: Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Impact BIO-2 THE PROJECT WOULD NOT RESULT IN IMPACTS TO STATE OR FEDERALLY PROTECTED WETLANDS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The project site does not contain riparian habitat or sensitive natural communities (USFWS 2018a) and is not located within a known regional wildlife movement corridor or any other sensitive biological area as indicated by the USFWS Critical Habitat portal or CDFW BIOS (USFWS 2018b; CDFW 2018). No wetlands or other water bodies were observed during a site visit conducted by Rincon Consultants. The National Wetlands Inventory (NWI) was reviewed to determine if any wetland and/or non-wetland waters had been previously documented and mapped on or near the proposed survey area (USFWS 2018a). There is one potential jurisdictional water or wetland near the project. Adobe Creek, a riverine wetland resource, is located approximately 430 feet southeast of the project site. The proposed project would not involve the direct removal, filling, hydrological interruption, or other disturbance to the bed, bank, channel, or adjacent upland area of Adobe Creek. This impact would be less than significant, consistent with findings of the Comprehensive Plan EIR.

Mitigation Measures

No mitigation measures are required.

Threshold 5: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Section 8.10)?

Impact BIO-3 THE PROPOSED PROJECT WOULD NOT INVOLVE REMOVAL OF A "PROTECTED TREE" AS DEFINED BY THE CITY'S TREE PRESERVATION AND MANAGEMENT ORDINANCE. HOWEVER, CONSTRUCTION ACTIVITIES WOULD OCCUR NEAR PROTECTED REDWOOD TREES SUCH THAT THEY COULD BE IMPACTED DURING CONSTRUCTION. FURTHER, THE PROJECT WOULD INVOLVE REMOVAL OF STREET TREES ALONG THE EL CAMINO REAL FRONTAGE. COMPLIANCE WITH THE CITY'S TREE PROTECTION ORDINANCE AND MITIGATION TO PROTECT ON-SITE AND ADJACENT REDWOOD TREES DURING CONSTRUCTION WOULD ENSURE THAT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The purpose of the City of Palo Alto Tree Preservation and Management Ordinance (PAMC Chapter 8.10) is to promote the health, safety, welfare, and quality of life of the residents of the city through the protection of specified trees located on private property within the city, and the establishment of standards for removal, maintenance, and planting of trees.

Under the Tree Preservation and Management Ordinance, discretionary development approvals for property containing regulated trees must include appropriate conditions providing for the protection of such trees during construction and for maintenance of the trees thereafter, or requires replacement of regulated trees in accordance with the prescribed ratios outlined in the Tree Technical Manual. "Protected tree" is defined as any tree of the species coast live oak (Quercus agrifolia) or valley oak (*Quercus lobate*) 11.5 inches in diameter (36 inches in circumference) or more when measured 4.5 feet (54 inches) above natural grade and any redwood tree (Sequoia sempervirens) 18 inches in diameter (57 inches in circumference) or more when measured 4.5 feet (54 inches) above natural grade as any publicly owned tree, shrub or plant growing within the street right-of-way, outside of private property. In some cases, property lines lie several feet behind the sidewalks (City of Palo Alto 2001). Trees on and adjacent to the project site are listed in Table 2 of Appendix C and shown on Figure 4.1-1.

Four redwoods on-site, two located in each of the west and south corners of the site, are considered "protected trees." As stated in the Section 2, *Project Description*, the protected redwood trees would not be removed under the proposed project. However, construction of the proposed project would occur within the tree protection zone of three of the four redwoods that would be retained on-site (Appendix C).¹ Therefore, the project has the potential to damage protected trees. Compliance with the Tree Technical Manual, described in PAMC Section 8.10.030, requires preparation of a tree report (specifically, a Tree Protection and Preservation Report), which are described in Section 6.30 of the Tree Technical manual. The Tree Protection and Preservation Report for the proposed project is included as Appendix C. Compliance with the Tree Technical Manual and PAMC Section 8.10 requires that all protective measures of the Tree Protection and Preservation Plan (Rincon Consultants 2018b, Appendix C) must be incorporated into the project including preconstruction measures (such as protective fencing), during-construction measures (such as avoidance of soil compaction), and maintenance activities (such as maintaining normal irrigation. Mitigation Measure BIO-2 is required to further ensure implementation tree protection measures as prescribed in the Tree Protection and Preservation Report

¹ The tree protection zone includes a radius of 10 times the trunk diameter at breast height measured in feet (Appendix C).





In addition, five off-site London plane "street trees" along the project site's frontage to El Camino Real are regulated under the Tree Preservation Ordinance. Four of the five street trees would be removed and replaced along the project frontage on El Camino Real to accommodate the project driveways; one of these trees (southeast of the project site) would be protected in place. The applicant would be required to ensure survival of the new street trees in accordance with the requirements of the Tree Technical Manual (City of Palo Alto 2001). A fifth London plane street tree is located adjacent to the project frontage in front of the building at 4260 El Camino Real. This tree would be protected during construction. Therefore, of the five street trees that could be affected by the project, one would remain, and four would be removed and replaced in a slightly different location along the frontage. The City's Tree Preservation and Management Ordinance requires compliance with the Tree Technical Manual, which outlines the requirements for removal and replacement of these street trees. A written Tree Removal Permit would be required prior to removal of the street tree and would further ensure that the requirements of the Ordinance are met. Compliance with the City's regulations would ensure that impacts to street trees remain less than significant.

Mitigation Measures

The following mitigation measure is required to protect regulated trees during construction.

BIO-2 Tree Protection and Preservation Plan

All protective measures described on pages 14 through 17 of the Tree Protection and Preservation Plan (Rincon Consultants 2018b, Appendix C) shall be incorporated into the project including preconstruction measures (such as protective fencing), during-construction measures (such as avoidance of soil compaction), and maintenance activities (such as maintaining normal irrigation).

Significance After Mitigation

Implementation of Mitigation Measure BIO-2 would ensure protection of retained trees by providing appropriate conditions providing for the protection of protected trees during construction and for maintenance of the trees thereafter, in accordance with PAMC Chapter 8.10. These measures would reduce the potentially significant impact involving conflict with local ordinances protecting trees to a less than significant level.

Threshold 6: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Impact BIO-4 THE PROJECT SITE IS NOT LOCATED IN AN APPROVED HABITAT CONSERVATION PLAN, NATURAL COMMUNITY CONSERVATION PLAN, OR OTHER APPROVED CONSERVATION PLAN. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The project site is not located in an approved habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. This impact would be less than significant, consistent with findings of the 2030 Comprehensive Plan EIR.

Mitigation Measures

No mitigation measures are required.

c. Cumulative Impacts

Cumulative impacts to biological resources are addressed on a project-by-project basis through sitespecific investigations and surveys as well as the development of the assessment of potential impacts and prescription of appropriate mitigation. As with the project, other cumulative development within the City that would result in potential impacts to biological resources would be subject to applicable Comprehensive Plan goals and policies and would be required to incorporate project-specific mitigation measures to implement these policies. Cumulative development outside of the City limits that would result in potential impacts to biological resources would be subject to applicable County goals and policies and would be required to incorporate project-specific mitigation measures to implement these policies.

Implementation of the mitigation measures described in this section would reduce project-level impacts to biological resources to a less than significant level. In particular, Mitigation Measure BIO-1 requires nesting bird surveys to avoid impacts to migratory bird species and Mitigation Measure BIO-2 would ensure that the project would not impact trees protected by City ordinance or conflict with the City's tree protection ordinance. Therefore, with the implementation of required mitigation measure, the project's contribution to cumulative impacts on nesting bird species would be less than significant.

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4.2 Cultural Resources

This section analyzes the proposed project's potential impacts related to cultural resources including historical, archeological, and tribal cultural resources as well as human remains. The analysis in this section is based, in part, on a Cultural Resources Assessment prepared for the project by Rincon Consultants, Inc. in July 2018. The full analysis is provided in Appendix D of this EIR. The City's 2030 Comprehensive Plan EIR, certified on November 13, 2017, included analysis of impacts related to cultural resources at anticipated Comprehensive Plan buildout. Potential project-specific impacts related to biological resources were discussed in Section 5, *Cultural Resources*, of the project Initial Study (included in Appendix B of this EIR). Due to the potential for impacts to cultural resources peculiar to the project site not covered in the Comprehensive Plan EIR, this section includes an analysis of project-specific impacts to cultural resources.

4.2.1 Setting

a. Regulatory Framework

Federal

The project does not involve federal funding or permitting, and as a result, does not have a federal nexus. Therefore, compliance with reference to the National Historic Preservation Act of 1966 (NHPA) and other federal laws is provided here for informational purposes only.

National Register of Historic Places

The NRHP was established by the NHPA to help identify properties that are significant cultural resources at the national, state, and/or local level. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if it meets one or more of the following criteria:

- A. It is associated with events that have made a significant contribution to the broad patterns of our history;
- B. It is associated with the lives of persons who are significant in our past;
- C. It embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; and/or
- D. It has yielded, or may be likely to yield, information important in prehistory or history.

Listing in the NRHP does not guarantee specific protection or assistance for a property, but it helps to ensure its recognition in the planning process for federal or federally-assisted projects (see Section 106), eligibility for federal tax benefits, and qualification for federal historic preservation assistance. In addition, the NRHP also is designed to achieve uniform standards of documentation and evaluation for historic properties. A project's effects on properties listed in the NRHP must be evaluated under CEQA.

State

Senate Bill 18 (SB 18)

California Government Code §65352.3 (adopted pursuant to the requirements of SB 18) requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan. The tribal organizations eligible to consult have traditional lands in a local government's jurisdiction, and are identified, upon request, by the Native American Heritage Commission (NAHC). As noted in the California Office of Planning and Research's Tribal Consultation Guidelines (2005), "The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places."

Assembly Bill 52 (AB 52)

As of July 1, 2015, California Assembly Bill 52 (AB 52) was enacted and expands the California Environmental Quality Act (CEQA) by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project that may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." According to the legislative intent for AB 52, "tribes may have knowledge about land and cultural resources that should be included in the environmental analysis for projects that may have a significant impact on those resources." Section 21074 of AB 52 also defines a new category of resources under CEQA called "tribal cultural resources." Tribal cultural resources are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is either listed on or eligible for the California Register of Historical Resources or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource. See also PRC 21074 (a)(1)(A)-(B).

California Environmental Quality Act

Section 15064.5(a)(3) of the State CEQA Guidelines states that a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (CRHR) (Pub. Res. Code §§5024.1, Title 14 CCR, Section 4852), including the following:

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

Cultural resources meeting one or more of these criteria are defined as "historical resources" under CEQA (Office of Historic Preservation 2000). Resources included in a local register of historical resources [pursuant to Section 5020.1(k) of the Public Resources Code] or identified as significant in an historical resources survey [meeting the criteria in Section 5024.1(g) of the Public Resources Code], also are considered "historical resources" for the purposes of CEQA.

The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historical resources, or identified in an historical resources survey, does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

CEQA requires that a determination be made as to whether a project would directly or indirectly destroy a unique paleontological resource or site or a unique geological feature (CEQA Guidelines, Appendix G (V)c). If an impact is significant, the State CEQA Guidelines require that feasible measures which could minimize significant adverse impacts (State CEQA Guidelines § 15126.4) be implemented. State CEQA Guidelines §15370 includes mitigation guidelines to avoid, minimize, rectify, reduce/eliminate or compensate for impacts to paleontological resources.

Codes Governing Human Remains

The disposition of human remains is governed by Section 7050.5 of the California Health and Safety Code and Sections 5097.94 and 5097.98 of the Public Resources Code and falls within the jurisdiction of the NAHC. If human remains are discovered, the County Coroner must be notified within 48 hours and there should be no further disturbance to the site where the remains were found. If the remains are determined by the coroner to be Native American, the coroner is responsible for contacting the NAHC within 24 hours. The NAHC, pursuant to Section 5097.98, will immediately notify those persons it believes to be most likely descended from the deceased Native Americans so they can inspect the burial site and make recommendations for treatment or disposal.

City of Palo Alto

2030 Comprehensive Plan

The City's 2030 Comprehensive Plan Land use and Community Design Element includes the following goals and policies related to historic and archeological resources that apply to the project:

- **Goal L-7:** Conservation and preservation of Palo Alto's historic buildings, sites and districts.
 - Policy L-7.1: Encourage public and private upkeep and preservation of resources that have historic merit, including residences listed in the City's Historic Resource Inventory, the California Register of Historical Resources, or the National Register of Historic Places.
 - Policy L-7.2: If a proposed project would substantially affect the exterior of a potential historic resource that has not been evaluated for inclusion into the City's Historic Resources Inventory, City staff shall consider whether it is eligible for inclusion in State or federal registers prior to the issuance of a demolition or alterations permit. Minor exterior improvements that do not affect the architectural integrity of potentially historic buildings shall be exempt from consideration. Examples of minor improvements may include repair or replacement of features in kind, or other changes that do not alter character-defining features of the building.
 - Policy L-7.15: Protect Palo Alto's archaeological resources, including natural land formations, sacred sites, the historical landscape, historic habitats and remains of settlements here before the founding of Palo Alto in the 19th century.
 - Policy L-7.16: Continue to consult with tribes as required by California Government Code Section 65352.3. In doing so, use appropriate procedures to accommodate tribal

concerns when a tribe has a religious prohibition against revealing precise information about the location or previous practice at a particular sacred site.

- Policy L-7.17: Assess the need for archaeological surveys and mitigation plans on a project-by-project basis, consistent with the California Environmental Quality Act and the National Historic Preservation Act.
- Policy L-7.18: Require project proponents to meet State codes and regulations regarding the identification and protection of archaeological and paleontological deposits, and unique geologic features.

Palo Alto Municipal Code

According to Section 16.49.040 of the City of Palo Alto Historic Preservation Ordinance, a building, structure, object or site may be designated as a Historic Landmark if it possesses sufficient character-defining features, integrity of location, design, setting, materials, workmanship, feeling or association and meets at least of the following criteria:

- 1. The structure or site is identified with the lives of historic people or with important events in the city, state, or nation;
- 2. The structure or site is particularly representative of an architectural style or way of life important to the city, state, or nation;
- 3. The structure or site is an example of a type of building which was once common, but is now rare;
- 4. The structure or site is connected with a business or use which was once common, but is now rare;
- 5. The architect or building was important; or
- 6. The structure of site contains elements demonstrating outstanding attention to architectural design, detail, materials, or craftsmanship.

In addition to the criteria for designation, the definitions of historic categories and districts, as defined in the ordinance, shall be used for designation of properties to the inventory. The definitions are as follows:

- Category 1: An "Exceptional Building" of pre-eminent national or State importance. These buildings are meritorious works of the best architects, outstanding examples of a specific architectural style, or illustrate stylistic development of architecture in the United States. These buildings have had either no exterior modifications or such minor ones that the overall appearance of the building is in its original character.
- Category 2: A "Major Building" of regional importance. These buildings are meritorious works of the best architects, outstanding examples of an architectural style, or illustrate stylistic development of architecture in the State or region. A major building may have some exterior modifications, but the original character is retained.
- Category 3 or 4: A "Contributing Building" which is a good local example of an architectural style and relates to the character of a neighborhood grouping in scale, materials, proportion, or other factors. A contributing building may have had extensive or permanent changes made to the original design, such as inappropriate additions, extensive removal of architectural details, or wooden facades resurfaced in asbestos or stucco.

2030 Comprehensive Plan EIR Summary

The City's 2030 Comprehensive Plan EIR analyzed impacts related to cultural resources in Section 4.4, *Cultural Resources*. The EIR identified the following impacts and mitigation measures for cultural resources:

- Impact CULT-1: Implementation of the proposed Plan could adversely affect a historic resource listed or eligible for listing on the National and/or California Register, or listed on the City's Historic Inventory. (Significant and Mitigable)
 - Mitigation Measure CULT-1: To ensure the protection of potentially historic resources, the proposed Plan shall include policies that achieve the following:
 - Process for reviewing proposed demolition or alteration of potentially historic buildings.
 - Protection of archaeological resources.
- Impact CULT-2: Implementation of the proposed Plan could eliminate important examples of major periods of California history or prehistory. (Significant and Mitigable)
 - Mitigation Measure CULT-2: Implement Mitigation Measures CULT-1.
- Impact CULT-3: Implementation of the proposed Plan could damage to an important archaeological resource as defined in Section 15064.5 of the CEQA Guidelines. (Significant and Mitigable)
 - Mitigation Measure CULT-3: Implement Mitigation Measure CULT-1. In addition, to ensure that future development would not damage archaeological resources, the proposed Plan shall include policies that achieve the following:
 - Archaeological surveys and mitigation plans for future development projects.
 - Developer compliance with applicable regulations regarding the identification and protection of archaeological and paleontological deposits, and unique geologic features.
 - Appropriate tribal consultation and consideration of tribal concerns.
- Impact CULT-4: Implementation of the proposed Plan would not cause a significant impact due to disturbance of any human remains, including those interred outside of formal cemeteries. (Less than Significant)
- Impact CULT-5: Implementation of the proposed Plan would have the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Significant and Mitigable)
 - Mitigation Measure CULT-5: Implement Mitigation Measure CULT-3.
- Impact CULT-6: Implementation of the proposed Plan would not directly or indirectly destroy a local cultural resource that is recognized by City Council resolution. (Less than Significant)
- Impact CULT-7: Implementation of the proposed Plan, in combination with past, present, and reasonably foreseeable projects, would result in significant cumulative impacts with respect to cultural resources. (Significant and Mitigable)
 - Mitigation Measure CULT-7: Implement Mitigation Measures CULT-1 and CULT-3.

b. Existing Conditions

Natural Environment

The Bay Area and the surrounding region contain an abundance of natural resources, which were taken advantage of by its prehistoric and early historic-period people. Deer, elk, and waterfowl were plentiful in prehistory, as were marine and Bay resources such as seals, otters, abalone, mussels, oysters, clams and numerous fish species. Franciscan chert was an easily obtainable local raw material used for stone tools. Obsidian, another material used in tool making, could be obtained from the Anadel and Napa Glass Mountain quarries north of the Bay Area.

Archaeological Setting

The area that now contains the city of Palo Alto is known to have been inhabited by indigenous peoples for thousands of years prior to the arrival of Europeans. Archaeological excavation of the banks of San Francisquito Creek indicated that the area around Palo Alto was inhabited as far back as 2400 BC, during the late Archaic period. Additionally, carbon dating of a human skull belonging to Stanford Man I places humans in the area approximately 3,130 years ago. During the late Archaic period, prehistoric peoples lived widely throughout the region in small groups.

With more than 50 archaeological surveys conducted in Palo Alto, several prehistoric sites with shell midden components, including human burials, have been found, particularly in the flatland areas of the city. There is still the potential that additional undiscovered archeological resources exist in the city. Areas categorized as extremely sensitive can generally be found in riparian areas surrounding Adobe and San Francisquito Creeks as well scattered urbanized sites distributed throughout the city. Site-specific mapping of known resources is prohibited by CEQA Guidelines 15120(d). The project site is located in an area historically occupied by the Ohlone peoples, who originated in present day eastern Contra Costa County, settled in the Palo Alto region around 1500 B.C., replacing the groups that had settled there earlier. The Ohlone or Costanoan peoples would continue to settle in this area up to historical times. The Ohlone peoples are a group defined by commonalities in their language, though the group is made up of several autonomous tribes that spoke eight distinct but related languages. Together with the related Miwok, a Native American group that ranged from present day Oregon to California, the Ohlone languages comprise the Utian language family, which is in turn part of a larger group of related languages among tribes from originally from present day California and Oregon. The Ohlone peoples were hunter-gathers who relied heavily on plants, seeds, berries, roots, birds, and seafood, including shellfish. They developed bows and arrows, tobacco pipes, intensive acorn use, and increasingly complicated exchange systems. The territory of the Ohlone people ranged from the San Francisco Bay Area, south to Carmel and approximately 60 miles inland. This territory included miles of coastline and several inland valleys. As noted above, the Ohlone people were organized politically by tribes, each of which had a designated territory. Tribes consisted of villages and camps, designated by features of the environment. The title of chief of the tribe was inherited patrilineally and could be held by both men and women. As the chief, responsibilities included directing hunting, fishing, and gathering expeditions, as well as hosting visitors and directing ceremonial activities (City of Palo Alto 2017b).

Historical Setting

Post-European contact history for California is generally divided into three periods: the Spanish Period (1769–1822), the Mexican Period (1822–1848), and the American Period (1848–present). The Spanish Period brought the establishment of the California mission system, while the Mexican

Period is largely known for the division of the land of California into private land holdings. Following the Mexican-American war, the United States purchased California from Mexico; population of the state subsequently increased, particularly during the Gold Rush.

European contact in the Palo Alto region began in 1769 with the visit of Don Gaspar de Portola to San Francisco Bay. His group camped at a location they called El Palo Alto, for a tall tree located in present day Palo Alto. In 1776, Juan Bautista DeAnza established Mission Dolores and the Presidio of San Francisco, and soon after this, the colonization of the San Francisco Peninsula by the Spanish began. As elsewhere, induction into the missions had a devastating effect on the local inhabitants, requiring them to live and work at the mission and abandon their former lifeways. By 1821, four presidios and 21 missions were established in Spanish California. The trail between missions became known as El Camino Real, which today spans through the present-day City of Palo Alto.

Spanish architectural styles, which arrived in California via Mexico, can be seen in the city of Palo Alto today, including the Spanish Colonial and Early California styles present in the Ramona Street Architectural District. Later, James Marshall's discovery of gold on the American River would lead to the gold rush. The lure of wealth from gold prospecting brought the parents of Palo Alto's founder, Timothy Hopkins, to Northern California (City of Palo Alto 2017b).

4.2.2 Impact Analysis

a. Methodology and Significance Thresholds

If a project may cause a substantial adverse change in the characteristics of a resource that convey its significance or justify its eligibility for inclusion in the CRHR or a local register, either through demolition, destruction, relocation, alteration, or other means, then the project is judged to have a significant effect on the environment (CEQA Guidelines, Section 15064.5[b]). Impacts would be significant if the project would:

- 1. Cause a substantial adverse change in the significance of a historic resource pursuant to §15064.5;
- 2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5;
- 3. Disturb any human remains, including those interred outside of formal cemeteries;
- 4. 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:
 - a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
 - b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Direct impacts can be assessed by identifying the types and locations of proposed development, determining the exact locations of cultural resources within the project area, assessing the significance of the resources that may be affected, and determining the appropriate mitigation.

Removal, demolition, or alteration of historical resources can permanently impact the historic fabric of an archaeological site, structure, or historic district.

The State Legislature, in enacting the California Register, amended CEQA to clarify which properties are significant, as well as which project impacts are considered to be significantly adverse. A project with an effect that may cause a substantial adverse change in the significance of a historic resource is a project that may have significant effect on the environment (Section 150645[b]). A substantial adverse change in the significance of a historic resource means demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (Section 150645[b][1]).

The *States CEQA Guidelines* further state that "[t]he significance of an historic resource is materially impaired when a project... [d]emolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in the California Register ... local register of historic resources... or its identification in an historic resources survey."

As such, the test for determining whether the project will have a significant impact on identified historic resources is whether it will materially impair physical integrity of the historic resource such that it could no longer be listed in the National or California Registers or the local landmark program.

As described in Section 4.5.1(d) of the Cultural Resources Assessment prepared by Rincon Consultants, Inc. in 2018 (Appendix D), Rincon Consultants, Inc. conducted a cultural resources records search at the California Historical Resources Information System (CHRIS) at the Northwest Information Center (NWIC) located at Sonoma State University on June 18, 2018. The search was performed to identify previously recorded cultural resources, as well as previously conducted cultural resources studies on the project site and a 0.8-kilometer (0.5-mile) radius surrounding it. The CHRIS search included a review of available records at the NWIC, as well as the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the Office of Historic Preservation Historic Properties Directory, the California Inventory of Historic Resources, the Archaeological Determinations of Eligibility list, and historic maps. In addition to the records search, the Cultural Resources Assessment included archival research for the project site. The methodology for the archival research focused on the review of primary and secondary source materials related to the history and development of the project site and vicinity. Sources for this research included historic maps, aerial photographs, and written histories of the area. Rincon Consultants, Inc. conducted surveys of the project site for historic resources, which included examination, documentation, photographing, and evaluating the built environment features on the project site.

Rincon Consultants, Inc. completed of California Department of Parks and Recreation (DPR) 523 Series forms for the project site. The purpose of this work was to determine whether the subject property appeared to be eligible for inclusion in the NRHP, the CRHR, and the Palo Alto Historic Inventory, as detailed in the City of Palo Alto Historic Preservation Ordinance (Title 16 Palo Alto Municipal Code, Section 49).

On June 5, 2018, Rincon contacted the Native American Heritage Commission (NAHC) and requested a search of the Sacred Lands File (SLF). The NAHC emailed a response on June 20, 2018, stating that the SLF search was returned with negative results.

b. Project Impacts and Mitigation

Threshold 1: Would the project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?

Impact CR-1 THE PROJECT WOULD RESULT IN THE DEMOLITION AND REMOVAL OF AN EXISTING SINGLE-STORY RESTAURANT BUILDING. DUE TO A LACK OF SIGNIFICANCE AND INTEGRITY, THE STRUCTURE DOES NOT MEET THE ELIGIBILITY CRITERIA FOR LISTING IN THE CRHR OR OTHERWISE CONSTITUTE HISTORICAL RESOURCES FOR THE PURPOSES OF CEQA. THUS, THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Appendix D to the Comprehensive Plan EIR lists over 850 historic resources within the City of Palo Alto that could be impacted by future development. According to the City of Palo Alto Master List of Structures on the Historic Inventory and the Cultural Resources Draft Existing Conditions Report for the City's Comprehensive Plan Update, the project site and adjacent properties do not contain historic resources as defined under CEQA *Guidelines* Section 15064.5 (City of Palo Alto 2012, City of Palo Alto 2014).

The project site is developed with a single-story restaurant building constructed in 1964 and opened as a Denny's restaurant at that time. Aerial photographs available at the time of the present study indicate that the project site and surrounding lands were in use primarily as orchards as late as 1948. In the years leading up to the 1964 construction of the Denny's restaurant, agricultural land uses gradually gave way to commercial and residential development along, and adjacent to, the stretch of El Camino Real on which the building is located. By 1956, several homes had been completed in the Palo Alto Orchards subdivision located immediately north of the subject property. In addition, what appears to have been commercial development along both sides of El Camino Real continued steadily in the 1950s and 1960s. The project site operated as a Denny's restaurant until 2007. In 2012, the property became home to the Su Hong restaurant. In 2013, long-time owner David King sold the property.

The restaurant building's design is the work of the architecture firm Armet and Davis. This partnership, established in 1947 by Louis Armet and Eldon Davis, was responsible for the construction of as many as 4,000 eateries, including the prototypes of buildings constructed and operated by the chains Denny's and Bob's Big Boy. Often, these buildings incorporated features of Googie-style architecture, a school of design which, the Los Angeles Conservancy explains, "combined elements of futurism with the city's car culture to produce eating establishments with undulating forms, dramatically angled roofs, dazzling signage, and glass expanses." The building is based on the firm's oft-replicated 1958 prototype design for Denny's restaurants. This design represents a relatively restrained approach to Googie architecture, in that it incorporates only some of the more staid elements of the style. Most notably, the building features a boomerang roof and generous use of windows along its front and side exteriors.

Rincon Consultants evaluated the building for listing in the National Register of Historic Places, the California Register of Historical Resources, and the City of Palo Alto Historic Inventory (Rincon Consultants 2018b, Appendix D). As discussed in the evaluation, the building is not identified with the lives of significant people, locally or nationally; the building is not an excellent representative of the Googie architectural style or a rare building type; it is not connected with a rare business type; the building is not a significant representative example of recognized architectural masters, Armet and Davis, nor does it contain elements of outstanding design or craftsmanship. Furthermore, the building is an altered example of a heavily duplicated restaurant prototype that no longer retains integrity of design, materials, feeling, association, and workmanship. As such, the building would be ineligible for

listing on a historic register. Additionally, the site is not located in a historic district nor are there listed historic resources nearby. The building is not listed on the local, state, or national register nor has it been deemed eligible for listing on a register. Therefore, the project, which includes demolition of the existing building, would not adversely affect a historic resource. This impact would be less than significant.

Mitigation Measures

No mitigation measures are required.

Threshold 2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064?

Impact CR-2 PROJECT GRADING AND OTHER GROUND-DISTURBING ACTIVITIES COULD RESULT IN IMPACTS TO PREVIOUSLY UNIDENTIFIED ARCHAEOLOGICAL RESOURCES. THIS IMPACT WOULD BE SIGNIFICANT BUT MITIGABLE.

The project site is located in an urbanized area of Palo Alto and is developed with a single-story restaurant building, surface parking lot, and landscaping around the perimeter of the site. According to the City's Archaeologically Sensitive Areas Map, the project site is in a moderate sensitivity area (City of Palo Alto 2014).

A CHRIS records search conducted at the NWIC of the project site and a 0.5-mile radius identified 19 reports of studies previously conducted within a 0.5-mile radius of the project site (see Table 1 in Appendix D). The NWIC records search identified three previously recorded cultural resources within a 0.5-mile radius of the project site, none of which are located on the project site. Of the resources within the search radius, each is a prehistoric archaeological site (see Table 2 in Appendix D). Therefore, because three prehistoric habitation archaeological sites are located within a 0.5-mile radius of the project site is in a moderate sensitivity area according to the City, the project vicinity is considered sensitive for buried archaeological resources.

The proposed project would include excavation for a below-grade parking structure. The site has been previously graded and disturbed during construction of the existing building and surface parking lot. However, new ground disturbance would be below the level of past disturbance. Because project ground disturbance would extend below the level of past disturbance and because of the sensitivity of the project vicinity, there is the possibility of encountering undisturbed subsurface archaeological resources that may be considered important examples of California history or prehistory. In the event that such resources are unearthed during construction, applicable regulatory requirements pertaining to the handling and treatment of such resources would apply. If archaeological resources are identified, as defined by Section 21083.2 of the Public Resources Code, the site would be required to be treated in accordance with the provisions of Section 21083.2 of the Public Resources that impacts would be less than significant.

Mitigation Measures

The following mitigation measures are required:

CR-1 Worker's Environmental Awareness Program (WEAP)

A qualified archaeologist shall be retained who meets the Secretary of the Interior's Professional Qualifications Standards for archaeology to conduct WEAP training for archaeological sensitivity for all construction personnel prior to the commencement of ground disturbing activities. Archaeological sensitivity training should include a description of the types of cultural resources that may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find.

CR-2 Resource Recovery Procedures

In the event that archaeological resources are unearthed during project construction, all earthdisturbing work near the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find. If the discovery proves to be significant under CEQA, additional work, such as preservation in place or archaeological data recovery, shall occur as required by the archeologist in coordination with City staff and descendants and/or stakeholder groups, as warranted. Once the resource has been properly treated or protected, work in the area may resume. A Native American representative shall be retained to monitor mitigation work associated with Native American cultural material.

Significance After Mitigation

Implementation of mitigation measures CR-1 and CR-2 would reduce impacts to previously unidentified archaeological resources to a less than significant level.

Threshold 3: Would the project disturb any human remains, including those interred outside of formal cemeteries?

Impact CR-3 GROUND-DISTURBING ACTIVITIES ASSOCIATED WITH DEVELOPMENT UNDER THE PROPOSED PROJECT HAVE THE POTENTIAL TO DISTURB UNIDENTIFIED HUMAN REMAINS. COMPLIANCE WITH EXISTING REGULATIONS WOULD ENSURE IMPACTS REMAIN LESS THAN SIGNIFICANT.

Based on the cultural resource sites recorded in the search radius and the City's sensitivity map, the project vicinity is considered sensitive for buried archaeological resources. However, as discussed in the Comprehensive Plan EIR, existing regulations contain mandated procedures of conduct following the discovery of human remains (Palo Alto 2016a). If human remains are unearthed, State Health and Safety Code Section 7050.5 requires no further disturbance to occur until the county coroner has made the necessary findings as to the origin and disposition pursuant to the Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission. With adherence to existing regulations, impacts to human remains would be less than significant, and would not be outside the scope of impacts already analyzed within the Comprehensive Plan EIR.

Mitigation Measures

No mitigation measures are required.

Threshold 4: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

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

Impact CR-4 PROJECT GRADING AND OTHER GROUND-DISTURBING ACTIVITIES COULD RESULT IN IMPACTS TO PREVIOUSLY UNIDENTIFIED TRIBAL CULTURAL RESOURCES. THIS IMPACT WOULD BE SIGNIFICANT BUT MITIGABLE.

In May 2016, the City of Palo received a single request to be contacted from a tribe, in accordance with AB 52. However, through subsequent correspondence with the tribe, it was concluded the tribe had contacted the City in error and did not wish to be contacted regarding future projects in the City's jurisdiction. The tribe, the Torres Martinez Desert Cahuilla Indians, is not affiliated traditionally or culturally with the geographic area that makes up the city of Palo Alto. Because no other tribes have requested to be contacted, no notices in accordance with AB 52 were sent and no further action is required.

The results of the Sacred Lands File search conducted through the Native American Heritage Commission were negative for the proposed project area. As described above, although no tribal cultural resources are expected to be present on-site, new ground disturbance would be below the level of past disturbance. As a result, there is the possibility of encountering undisturbed subsurface tribal cultural resources. The proposed excavation of the project site could potentially result in adverse effects on unanticipated tribal cultural resources. However, impacts from the unanticipated discovery of tribal cultural resources during construction would be less than significant with Mitigation Measure CR-3.

Mitigation Measures

The following mitigation measures are required:

CR-3 Unanticipated Discovery of Tribal Cultural Resources

In the event that cultural resources of Native American origin are identified during construction, the applicant shall contact the City. The City shall follow procedures to make sure appropriate monitoring is taking place and appropriate groups are contacted, including consulting with a qualified archaeologist and beginning or continuing Native American consultation procedures. If the City determines the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with Native American groups. The plan would include avoidance of the resource or, if avoidance of the resource is infeasible, the plan would outline the appropriate treatment of the

resource in coordination with the archeologist and the appropriate Native American tribal representative.

Significance After Mitigation

Mitigation Measure CR-3 would ensure that tribal cultural resources are identified properly and preserved in the event they are uncovered during construction and would reduce impacts regarding disrupting tribal cultural resources to a less than significant level.

c. Cumulative Impacts

The proposed project, in conjunction with other nearby planned, pending, and potential future projects in the City of Palo Altos, could adversely impact cultural resources. Cumulative development in the region would continue to disturb areas with the potential to contain historical resources, archaeological resources, human remains, and tribal cultural resources. For other developments that would have significant impacts on cultural or tribal cultural resources, similar conditions and mitigation measures described herein would be imposed on those other developments consistent with the requirements of CEQA, along with requirements to comply with all applicable laws and regulations governing said resources.

The proposed project, in conjunction with cumulative projects in and around the City of Palo Alto, would result in significant cumulative impacts to unknown archaeological resources. However, the project would implement Mitigation Measure CR-2 to ensure that unanticipated archaeological resources identified during construction area adequately mitigated. Similarly, cumulative projects are reviewed separately by the appropriate jurisdiction and undergo environmental review when it is determined that the potential for significant impacts exists. In the event that future cumulative projects would result in impacts to known or unknown cultural resources, impacts to such resources would be addressed on a case-by-case basis, and would likely be subject to mitigation measures similar to those imposed for the proposed project. As such, cumulative impacts would be less than significant with mitigation. After implementation of Mitigation Measure CR-2, the project's contribution would not be cumulatively considerable.

The project would involve ground disturbing activities which could encounter human remains. If human remains are found, the proposed project and cumulative projects would be required to comply with the State of California Health and Safety Code Section 7050.5. With adherence to existing regulations relating to human remains, cumulative impacts would be less than significant and the proposed project's impacts would not be cumulatively considerable.

The project, in conjunction with cumulative projects in and around the City of Palo Alto, could result in significant cumulative impacts to tribal cultural resources. However, the project would implement Mitigation Measure CR-3 to ensure tribal cultural resources are identified and adequately mitigated on a project-by-project basis. Similarly, cumulative projects are reviewed separately by the appropriate jurisdiction and undergo environmental review when it is determined that the potential for significant impacts exists. In the event that future cumulative projects would result in impacts to known or unknown tribal cultural resources, impacts to such resources would be addressed on a case-by-case basis, and would likely be subject to mitigation measures similar to those imposed for the proposed project. As such, cumulative impacts would be less than significant with mitigation. After implementation of Mitigation Measure CR-3, the project's contribution would not be cumulatively considerable.
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4.3 Geology and Soils

This section analyzes the proposed project's potential impacts related to geologic and seismic hazards, erosion, loss of topsoil, and soil instability. The analysis in this section is based, in part, on a geotechnical investigation prepared for the project by Cornerstone Earth Group (Cornerstone) in September 2018. The full analysis is provided in Appendix E of this EIR. The City's 2030 Comprehensive Plan EIR, certified on November 13, 2017, included analysis of impacts related to geology and soils at anticipated Comprehensive Plan buildout. Potential project-specific impacts related to geologic and seismic hazards were discussed in Section 6, *Geology and Soils*, of the project Initial Study (Appendix B of this EIR). Due to the potential for impacts to geology and soils peculiar to the project not covered in the 2030 Comprehensive Plan EIR, this section includes an analysis of site- and project-specific impacts related to geology and soils.

4.3.1 Setting

a. Regulatory Framework

This section describes applicable federal, state, and local laws, ordinances, regulations, and standards pertaining to geology, soils, and seismicity.

Federal

International Building Code

The International Building Code (IBC) is published by the International Code Council. The scope of this code covers major aspects of construction and design of structures and buildings. The IBC has replaced the Uniform Building Code as the basis for the California Building Code and contains provisions for structural engineering design. The 2018 IBC addresses the design and installation of structures and building systems through requirements that emphasize performance. The IBC includes codes governing structural as well as fire and life safety provisions covering seismic, wind, accessibility, egress, occupancy, and roofs.

Earthquake Hazards Reduction Act

U.S. Congress passed the Earthquake Hazards Reduction Act in 1977 to reduce the risks to life and property from future earthquakes through the establishment and maintenance of an effective earthquake hazards reduction program. To accomplish this goal, the act established the National Earthquake Hazards Reduction Program. This program was substantially amended in November 1990 by the National Earthquake Hazards Reduction Program Act, which refined the description of agency responsibilities, program goals, and objectives to focus on minimizing loss from earthquakes after they occur. The National Earthquake Hazards Reduction Program promotes the adoption of earthquake hazard reduction activities by all scales of government and works to develop national building standards and model codes for use by engineers, architects, and all others involved in the planning and construction of buildings and infrastructure.

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 (Alquist-Priolo Act) was passed into law following the destructive February 9, 1971 magnitude 6.6 San Fernando earthquake. The Alquist-Priolo Act provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the Alquist-Priolo Act is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. This Alquist-Priolo Act groups faults into categories of active, potentially active, and inactive. Historic and Holocene age faults are considered active, Late Quaternary and Quaternary age faults are considered potentially active, and pre-Quaternary age faults are considered inactive.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (Mapping Act) of 1990 was passed into law following the destructive October 17, 1989 magnitude 6.9 Loma Prieta earthquake. The Mapping Act directs the California Geological Survey (CGS) to delineate Seismic Hazard Zones. The purpose of the Mapping Act is to reduce the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards. Cities, counties, and state agencies are directed to use seismic hazard zone maps developed by CGS in their land-use planning and permitting processes. The Mapping Act requires that site-specific geotechnical investigations be performed prior to permitting most urban development projects in seismic hazard zones.

California Building Code

California provides minimum standards for building design through the California Building Code (CBC), which is located in Part 2 of Title 24 of the California Code of Regulations. The CBC is based on the 1997 Uniform Building Code with modifications specific for California conditions. The CBC provides fire and emergency equipment access standards for public roadways, which include specific width, grading, design and other specifications for roads which provide access for fir apparatuses. Street modifications in the City of Palo Alto would be subject to these and any modified State standards. The City of Palo Alto adopted the 2016 edition of the California Building Code on October 24, 2016.

Local Plans and Policies

2030 Comprehensive Plan

The Safety Element of the City's 2030 Comprehensive Plan (City of Palo Alto 2017a) contains several goals and policies aimed at reducing risks associated with natural hazards that include seismic events. The following policy and program applies to the project:

- Policy S-2.7: Encourage property owners, business owners, and the PAUSD to evaluate their vulnerability to earthquake hazards and take appropriate action to minimize their risk.
 - Program S2.7.1: As part of the construction permitting process for proposed new and redeveloped buildings in areas of identified hazard shown on Map S-2, require submittal to the City of a geotechnical/seismic report that identifies specific risks and appropriate mitigation measures.

Santa Clara Operational Area Hazard Mitigation Plan: City of Palo Alto Annex

The City of Palo Alto participated in the multi-jurisdictional planning process to develop the *Santa Clara Operational Area Hazard Mitigation Plan*, adopted by City Council on October 16, 2017. The *Hazard Mitigation Plan* identifies and prioritizes potential and existing hazards throughout Santa Clara County, and includes hazards that may be exacerbated by climate change. The *Hazard Mitigation Plan* ranks earthquake risks as high and no risk of landslides in Santa Clara County.

Palo Alto Municipal Code

The City of Palo Alto Municipal Code (PAMC) Chapter 16.28, *Grading and Erosion and Sediment Control,* contains requirements for construction-related grading, erosion, and sediment control to ensure worker safety during such earthwork, to preserve and enhance the natural environment, and to prevent water quality impacts from such activities. PAMC Chapter 16.28 also requires the submittal of an Erosion and Sediment Control Plan as part of a project permit application.

PAMC Chapter 16.42, *Seismic Hazards Identification Program*, contains building-related requirements of the City's Seismic Hazards Identification Program. The Program seeks to enhance public safety by identifying buildings that may possess structural deficiencies from a seismic safety perspective, determining the severity and extent of deficiencies, and assessment of potential loss of life or injury during a seismic event. Certain projects that are subject to the Program must perform a detailed soils report to identify potentially unsuitable soil conditions.

PAMC Chapter 16.40 Section 120, *Hazardous Conditions*, states that a Geologic Report is required prior to issuance of building permits for projects located in high and moderate flood, seismic, or other geologic hazard area as identified in the Comprehensive Plan.

2030 Comprehensive Plan EIR Summary

The City's 2030 Comprehensive Plan EIR analyzes impacts related to geology and soils in Section 4.5, *Geology, Soils, and Seismicity,* and identified the following impacts:

- Impact GEO-1: The proposed Plan would not expose people or structures to substantial adverse effects including the risk of loss, injury or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure (including liquefaction), landslides, or expansive soil. (Less than Significant)
- Impact GEO-2: The proposed Plan would not expose people or property to major geologic hazards that cannot be mitigated through the use of standard engineering design and seismic safety techniques. (Less than Significant)
- Impact GEO-3: Future development allowed by the proposed Plan would not be located on a geologic unit or on soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. (Less than Significant)
- Impact GEO-4: Implementation of the proposed Plan would not cause substantial erosion or siltation. (Less than Significant)
- Impact GEO-5: The proposed Plan, in combination with past, present, and reasonably foreseeable projects, would result in less-than-significant cumulative impacts with respect to geology, soils, and seismicity. (Less than Significant)

b. Existing Conditions

Existing Geologic and Soil Setting

The project site is located in the northern-most extent of the Santa Clara Valley in the City of Palo Alto. The San Andreas Fault system, including the Monte Vista-Shannon Fault, exists in the Santa Cruz Mountains to the southwest. The Hayward and Calaveras Fault systems exist in the Diablo Range, approximately 13 and 18 miles to the east, respectively. Figure 4.3-1 shows the project site in relation to known fault zones in the vicinity. The site is underlain by Holocene alluvial fan deposits, consisting of unconsolidated, interbedded fine-grained and coarse-grained soils. Adobe Creek is located approximately 400 feet to the southeast (Appendix E).

The project site is currently occupied by a restaurant building and surrounding paved parking lot and driveways. The site is relatively level, ranging from Elevation 60.8 feet in the northwest portion of the site to Elevation 63.5 feet in the southeastern portion of the site (NAVD88¹; see Appendix E). Subsurface conditions of the project site were determined by Cornerstone as consisting primarily of stiff to hard, lean clay with sand and sandy lean clay to a depth of 40 feet below the existing grades. A layer of medium dense to dense clayey sand and clayey sand with gravel was encountered within the proposed garage excavation area at depths of 12 to 16 feet (bottom of garage level excavation assumed to be at a depth of 16 feet, corresponding to Elevation 47 feet NAVD88. Below a depth of 30 feet, interbedded layers of clayey sand were encountered at approximately 29.5 to 30.5 feet, 33 to 37 feet, and 39.5 to 41 feet below the existing grades.

Geologic Hazards

Seismic Hazards

The San Francisco Bay area region is one of the most seismically active areas in the country. While seismologists cannot predict earthquake events, the U.S. Geological Survey's Working Group on California Earthquake Probabilities 2015 estimates that the rate of earthquakes around magnitude 6.7 (the size of the destructive 1994 Northridge earthquake) has decreased by about 30 percent. There is a 63 percent chance of at least one magnitude 6.7 or greater earthquake occurring in the Bay Area region between 2007 and 2036 (Appendix E).

An active fault is one that has had surface displacement within Holocene time (about the last 11,000 years). A potentially active fault is one that has demonstrated surface displacement during Quaternary time (approximately the last 1.6 million years), but has had no known Holocene movement. Faults that have not moved in the last 1.6 million years are considered inactive. Table 4.3.1, below, presents the State-considered active faults that are located within 15.5 miles (25 kilometers) of the project site (Appendix E).

¹ The geotechnical investigation (Appendix E) provided project site elevations in "NAVD88" units. North American Vertical Datum of 1988 (NAVD88) is a fixed reference for elevations determined by geodetic leveling, derived from a general adjustment of terrestrial leveling nets of North America (U.S., Canada, and Mexico). In the adjustment, only the height of the primary tidal bench mark, referenced to the International Great Lakes Datum of 1985 (IGLD85) local mean sea level height value (at Father Point, Quebec, Canada) was held fixed to provide minimum constraint. Therefore, NAVD88 should not be used as "Mean Sea Level" (MSL), which specifically is the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch. NOAA. 2018. About Tidal Datums. https://tidesandcurrents.noaa.gov/datum options.html, accessed August 2019.



Figure 4.3-1 Known Faults in Project Site Vicinity

	Dis	tance
Fault Name	Miles	Kilometers
Monte Vista-Shannon	3.2	5.1
Northern San Andreas	5.6	8.9
Hayward-Rodgers Creek	13.6	21.8
Source: Cornerstone Earth Group 2018, Appendix E		

Table 4.3.1 Approximate Fault Distances

As noted in Table 4.3.1, several significant known faults are located within 25 kilometers of the project site. Additional major known faults in the vicinity include the Calaveras Fault and the San Gregorio Fault (City of Palo Alto 2017a). The project site is not located in a state-designated Alquist-Priolo Earthquake Fault Zone or a Santa Clara County Fault Hazard Zone (Appendix E).

Landslides

Landslides are gravity-driven movements of earth materials that may include rock, soil, unconsolidated sediment, or combinations of such materials. The rate of landslide movement can vary considerably. Some move rapidly as in a soil or rock avalanche, while other landslides creep or move slowly for extended periods of time.

Landslides have the potential to occur within Palo Alto, most notably on some of the hilly slopes west of Interstate 280 (I-280). Earthquake hazard maps prepared by the CGS show many small seismic-induced landslide hazard areas in the westernmost parts of the city. These zones are almost exclusively limited to steeper hillsides near I-280 and west from I-280, as well as the foothills proper, located west of the San Andreas Fault Zone. However, landslides are not an issue for parts of the city where the topography is flat (City of Palo Alto 2016a). The project site is relatively flat, as described above. There are no steep slopes in the immediate vicinity of the project site.

Liquefaction and Ground Rupture

Liquefaction describes a phenomenon in which loose, saturated, relatively cohesionless soil deposits lose shear strength during strong ground motions. Primary factors controlling liquefaction include intensity and duration of ground motion, gradation characteristics of the subsurface soils, on-site stress conditions, and the depth to groundwater. Liquefaction is typified by a loss of shear strength in the liquefied layers due to rapid increases in pore water pressure generated by earthquake accelerations. Liquefaction typically occurs in areas where the soils below the water table are composed of poorly consolidated, fine to medium-grained, primarily sandy soil. In addition to the requisite soil conditions, the ground acceleration and duration of the earthquake must also be of a sufficient level to induce liquefaction.

According to the geotechnical investigation completed for the project site (Appendix E), the project site is not mapped within a state-designated Liquefaction Hazard Zone or a Santa Clara County Liquefaction Hazard Zone. However, the site is located about 0.5 mile from a mapped liquefaction hazard area. Due to the proximity of the existing liquefaction hazard area to the project site, Cornerstone completed testing and sampling for potentially liquefiable layers on the project site, to depths of approximately 45 feet. The analysis included performing visual classification on sampled materials, evaluating cone penetration test (CPT) data, and other tests to further classify soil properties on the project site.

Based on the test results, Cornerstone concludes that several soil layers would experience liquefaction that would result in a total ground settlement of up to 0.5 inch, though settlement of the building foundation elements is anticipated to be about 0.33 inch. When cross-referenced with other analytical methodologies, Cornerstone concludes that the 0.5 inch total ground settlement estimate is reasonable for the proposed project (Appendix E).

Subsidence

Subsidence is the sinking of the ground surface caused by the compression of soil layers. This compression is caused by deep-seated settlement of these soil layers, which in turn is caused by human activities or natural effects such as extraction of groundwater, oil and gas withdrawal, oxidation of organics, and the placement of additional fill over compressible layers.

Seismically-induced subsidence occurs in loose to medium density unconsolidated soils above groundwater. These can compress when subject to seismic shaking, causing subsidence. This subsidence is exacerbated by increased loading, such as from the construction of structures onsite. This hazard can be mitigated prior to development through removal and re-compaction of loose soils.

The CPT results indicate soil behavior types consisting of clay, silty clay to clay, clayey silt to silty clay, and sandy silt to clayey silt to a depth of 45.75 feet, which was the maximum depth explored. CPT results also indicate the presence of several layers of sand and gravelly sand at sampled locations on site. Loose unsaturated sandy soils can settle during strong seismic shaking.

Based on these results, several soil layers could potentially experience liquefaction and result in post-liquefaction total settlement at the ground surface of up to 0.5 inch. Cornerstone evaluated the project site's potential for seismic compaction of the medium dense clayey sand encountered above the historic high groundwater level of 17 feet. The geotechnical investigation concludes that the potential for seismic settlement of the medium dense clayey sand is low at the project site (Appendix E).

Lateral Spreading

Lateral spreading is the horizontal (lateral) ground movement of relatively flat-lying soil deposits toward a free face such as an excavation, channel, or open body of water; lateral spreading is typically associated with liquefaction of one or more subsurface layers near the bottom of an exposed slope. Adobe Creek is located about 400 feet southeast of the project site, which is not within a distance considered to be susceptible to lateral spreading (Appendix E).

4.3.2 Impact Analysis

a. Methodology and Significance Thresholds

As listed in Appendix G of the CEQA Guidelines, a project is considered to have a significant impact related to geology and soils if it would:

- 1. Expose people or structures to substantial adverse effects including the risk of loss, injury or death involving:
 - a. rupture of a known earthquake fault,
 - b. strong seismic ground shaking,
 - c. seismic related ground failure (including liquefaction),

- d. landslides, or
- e. expansive soil;
- 2. Expose people or property to major geologic hazards that cannot be mitigated through the use of standard engineering design and seismic safety techniques;
- 3. Be located on a geologic unit or on soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
- 4. Cause substantial erosion or siltation;
- 5. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater; or
- 6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

The Initial Study (Appendix A) includes a summary of the Comprehensive Plan EIR findings, which determined impacts relating to geology and soil hazards would be less than significant with compliance to existing regulations for projects within anticipated buildout. The project-specific analysis, therein, is based on the geotechnical investigation prepared by Cornerstone (Appendix E). As discussed in the Initial Study, criteria 1a, 1b, 1c. 1d, 4, 5, and 6 were found to be less than significant. The impacts associated with criteria 1e, 2, and 3 are described below.

b. Project Impacts and Mitigation

Threshold 1e:	Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving expansive soils?
Threshold 2:	Would the project expose people or property to major geologic hazards that cannot be mitigated through the use of standard engineering design and seismic safety techniques?
Threshold 3:	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?

Impact GEO-1 THE PROJECT SITE CONTAINS SEVERAL LAYERS OF SOIL WITH MODERATE EXPANSION POTENTIAL THAT COULD POTENTIALLY EXPERIENCE LIQUEFACTION. THE PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

Some soils within the city of Palo Alto are known to be expansive. Local-area construction contractors and soil testing firms are well acquainted with the procedures used to identify and mitigate expansive soils (City of Palo Alto 2016a), including soil grouting, recompaction, and replacement with a non-expansive material. The CBC requires that each construction location be evaluated to determine the most appropriate treatment for expansive soils. According to the geotechnical investigation conducted by Cornerstone in September 2018 (Appendix E), on-site soils have a moderate expansion potential.

Unstable geologic units prone to subsidence, or collapse are not known to be present within Palo Alto (City of Palo Alto 2016a). Additionally, the geotechnical investigation concludes that the potential for lateral spreading to affect the project site is low.

The project site is not located in an identified liquefaction zone, but according to Map S-3 in the Comprehensive Plan, the site is at moderate risk for liquefaction (City of Palo Alto 2017a). Testing and analysis performed as part of the geotechnical investigation indicated that several layers could potentially experience liquefaction and subsequent settling. However, Cornerstone concludes the project would be feasible from a geotechnical perspective provided the project design addresses the presence of expansive and sandy soils, presence of groundwater in the proposed car lift pit excavation, proximity of the propose garage excavation to existing surface improvements, and differential movement at on-grade to on-structure transitions (Appendix E).

The project would be required to adhere to the geology and soil provisions of the CBC, which sets forth seismic design standards (Chapters 16 and 18) and geohazard study requirements (Chapter 18) (California Building Standards Commission 2017), and regulations pursuant to PAMC Chapter 16.40.120, *Hazardous Conditions*, and Chapter 16.42, *Seismic Hazards Identification Project*, and the Hazardous Conditions chapter (Section 18.40.120). The incorporation of Mitigation Measure GEO-1 would ensure geological and soil impacts would be less than significant.

Mitigation Measures

The applicant shall implement Mitigation Measure GEO-1 to reduce impacts related to expansive and unstable soils.

GEO-1 Geotechnical Design Considerations

The 2018 geotechnical investigation conducted by Cornerstone Earth Group contains comprehensive design recommendations for the project, as well as recommendations for the construction contractor. Feasible recommendations or an equivalent alternative design measure recommended by a qualified engineer and approved by the Chief Building Official shall be incorporated into the proposed project grading and building plans. Measures to be incorporated into the project plans prior to project construction include, but are not limited to:

- Prior to submitting project grading and building plans for City review, a qualified geotechnical consultant shall be retained to review the geotechnical aspects of the project structural, civil, and landscape plans and specifications, allowing sufficient time to provide the design team with comments.
- A qualified geotechnical consultant shall be notified at least 48 hours prior to earthwork and construction activities and be present on site to provide geotechnical observation and testing during earthwork and foundation construction. The qualified geotechnical consultant shall provide a letter to the Chief Building Official at the end of construction, outlining contractor compliance with project plans, specifications, and adherence to project mitigation measures.
- Groundwater in car lift pit excavation:
 - The car list pit wall shall be waterproof, and the pit foundation and walls shall be designed to include construction joints that are resistant to hydrostatic pressure.
 - Groundwater level of 17 feet below the existing ground surface in structure design shall be used in designing the car lift pit.
 - The construction contractor shall provide a construction dewatering plan to the construction monitor prior to commencing pit excavation work during project construction. The dewatering plan shall maintain groundwater at least five feet below

the bottom of the mass excavation, and at least two feet below localized excavations such as deepened footings, lift shafts, and utilities.

- Proximity to garage excavation to existing improvements: Temporary shoring to support the proposed 18- to 26-foot deep excavation adjacent to 4250 and 4260 El Camino Real (adjacent properties to the northwest and southeast, respectively) and shoring for the basement walls near El Camino Real and the property to the southwest shall be implemented during project construction to preserve the structural and geologic integrity of adjacent buildings during project excavation activities.
- Differential movement from on-grade to on-structure transitions:
 - Subslabs shall be included beneath flatwork or pavers that can cantilever at least three feet beyond the underground retaining wall.
 - Retaining wall backfill shall be compacted to 95 percent where surface improvements are planned.
- Presence of expansive surficial soil:
 - At-grade surface improvements outside the basement footprint shall be designed to resist expansive soils.
 - ^a All flatwork (e.g., sidewalks and patios) shall have sufficient reinforcement and be supported on a layer of non-expansive fill.
 - At-grade footings shall extend below the zone of seasonal moisture fluctuation.
 - Moisture changes in the surficial soils shall be limited by using positive drainage away from buildings as well as limiting landscaping watering.
- Presence of cohesionless (sandy) soil at basement level: Contractors shall form footings where sand with low fine substrates are encountered, and prepare slab-on-grade subgrade just prior to concrete placement.

Significance After Mitigation

Implementation of Mitigation Measure GEO-1 would reduce the likelihood of significant damage to the proposed buildings from expansive and unstable soils by ensuring that the project design incorporates features that address on-site soil conditions, and the features are geotechnically feasible for the project site and appropriate for the project. The project would not expose people or property to major geologic hazards that cannot be mitigated through the use of standard engineering design and seismic safety techniques. Therefore, Mitigation Measure GEO-1 would reduce project impacts to a less than significant impact with mitigation incorporated.

c. Cumulative Impacts

Table 3-1, *Cumulative Projects List*, in Section 3.3, *Cumulative Development*, of this EIR provides a listing of all projects considered in the cumulative analysis of this project. These planned and pending projects would increase structural development near the project site, in turn exposing residents and property to potential risks from seismic hazards or soil instability in the area. Like the proposed project, all new planned and pending development in the city and adjacent jurisdictions would be subject to current applicable federal, state, and local seismic and erosion control standards and regulations.

Furthermore, development projects listed in Table 3-1 would also be required to be consistent with the local planning documents or mitigation would be required to assess the impacts that were not addressed in the Comprehensive Plan EIR. Therefore, the project's consistency with the Comprehensive Plan and project-specific geology and soils analysis in the Initial Study (Appendix A), geotechnical investigation (Appendix E), and Section 4.3.2 above indicate that the project would not result in significant cumulative impacts that were not addressed in the Comprehensive Plan EIR.

Although new development would be exposed to existing geologic and seismic hazards, it would not increase the potential for such hazards to occur. Geologic hazards are site-specific, and individual developments would not create additive impacts that would affect geologic conditions on other sites. Therefore, development of individual projects would not exacerbate existing geologic conditions, and cumulative impacts would be less than significant.

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4.4 Noise

This section analyzes the proposed project's potential impacts related to noise. The City's 2030 Comprehensive Plan EIR, certified on November 13, 2017, included analysis of impacts related to noise at anticipated Comprehensive Plan buildout. Potential project-specific impacts related to noise were discussed in Section 12, *Noise*, of the project Initial Study (included in Appendix B of this EIR). Due to the potential for impacts related to noise peculiar to the project site not covered in the Comprehensive Plan EIR, this section includes an analysis of site- and project-specific noise impacts.

4.4.1 Setting

a. Overview of Sound Measurement

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (Caltrans 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz and less sensitive to frequencies around and below 100 Hertz (Kinsler, et. al. 1999). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dBA; reducing the energy in half would result in a 3 dBA decrease (Crocker 2007).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not "sound twice as loud" as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud ([10.5x the sound energy] Crocker 2007).

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in level as the distance from the source increases. The manner in which noise reduces with distance depends on factors such as the type of sources (e.g., point or line, the path the sound will travel, site conditions, and obstructions). Noise levels from a point source typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance (e.g., construction, industrial machinery, ventilation units). Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013a). The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site, such as a parking lot or smooth body of water, receives no additional ground attenuation and the changes in noise levels with distance (drop-off rate) result from simply the geometric spreading of the source. An additional ground attenuation value of 1.5 dBA per doubling of distance applies to a soft site (e.g., soft dirt, grass, or scattered bushes and trees) (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features

such as hills and dense woods, and man-made features such as buildings and walls, can significantly alter noise levels. Generally, a large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2017). Structures can substantially reduce exposure to noise as well. The FHWA's guidelines indicate that modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows.

The impact of noise is not a function of loudness alone. The time of day when noise occurs, and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level (L_{eq}) ; it considers both duration and sound power level. L_{eq} is defined as the single steady A-weighted level equivalent to the same amount of energy as that contained in the actual fluctuating levels over time. Typically, L_{eq} is summed over a one-hour period. L_{max} is the highest RMS sound pressure level within the sampling period, and L_{min} is the lowest RMS sound pressure level within the measuring period (Crocker 2007).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (L_{dn}), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours; it is also measured using Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013a). Noise levels described by L_{dn} and CNEL usually differ by about 1 dBA. The relationship between the peak-hour L_{eq} value and the L_{dn} /CNEL depends on the distribution of traffic during the day, evening, and night. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 dBA, while areas near arterial streets are in the 50 to 60-plus CNEL range. Normal conversational levels are in the 60 to 65-dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (FTA 2018).

b. Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hz. The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body starts from a low frequency of less than 1 Hz and goes to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (Federal Transit Administration [FTA] 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High-frequency vibrations diminish much more rapidly than low frequencies, so low frequencies tend to dominate the spectrum at large distances from the source. Discontinuities in the soil strata can also cause diffractions or channeling effects that affect the propagation of vibration over long distances (Caltrans 2013b). When a building is impacted by vibration, a ground-to-foundation coupling loss will usually reduce the overall vibration level. However, under rare circumstances, the ground-to-foundation coupling may actually amplify the vibration level due to structural resonances of the floors and walls.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. The PPV and RMS velocity are normally described in inches per second. PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (Caltrans 2013b).

c. Project Site Noise Environment

Like many urban areas, transportation-related noise, including car and truck traffic and trains, dominates Palo Alto's noise environment. Highway 101 is the largest source of traffic noise in Palo Alto, with other highways and major roadways contributing as well. These include El Camino Real, the Oregon Expressway, the Foothill Expressway, Interstate 280 (I-280), Embarcadero Road, San Antonio Road, Middlefield Road, University Avenue, Page Mill Road/Oregon Expressway, and Alma Street, among others. Private cars, trucks, buses, and other types of vehicles generate noise along all these roadways. Caltrain also runs through the center of Palo Alto and contributes to the noise environment of the city. Air traffic makes only a modest contribution to ambient noise levels in Palo Alto.

To characterize noise levels on the project site, a fifteen-minute noise measurement was taken with an ANSI Type II sound level meter in front of the project site along El Camino Real during the PM peak hour on a weekday. Three additional 15-minute noise measurements were taken at various points throughout the site during midday on a weekday. The locations, timing, and results of those measurements are shown in Table 4.4-1. The locations of the noise measurements are shown on Figure 4.4-1.

The primary source of noise at the project site was automobile traffic on El Camino Real. According to the noise measurements in the Palo Alto Comprehensive Plan, the project site's local ambient noise level is approximately 65 dBA Leq.



Figure 4.4-1 Noise Measurement Locations

No.	Location	Primary Noise Source	Time	Result (Leq)
1	On El Camino Real sidewalk in front of the existing building on the project site (approximately 60 feet from centerline of El Camino Real)	Traffic along El Camino Real	6/4/2018, 4:17 to 4:32 pm	74.7 dBA
2	Northeastern corner of project site (approximately 65 feet from centerline of El Camino Real)	Traffic along El Camino Real	4/4/2019 11:37 to 11:52 am	66.2 dBA
3	Northern property line near adjacent residences	Traffic along El Camino Real, existing restaurant HVAC system, parking lot noise	4/4/2019 11:53 am to 12:08 pm	60.6 dBA
4	Southern property line near adjacent office building	Traffic along El Camino Real, existing restaurant HVAC system, parking lot noise	4/4/2019, 12:09 to 12:24 pm	59.8 dBA
Soo Ar	anondix E for noise measurement data			

Table 4.4-1 Project Site Noise Measurement Information

d. Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. In general, residential, education, and medical uses are more sensitive to noise than are commercial and industrial activities. Noise-sensitive uses ("sensitive receptors") include residences, schools, hospitals, senior care facilities, long-term medical or mental health care facilities, or any other land use areas deemed noise-sensitive by the local jurisdiction.

Vibration sensitive receivers are similar to noise sensitive receivers, such as residences and institutional uses (e.g., schools, libraries, and religious facilities). However, vibration sensitive receivers also include buildings where vibrations may interfere with vibration-sensitive equipment, affected by levels that may be well below those associated with human annoyance.

The nearest noise and vibration sensitive receptor to the project site is the Palo Alto Redwoods apartment complex, located adjacent to the northern and eastern boundaries of the project site. As shown in Table 4.4-1, the measured noise levels on the project site near the Palo Alto Redwoods were between 59.8 and 66.2 dBA Leq. The Comprehensive Plan characterizes the local ambient noise level at this location as 60 dBA Leq.

e. Regulatory Environment

This section describes applicable regulations and standards pertaining to noise and vibration.

2030 Comprehensive Plan

The City's Comprehensive Plan Natural Environment Element includes goals and policies related to noise. This element establishes land use compatibility categories for community noise exposure (Table 4.4-2). For residential uses, hotels, and motels, the City identifies noise levels up to 60 dBA

Ldn as normally acceptable and noise levels between 60 and 75 dBA Ldn as conditionally acceptable (City of Palo Alto 2017a).

Exterior N		Noise Exposure Ldn or CNEL or dB	
Land Use Category	Normally Acceptable	Conditionally Acceptable	Unacceptable
Residential, Hotel and Motels	50-60	60-75	75+
Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds	50-65	65-80	80+
Schools, Libraries, Museums, Hospitals, Personal Care, Meeting Halls, Churches	50-60	60-75	75+
Office Buildings, Business Commercial, and Professional	50-70	70-80	80+
Auditoriums, Concert Halls, and Amphitheaters	N/A	50-75	75+
Industrial, Manufacturing, Utilities, and Agriculture	50-70	75+	N/A
Source: City of Palo Alto 2017a			

Table 4.4-2	Palo Alto Land Use Comp	atibility for Community	y Noise Environments
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Palo Alto Municipal Code

The PAMC regulates noise primarily through the Noise Ordinance, which comprises Chapter 9.10 of the Code. The Noise Ordinance regulates noise associated with construction activities. Section 9.10.060 of the PAMC restricts construction activities to the hours of 8:00 a.m. to 6:00 p.m. Monday through Friday and 9:00 a.m. to 6:00 p.m. on Saturday. Construction is prohibited on Sundays and holidays (New Year's Day, Martin Luther King Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, and Christmas Day). Construction, demolition, or repair activities must meet the following standards:

- No individual piece of equipment shall produce a noise level exceeding 110 dBA at a distance of 25 feet. If the device is housed in a structure on the property, the measurement shall be made outside the structure at a distance as close to 25 feet from the equipment as possible.
- The noise level at any point outside of the property plane of the project shall not exceed 110 dBA.
- The holder of a valid construction permit for a construction project in a non-residential zone shall post a sign at all entrances to the construction site upon commencement of construction, for the purpose of informing all contractors and subcontractors, their employees, agents, materialmen and all other persons at the construction site, of the basic requirements of this chapter.

2030 Comprehensive Plan EIR Summary

The City's 2030 Comprehensive Plan EIR analyzes noise and vibration impacts in Section 4.10, *Noise*, and identified the following impacts:

 Impact NOISE-1: Implementation of the proposed Plan would have the potential to cause the average 24-hour noise level (Ldn) to increase by 5.0 decibels (dB) or more in an existing residential area, even if the Ldn would remain below 60 dB. (Significant and Mitigable)

- Mitigation Measure NOISE-1a: To ensure that average 24-hour noise levels associated with long-term operational noise would not increase by 5.0 decibels (dB) or more in an existing residential area, the proposed Plan shall include policies that achieve the following:
 - Location of land uses in areas with compatible noise environments.
 - Use of the guidelines in the "Land Use Compatibility for Community Noise Environment" table in the proposed Plan to evaluate the compatibility of proposed land uses with existing noise environments.
 - Clear guidelines for maximum outdoor noise levels in residential areas.
 - Adherence to the interior noise requirements of the State of California Building Standards Code (Title 24) and the Noise Insulation Standards (Title 25).
 - Inclusion of a noise contour map in the proposed Plan.
 - Reduction of noise impacts of development on adjacent properties.
 - Evaluation of noise impacts on existing residential, open space, and conservation land.
 - Requirement for new projects in the Multiple Family, Commercial, Manufacturing, or Planned Community districts to demonstrate compliance with the Noise Ordinance.
- Mitigation Measure NOISE-1b: To reduce potential impacts to new land uses from aircraft noise, the proposed Plan shall include policies that achieve the following:
 - Compliance with the airport-related land use compatibility standards for community noise environments.
 - Prohibition of incompatible land use development within the 60 dBA CNEL noise contours of the Palo Alto airport, as established in the adopted County of Santa Clara Airport Land Use Commission Comprehensive Land Use Plan (CLUP) for the Palo Alto Airport.
- Mitigation Measure NOISE-1c: To reduce potential impacts to new land uses from railway noise, the proposed Plan shall include policies that achieve the following:
 - Minimization of noise spillover from rail-related activities into adjacent residential or noise-sensitive areas.
 - Building design that reduces impacts from noise and ground borne vibrations associated with rail operations.
 - Guidelines for interior noise levels.
- Impact NOISE-2: Implementation of the proposed Plan would have the potential to cause the Ldn to increase by 3 dB or more in an existing residential area, thereby causing the Ldn in the area to exceed 60 dB. (Significant and Mitigable)
 - Mitigation Measure NOISE-2: Implement Mitigation Measures NOISE-1a, NOISE-1b, and NOISE-1c.
- Impact NOISE-3: Implementation of the proposed Plan would have the potential to cause an increase of 3 dB or more in an existing residential area where the Ldn currently exceeds 60 dB. (Significant and Mitigable)
 - Mitigation Measure NOISE-3: Implement Mitigation Measures NOISE-1a, NOISE-1b, and NOISE-1c.

- Impact NOISE-4: Implementation of the proposed Plan would have the potential to result in indoor noise levels for residential development to exceed an Ldn of 45 dB. (Significant and Mitigable)
 - Mitigation Measure NOISE-4a: Implement Mitigation Measure NOISE-1a.
 - Mitigation Measure NOISE-4b: The Land Use Noise Compatibility Guidelines established in the 1998 Comprehensive Plan shall be maintained.
- Impact NOISE-5: Implementation of the proposed Plan would have the potential to expose persons to or generate excessive ground-borne vibration or ground-borne noise levels. (Significant and Mitigable)
 - Mitigation Measure NOISE-5a: To ensure that future development would not result in significant construction-related vibration impacts, the proposed Plan shall include policies that limit the hours of construction around sensitive receptors, and require formal, ongoing monitoring and reporting throughout the construction process for larger development projects, as well as the use of pertinent industry standards and City guidelines to avoid significant vibration impacts during construction or operations.
 - Mitigation Measure NOISE-5b: Implement Mitigation Measure NOISE-1c.
- Impact NOISE-6: Implementation of the proposed Plan would have the potential to expose people to noise levels in excess of established State standards. (Significant and Mitigable)
 - Mitigation Measure NOISE-6: Implement Mitigation Measures NOISE-4a and NOISE-4b.
- Impact NOISE-7: Implementation of the proposed Plan would have the potential to result in the exposure of persons to or generation of noise levels in excess of standards established in the local General Plan or noise ordinance, or applicable standards of other agencies. (Significant and Mitigable)
 - Mitigation Measure NOISE-7: Implement Mitigation Measures NOISE-1a, NOISE-1b, NOISE-1c, NOISE-4a, and NOISE-4b.
- Impact NOISE-8: Implementation of the proposed Plan could result in a potentially substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. (Significant and Mitigable)
 - Mitigation Measure NOISE-8: To ensure that future development would not result in significant impacts to sensitive receptors from construction noise, the proposed Plan shall include policies that achieve the following:
 - Construction noise limits around sensitive receptors.
 - Monitoring and reporting plans for construction noise levels of larger development projects.
 - Noise control measures to ensure compliance with the noise ordinance.
- Impact NOISE-9: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project would not expose people residing or working in the project area to excessive noise levels. (Less than Significant)
- Impact NOISE-10: For a project within the vicinity of a private airstrip, the project would not expose people residing or working in the project area to excessive noise levels. (Less than Significant)

- Impact NOISE-11: Implementation of the proposed Plan, in combination with past, present, and reasonably foreseeable projects, may result in significant cumulative impacts with respect to noise. (Significant and Mitigable)
 - Mitigation Measure NOISE-11a: Implement Mitigation Measure NOISE-1c.
 - Mitigation Measure NOISE-11b: To address overall community noise impacts from train noise to the extent such noise is within the City's control and in excess of established State and/or City standards, the proposed Plan shall include policies that achieve the following:
 - Efforts to develop and implement technological methods to reduce train whistle noise from Caltrain.
 - Evaluation of at-grade rail crossings as potential Quiet Zones based on Federal Railroad Administration (FRA) rules and guidelines.
 - Grade separation of rail crossings as a City priority.

4.4.2 Impact Analysis

a. Methodology and Significance Thresholds

As listed in Appendix G of the CEQA Guidelines, a project is considered to have a significant impact related to noise if it would result in:

- 1. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- 2. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?
- 3. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- 4. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
- 5. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
- 6. For a project near a private airstrip, would it expose people residing or working in the project area to excessive noise?

As discussed in the Initial Study (Appendix B), the project would result in no impact related to criteria 5 and 6. An analysis of criteria 1, 2, 3, and 4 are discussed below.

In accordance with state requirements, City of Palo Alto Comprehensive Plan Policies N-6.14 and N-61, and Section 9.10.030(a) of the PAMC, operational noise would be significant if it would cause the following:

- Cause interior noise levels at nearby residential development to exceed 45 dBA Ldn (City of Palo Alto Comprehensive Plan Policy N-6.1).
- Produce, suffer or allow to be produced by any machine, animal or device, or any combination of same, on residential property, a noise level more than 6 dB above the local ambient at any point outside of the property plane (PAMC Section 9.10.030[a]).

The City of Palo Alto has not adopted specific numerical thresholds for groundborne vibration impacts. Therefore, this analysis uses the Federal Transit Administration's (FTA) vibration impact thresholds to determine whether groundborne vibration would be "excessive." A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels, where many people find transit vibration at this level annoying. Consequently, the FTA recommends a 72 VdB threshold for frequent events at residences and buildings where people normally sleep (e.g., the residences 50 feet away from the project site). The FTA does not consider most commercial and industrial uses to be vibration-sensitive (except for those that depend on quiet as an important part of operations, such as sound recording studios) and therefore does not recommend thresholds for groundborne vibration impacts to such uses. In terms of groundborne vibration impacts on structures, the FTA states that groundborne vibration levels in excess of 100 VdB would damage fragile buildings and levels in excess of 95 VdB would damage extremely fragile historic buildings (FTA 2006).

b. Project Impacts and Mitigation

Threshold 1:	Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
Threshold 3:	Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Impact N-1 ON-SITE ACTIVITIES ASSOCIATED WITH PROJECT OPERATION, SUCH AS NOISE ASSOCIATED WITH BALCONIES, THE OUTDOOR RESTAURANT SEATING IN THE PATIO AREA, AND MECHANICAL EQUIPMENT WOULD GENERATE NOISE LEVELS THAT MAY PERIODICALLY BE AUDIBLE TO EXISTING USES NEAR THE PROJECT SITE. THE PROJECT WOULD ALSO INCREASE TRAFFIC NOISE ON AREA ROADWAYS AND WOULD GENERATE ON- AND OFF-SITE NOISE FROM MAIL AND DELIVERY TRUCKS TRAVELING TO AND FROM THE SITE. HOWEVER, THESE NOISE LEVELS WOULD NOT EXCEED APPLICABLE STANDARDS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The following analysis considers permanent operational noise that would result from the project and exposure of new hotel guests to existing ambient noise.

Permanent Operational Noise

Operation of the proposed project would generate noise associated with the balconies, outdoor patio area, mechanical equipment, project-generated traffic, and mail delivery and trash/recycling trucks. These are discussed in detail below.

Balconies

Conversations and music from residents on balconies may be audible at nearby sensitive receptors. Conversational noise when 20 people are talking simultaneously is approximately 63 dBA at 3 feet (City of Los Angeles 2014). Conservatively assuming that balconies are located at the project property line and an attenuation level of 6 dBA per doubling of distance, conversations would be approximately 45 dBA at adjacent sensitive receptors located approximately 25 feet from the site. This is less than the ambient noise level already experienced at these receptors. The level of noise at nearby residences from music on balconies at nearby residences would depend on the volume the music is being played. Balconies with music would be subject to the PAMC noise ordinance requirements, specifically Section 9.10.040, which states that "no person shall produce, suffer or allow to be produced by any machine or device, or any combination of same, on commercial or industrial property, a noise level more than eight dB above the local ambient at any point outside of the property plane." Therefore, nearby residents would not be exposed to excessive noise from music on balconies. Balcony noise would result in a less than significant impact.

Outdoor Restaurant Seating and Patio Area

Operation of the project would involve guest use of the outdoor patio area, which would include seating for dining and an outdoor lounge area. Noise-generating activities typical of this use include general conversation. Operational noise estimates for the proposed outdoor patio area was based on conversational noise levels as measured in the American Journal of Audiology. Noise levels associated with an outdoor patio area would primarily consist of people conversing. The noise level of a few people talking simultaneously was measured at 55 dBA Lmax at receptors 3 feet (American Journal of Audiology 1998). Therefore, noise levels of 30 people conversing would be approximately 67 dBA Lmax at 3 feet. Using the same noise generation assumptions, noise levels at the nearest sensitive receptors approximately 25 feet from the project site would be approximately 58 dBA Leq. Noise from the outdoor patio area would not approach the local ambient noise level (per the City's Comprehensive Plan) of 60 dBA at the nearest residential sensitive receptor. Furthermore, outdoor patio area users would be subject to the PAMC noise ordinance requirements, specifically Section 9.10.040, which states that "no person shall produce, suffer or allow to be produced by any machine or device, or any combination of same, on commercial or industrial property, a noise level more than eight dB above the local ambient at any point outside of the property plane." The on-site outdoor patio area would have a less than significant noise impact.

Mechanical Equipment

Mechanical equipment includes heating, ventilation, and air condition (HVAC) equipment typically located on the roof of a building or within an interior mechanical room. Per the project plans, HVAC equipment would be located in two locations on the roof of the proposed new building, in the northeast (approximately 50 feet from the nearest apartment building) and southeast (approximately 90 feet from nearest apartment building) areas of the site. Acoustic engineers have measured rooftop-mounted HVAC equipment at 82.5 dBA Lmax at a distance of 3 feet from the source (RK Engineering Group 2014). Based on a standard noise attenuation rate of 6 dBA per doubling of distance from stationary equipment, noise from the two HVAC systems (85.5 dBA Lmax) would be approximately 58.1 dBA Lmax at a distance of 70 feet (the average of the distances of the two units from the closest neighboring apartment complex buildings). Therefore, HVAC noise would not exceed the local ambient noise level of 60 dBA Leq at the residential sensitive receptor, and mechanical equipment would have a less than significant noise impact. Additionally, the project would include a condition of approval requiring an updated noise report to confirm noise levels once information on the selected mechanical equipment would be available.

Traffic Noise

The project would replace a restaurant with a hotel. As shown in Table 4.5-1 in Section 4.5, *Transportation,* with the removal of the existing restaurant, the project would result in a net increase of 212 average daily trips compared to existing conditions. While a doubling of traffic

produces a 3 dBA increase in noise, the project would result in a 0.9 percent increase in daily traffic¹, which would result in a less than 0.4 dBA increase in traffic noise. A change of 3 dBA is barely perceptible by human hearing (FHWA 2017); therefore, the increase in traffic noise would not be perceptible. Additionally, the project would replace an existing at-grade surface parking lot with an underground parking structure, which would eliminate existing parking lot noise directly adjacent to the closest sensitive receptors (the Palo Alto Redwoods apartment complex). Therefore, traffic-related noise would result in a less than significant noise impact.

Mail Delivery and Trash/Recycling Trucks

Noise from mail delivery trucks and trash/recycling hauling trucks would generate periodic noise near the project site. Mail delivery and trash/recycling hauling trucks would access the project site via El Camino Real. Both mail delivery and trash hauling trucks would periodically idle on El Camino Real and El Camino Way while performing duties. The average noise level for a single idling truck is estimated at 80 dBA Leq at a distance of 10 feet (BridgeNet 2008). Garbage trucks have been measured at 65 dBA Leq at a distance of 50 feet while idling and up to 80 to 90 dBA while emptying dumpsters (DSA Engineers 2003). However, estimated noise from idling trucks would not be substantially louder or occur more frequently than under existing conditions, as idling trucks including trash/recycling-hauling trucks, currently serve the existing business. Furthermore, the existing conditions have an open surface parking lot exposing sensitive receptors to noise, while the project has a double driveway entry that can accommodate typical mail delivery vehicles. The projects driveway design positions the delivery vehicles under the upper floors of the building, creating a physical noise barrier that the existing site does not have.

While trucks accessing the project site would contribute to the overall noise environment, and therefore the Ldn, trucks currently serve the existing on-site restaurant, El Camino Real is an established truck route in Palo Alto, per PAMC Section 10.48, and trucks regularly use this arterial roadway to access other properties, including nearby sensitive receptors. As such, noise from delivery and trash trucks would be consistent with existing noise levels and would not significantly contribute to the interior Ldn of nearby residences.

Exposure of New Hotel Guests to Noise

The California Supreme Court in a December 2015 opinion (*BIA v. BAAQMD*) confirmed that CEQA is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project. Nevertheless, the state of California and City of Palo Alto have policies that address existing conditions (e.g., ambient noise) affecting a proposed project, addressed below.

The project would locate a hotel development next to a busy roadway that generates substantial traffic noise. Based on the noise measurements shown in Table 4.4-1, peak-hour ambient noise levels reach approximately 74.7 dBA Leq. As described in Table 4.4-2, for hotel uses in the 60-75 dBA CNEL or Ldn range are considered conditionally acceptable and noise over 75 dBA CNEL or Ldn is considered unacceptable. Although there is no precise way to convert a peak hourly Leq to a 24-hour weighted noise level, in urban areas near heavy traffic the peak hourly Leq is typically 2-4 dBA

¹ Conservatively extrapolating trips that proceeded through the intersection during the a.m. peak hour (the peak hour with the highest project-generated trips and is less busy than the p.m. peak hour; thus project traffic would cause a greater percent increase in the a.m. peak hour than the p.m. peak hour), and multiplying by an industry-standard factor of 10 yields a daily roadway volume of approximately 24,820 (Appendix G)

lower than the daily Ldn or CNEL. Therefore, exterior noise during peak-hour traffic could reach 75 to 77 dBA CNEL or Ldn at the project site, which is in the unacceptable range. In particular, the upper floor balconies would be exposed to this unacceptable noise level. Proposed outdoor activity areas, including a lounge seating area and fire pit, would be located on the interior of the site. Therefore, the proposed multi-story building would largely block roadway noise from El Camino Real.

In addition, the interior of the building may be exposed to noise levels above standards. Local community risk and hazards are associated with noise if dwelling units or sleeping units (such as those found in hotels) are located or designed such that interior noise levels would exceed 45 dBA Ldn in accordance with state building code requirements and consistent with the Policy N-6.1 of the Comprehensive Plan. The following analysis illustrates existing conditions compared to this threshold for exposure to noise for a new hotel development.

To avoid adverse noise exposure, the project would be required to attenuate interior noise so that it does not exceed 45 dBA Ldn. The FHWA's guidelines indicate that modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with windows closed (FWHA 2011). Conservatively assuming a 20 dBA attenuation, the hotel rooms facing the roadways exposed to an estimated exterior noise level of 77 dBA CNEL would have an interior noise level approaching 57 dBA CNEL. The California Building Code (CBC) contained in Title 24 of the California Code of Regulations and the City require that interior noise levels for new habitable buildings (which include hotels, as they contain sleeping units) be below 45 dBA CNEL (California Building Standards Commission 2017). To comply with local and CBC requirements, the project applicant would be required to design the exterior wall assemblies to achieve interior levels of 45 dBA CNEL. Therefore, the project would comply with Policy N-6.1 and with the CBC.

Mitigation Measures

Impacts are less than significant without mitigation.

Threshold 2: Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Impact N-2 PROJECT CONSTRUCTION WOULD INTERMITTENTLY GENERATE GROUNDBORNE VIBRATION ON AND ADJACENT TO THE SITE. THIS WOULD AFFECT EXISTING VIBRATION-SENSITIVE RECEPTORS NEAR THE PROJECT SITE. HOWEVER, WITH COMPLIANCE WITH EXISTING CITY REQUIREMENTS THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Construction of the project over an anticipated 22-month period would intermittently generate vibration on and adjacent to the project site. Vibration-generating equipment would include bulldozers and trucks to move materials and debris and vibratory rollers for paving. Pile drivers, which generate strong groundborne vibration, would not be used during construction. Table 4.4-3 identifies vibration velocity levels at a distance of 25 feet, which is the distance to the nearest vibration-sensitive receptor, the Palo Alto Redwoods apartment complex.

Equipment	Estimated VdB at Nearest Sensitive Receptors (25 feet)
Vibratory roller	94
Large bulldozer	87
Loaded trucks	86
Small bulldozer	58
Source: Federal Transit A	dministration 2006

Table 4.4-3	Vibration Levels for Construction Equipment at Noise-Sensitive Receptors

Based on Table 4.4-3, conservatory assuming vibratory rollers are used, the nearby multi-family residences 25 feet away could experience vibration of up to approximately 94 VdB during paving when vibratory rollers are used (primarily during paving) and up to approximately 87 VdB when large bulldozers are used (primarily during grading). Compliance with Section 9.10.060 of the PAMC would restrict vibration-generating construction activity to daytime hours outside of normal sleeping hours (i.e., 8:00 a.m. to 6:00 p.m. Monday through Friday and 9 a.m. to 6 p.m. on Saturday). Therefore, while vibration from construction activity could be perceptible at nearby residences during daytime hours, this timing restriction would ensure that vibration does not exceed the FTA's criterion of 72 VdB during normal sleeping hours at residential uses. In addition, vibration levels also would not exceed 95 VdB at fragile historic buildings and therefore would not damage such buildings.

Mitigation Measures

Impacts are less than significant without mitigation.

Threshold 2: Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Impact N-3 PROJECT CONSTRUCTION WOULD INTERMITTENTLY GENERATE HIGH NOISE LEVELS ON AND ADJACENT TO THE SITE. THIS WOULD AFFECT EXISTING NOISE-SENSITIVE RECEPTORS NEAR THE PROJECT SITE. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

Construction-related Noise

Construction of the project would generate temporary noise that would be audible at nearby sensitive receptors, such as the apartment complex 25 feet northwest of the project site along El Camino Real. Noise associated with construction is a function of the type of construction equipment, the location and sensitivity of nearby land uses, and the timing and duration of the construction activities. Construction of the proposed project would occur over approximately 22 months. Pile drivers would not be used in building construction.

Table 4.4-4 provides estimates of construction noise at the nearest sensitive receptor, the apartment complex located 25 feet away from the source equipment, for each phase of project construction. Construction noise was estimated using the Federal Highway Administration's Roadway Construction Noise Model (RCNM). Noise was modeled based on the project's construction equipment list for each phase and distance to nearby receptors. As a project-specific construction equipment list is not currently available, an equipment list for the project was

generated using CalEEMod, which takes into consideration the project's proposed land uses, construction schedule, building and lot area, volume of export, and square footage of demolition. The CalEEMod-generated equipment list and RCNM outputs are provided in Appendix F.

Construction Phase	Equipment	Estimated Noise at 25 feet (dBA Leq)	
Demolition	Concrete saw, dozer, tractor/backhoe/loader (2), truck, excavator	92	
Site preparation	Tractor/backhoe/loader, grader	88	
Grading	Tractor/backhoe/loader (2), dozer, concrete saw, truck, excavator, drill	93	
Building construction	Crane, forklift (2), Tractor/backhoe/loader (2)	88	
Paving	Concrete mixer (4), paver, roller, tractor/loader/backhoe	90	
Architectural coating	Air compressor	80	
See Appendix F for RCNM modeling results.			

Table 4.4-4 Estimated Maximum Construction Noise – dBA Leq

As shown in Table 4.4-4, construction noise would reach as high as 93 dBA Leq at a distance of 25 feet during the building construction phase, which would exceed the local ambient noise level of 60 dBA Leq at the nearest sensitive receptor by 33 dBA.

To evaluate the project's impact from construction noise, the City applied a standard of an increase of 10 dBA or greater in hourly noise levels above ambient conditions for project construction which would occur two or more hours per day, five days per week, for a period of 12 months or more. Although this standard has not been adopted formally by the City, it is reasonably conservative and appropriate for evaluating the impact of construction noise on people who are especially sensitive to daytime noise, such as residents. Although adherence to the City's allowed hours of construction would protect residents from nighttime noise that could disturb people during normal sleeping hours, temporary construction noise would exceed existing measured daytime ambient noise by more than 10 dBA Leq. Therefore, it would have a potentially significant impact on noise-sensitive receptors and Mitigation Measure N-1 is required.

Mitigation Measures

The following mitigation measure is required.

N-1 Construction-Related Noise Reduction Measures

The applicant shall apply the following measures during construction of the project.

 Mufflers. Construction equipment shall be properly maintained and all internal combustion engine driven machinery with intake and exhaust mufflers and engine shrouds, as applicable, shall be in good condition and appropriate for the equipment. During construction, all equipment, fixed or mobile, shall be operated with closed engine doors and shall be equipped with properly operating and maintained mufflers, consistent with manufacturers' standards.

City of Palo Alto 4256 El Camino Real Hotel Project

- Electrical Power. Electrical power, rather than diesel equipment, shall be used to run compressors and similar power tools and to power temporary structures, such as construction trailers or caretaker facilities.
- Equipment Staging. All stationary equipment (e.g., air compressors, portable generators) shall be staged as far away from sensitive receptors as feasible. Where feasible, construct temporary noise barriers around stationary equipment in a manner that fully blocks the line of sight to residential windows in the adjacent apartment complex.
- **Equipment Idling.** Construction vehicles and equipment shall not be left idling for longer than five minutes when not in use.
- Workers' Radios. All noise from workers' radios shall be controlled to a point that they are not audible at sensitive receptors near construction activity.
- Smart Back-up Alarms. Mobile construction equipment shall have smart back-up alarms that automatically adjust the sound level of the alarm in response to ambient noise levels. Alternatively, back-up alarms shall be disabled and replaced with human spotters to ensure safety when mobile construction equipment is moving in the reverse direction.
- Sound Barrier. During the demolition, site preparation, grading, and building phases of construction, temporary sound barriers field tested to reduce noise by at least 15 dBA shall be installed and maintained facing the adjacent residential units. Temporary sound barriers shall block line of sight between noise-generating construction equipment and adjacent residential windows and shall be placed as close to the source equipment as feasible. Mobile sound barriers may be used as appropriate to attenuate construction noise near the source equipment. During the building construction phase, temporary sound barriers shall be applied to generators and cranes used on-site. Disturbance Coordinator. The applicant shall designate a disturbance coordinator who shall be responsible for responding to any local complaints about construction noise. The noise disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler) and shall require that reasonable measures warranted to correct the problem be implemented. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.

Significance After Mitigation

As explained above, it is estimated that construction activity during allowed hours would increase ambient noise by up to 33 dBA Leq at nearby noise-sensitive receptors before mitigation. Implementation of Mitigation Measure N-1 would reduce noise levels from construction activity. The use of manufacturer-certified mufflers associated with construction equipment has been shown to reduce noise levels by 8-10 dBA Leq (City of West Hollywood 2014). With installation of a temporary sound barrier between construction activities and adjacent sensitive receptors noise levels would be reduced an additional 15 dBA.² Therefore, these measures, combined with other measures, would be sufficient to reduce ambient noise during construction by at least 23 dBA such that an increase in 10 dBA or greater in hourly noise levels above ambient conditions would not occur for two or more hours per day, five days per week, for a period of 12 months or more. The above mitigation would reduce construction noise to the extent feasible. Furthermore, resultant noise levels from construction activity after mitigation would not exceed the City' maximum

² There are feasible noise barrier mitigation systems that can reduce noise levels in excess of 15 dBA. For example, Echo Barrier provides barriers that have been shown to provide up to 19 dBA of attenuation in the field, if installed at an appropriate distance from the source equipment. Echo Barrier is a company based in the United Kingdom, but its products are now sold in the United States.

allowable level of 110 dBA at any point outside of the project site (PAMC Section 9.10.060). Therefore, this impact would be less than significant with mitigation incorporated.

c. Cumulative Impacts

The proposed project and related projects in the area, as identified in Table 3-1 in Section 3, *Environmental Setting*, would generate temporary noise and vibration during construction. As discussed in Impact N-2 and Impact N-3, impacts related to noise generated by construction of the proposed project would be significant but mitigable and impacts related to construction vibration would be less than significant. Construction activities on the related projects in the area would generate similar noise and vibration levels as the proposed project. Construction noise and vibration are localized and rapidly attenuates within an urban environment. All the related projects are outside the immediate site vicinity of 0.25 miles and are located too far from the project site to contribute to increases in ambient noise or vibration levels associated with construction in the project area.

Traffic noise impacts associated with cumulative development within the City would incrementally increase noise levels along roadways. While cumulative growth in traffic volumes on roadways near the project site would likely increase traffic noise, depending on the number of net new trips associated cumulative projects, vehicle trips generated by the project are incremental such that the project would not considerably contribute to future traffic noise increases.

Cumulative development would result in stationary (non-traffic) operational noise increases in the project vicinity. Based on the long-term stationary noise analysis, impacts from the proposed project's operational noise would be less than significant. Because noise dissipates as it travels away from its source, noise impacts associated with on-site activities and other stationary sources would be limited to the project site and vicinity. There are no cumulative projects within 0.25 miles of the project site. Therefore, stationary noise sources from the planned or pending projects would not have a cumulative impact at noise sensitive receptors surrounding the project site. Cumulative operational (non-traffic) noise impacts would be less than significant.

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4.5 Transportation

This section analyzes the proposed project's impacts to the local transportation and circulation system. The analysis in this section is based, in part, on a transportation analysis prepared for the project by Hexagon Transportation Consultants, Inc. (Hexagon) in January 2019. The full analysis is provided in Appendix G of this EIR. The City's 2030 Comprehensive Plan EIR, certified on August 30, 2017, included analysis of transportation impacts at anticipated Comprehensive Plan buildout. Potential project-specific impacts related to transportation were discussed in Section 16, *Transportation*, of the project Initial Study (included in Appendix B of this EIR). Due to the potential for impacts to transportation peculiar to the project not covered in the 2030 Comprehensive Plan EIR, this section includes an analysis of project-specific impacts related to transportation.

4.5.1 Setting

a. Regulatory Framework

This section describes applicable state, regional, and local laws, ordinances, regulations, and standards governing transportation and traffic, which must be adhered to before and during project implementation.

State

State Senate Bill 375

Senate Bill (SB) 375, signed in August 2008, directs each of the state's 18 major Metropolitan Planning Organizations to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet emission targets for inclusion in the Regional Transportation Plan (RTP). On September 23, 2010, the California Air Resources Board (CARB) adopted final regional targets for reducing greenhouse gas (GHG) emissions from 2005 levels by 2020 and 2035.

The intent of SB 375 is to use the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) to integrate regional land use, regional housing need allocations (RHNA), environmental, and transportation planning to ensure efficient regional planning in the future that leads to reduced greenhouse gas emissions from land and transportation uses. As a result of SB 375, preparation of local RHNA Plans are required to be coordinated and consistent with the RTP/SCS for the length of the housing element cycle. Local governments play a large role in helping to develop the transportation and land use scenarios used in the SCS development process.

State Senate Bill 743

Senate Bill (SB) 743 was signed into law by Governor Brown in 2013 and tasked the State Office of Planning and Research (OPR) with establishing new criteria for determining the significance of transportation impacts under the California Environmental Quality Act (CEQA). SB 743 requires the new criteria to "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." It also states that alternative measures of transportation impacts may include "vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated."

On September 27, 2013, California Governor Jerry Brown signed SB 743 into law and started a process that changes transportation impact analysis as part of CEQA compliance. SB 743 requires

the Governor's OPR to identify new metrics for identifying and mitigation transportation impacts within CEQA. In January 2018, OPR transmitted its proposed CEQA Guidelines implementing SB 743 to the California Natural Resources Agency for adoption, and in January 2019 the Natural Resources Agency finalized updates to the CEQA Guidelines, which incorporated SB 743 modifications, and are now in effect SB 743 changed the way that public agencies evaluate the transportation impacts of projects under CEQA, recognizing that roadway congestion, while an inconvenience to drivers, is not itself an environmental impact (Public Resource Code, § 21099 (b)(2)). In addition to new exemptions for projects consistent with specific plans, the CEQA Guidelines replaced congestion-based metrics, such as auto delay and level of service, with Vehicle Miles Traveled (VMT) as the basis for determining significant impacts, unless the Guidelines provide specific exceptions.

California Building Code

California provides minimum standards for building design through the California Building Code (CBC), which is located in Part 2 of Title 24 of the California Code of Regulations. The CBC is based on the 1997 Uniform Building Code with modifications specific for California conditions. The CBC provides fire and emergency equipment access standards for public roadways, which include specific width, grading, design and other specifications for roads which provide access for fir apparatuses. Street modifications in the City of Palo Alto are subject to these and other modified State standards. The City of Palo Alto adopted the 2016 edition of the California Building Code on October 24, 2016.

Regional Agencies, Plans, and Policies

Metropolitan Transportation Commission and Association of Bay Area Governments: Plan Bay Area 2040

The Metropolitan Transportation Commission (MTC) serves the nine-county Bay Area as the transportation planning, coordination, and financing agency and the metropolitan planning organization (MPO). The Association of Bay Area Governments (ABAG) serves as a regional planning agency for the Bay Area and provides resources for local governments to accommodate growth trends in land use and housing, environmental protection, and disaster resilience to name a few key issue areas.

The current RTP, Plan Bay Area 2040, was prepared by MTC, ABAG, and cities and counties throughout the Bay Area. Plan Bay Area 2040, adopted by MTC on July 26, 2017, is an integrated long-range transportation and land use/housing plan intended to support growth in the Bay Area, provide more housing and transportation choices, and reduce transportation-related pollution. Plan Bay Area 2040 also includes finance strategies to implement the plan.

State and federal law requires the RTP to be updated at least every four years to respond to emerging regional growth issues and reflect new funding forecasts. The next update to Plan Bay Area, called Plan Bay Area 2050, is scheduled to begin in August 2019.

Santa Clara Valley Transportation Authority

The Santa Clara Valley Transportation Authority (VTA) is an independent special district that provides transportation options throughout Santa Clara Valley, and oversees several transportation programs such as the Congestion Management Program (CMP) and Bicycle Program.

The CMP describes the VTA's strategies for addressing congestion problems and monitoring compliance. The CMP contains level of service (LOS) standards for highways and arterials, multimodal performance standards, a capital improvement program, and a travel demand management (TDM) program. The City of Palo Alto uses a minimum LOS standard of LOS D for its intersections not monitored as part of the VTA CMP.

The VTA prepared the Santa Clara Countywide Bicycle Plan (SCCBP) and Bicycle Technical Guidelines (BTG). The SCCBP provides a foundation for maintaining and enhancing the countywide bicycle network, which contains over 800 miles of bikeways (VTA 2018). The BTG contains standards and provides guidance for planning, designing, operating, retrofitting, and maintaining roadways and bikeways throughout the county and City.

Local Plans and Policies

2030 Comprehensive Plan

The Transportation Element of the City's 2030 Comprehensive Plan (City of Palo Alto 2017a) contains several goals and policies pertaining to the improvement of transportation facilities and reducing project impacts. The following goals, policies, and programs apply to the project:

- Policy T-1.2: Collaborate with Palo Alto employers and business owners to develop, implement and expand comprehensive programs like the TMA to reduce single-occupant vehicle commute trips, including through incentives.
 - Program T1.2.3: Formalize TDM requirements by ordinance and require new developments above a certain size threshold to prepare and implement a TDM Plan to meet specific performance standards. Require regular monitoring/reporting and provide for enforcement with meaningful penalties for non-compliance. The ordinance should also: [...] Require new development projects to pay a Transportation Impact Fee for all those peak-hour motor vehicle trips that cannot be reduced via TDM measures. Fees collected would be used for capital improvements aimed at reducing vehicle trips and traffic congestion.
- Policy T-1.17: Require new office, commercial, and multi-family residential developments to provide improvements that improve bicycle and pedestrian connectivity as called for in the 2012 Palo Alto Bicycle + Pedestrian Transportation Plan.
- Policy T-5.1: All new development projects should manage parking demand generated by the project, without the use of on-street parking, consistent with the established parking regulations. As demonstrated parking demand decreases over time, parking requirements for new construction should decrease.
- Policy T-5.6: Strongly encourage the use of below-grade or structured parking, and explore mechanized parking instead of surface parking for new developments of all types while minimizing negative impacts including on groundwater and landscaping where feasible.
- Policy T-5.7: Require new or redesigned parking lots to optimize pedestrian and bicycle safety.

Sustainability/Climate Action Plan Framework & 2018-2020 Sustainability Implementation Plan

The City adopted the Sustainability/Climate Action Plan Framework (S/CAP) in November 2016, which is a strategic plan that sets direction and overall goals for the City to reduce GHG emissions to

80 percent below 1990 levels by 2030. To meet the City's reduction target, the S/CAP includes several mobility strategies aimed at developing multimodal transportation options to minimize the use of personal vehicles, encouraging land use patterns that reduce congestion and climate impacts, and promoting electric vehicle charging infrastructure (City of Palo Alto 2016).

The City's 2018-2020 Sustainability Implementation Plan (SIP) contains specific actions focused around energy use, mobility, electric vehicles, and water use to successfully implement the S/CAP. SIP mobility actions are aimed at reducing single-occupancy vehicle (SOV) travel by encouraging ride sharing, transit use, bike sharing, and providing flexible and responsive first- and last-mile transportation solutions (City of Palo Alto 2016).

Palo Alto Municipal Code: Title 10 Vehicles and Traffic

Palo Alto Municipal Code Title 10 regulates vehicle and traffic operations within the City, which includes traffic-control devices, pedestrian safety, bicycle safety and designated bike paths, and general vehicle and traffic safety.

2030 Comprehensive Plan EIR Summary

The City's 2030 Comprehensive Plan EIR analyzes impacts related to transportation in Section 4.13, *Transportation and Traffic*, and identified the following impacts:

- Impact TRANS-1: The project would cause an intersection to drop below its motor vehicle level of service standard, or deteriorate operations at representative intersections that already operate at a substandard level of service. (Significant and Unavoidable)
 - Mitigation Measure TRANS-1a: Adopt a programmatic approach to reducing motor vehicle traffic with the goal of achieving no net increase in peak-hour motor vehicle trips from new development, with an exception for uses that directly contribute to the neighborhood character and diversity of Palo Alto (such as ground-floor retail and below- market-rate housing). The program should, at a minimum, require new development projects above a specific size threshold to prepare and implement a Transportation Demand Management (TDM) Plan to achieve the following reduction in peak-hour motor vehicle trips from the rates included in the Institute of Transportation Engineers' Trip Generation Manual for the appropriate land use category and size. These reductions are deemed aggressive, yet feasible, for the districts indicated.
 - 45 percent reduction in the Downtown district
 - 35 percent reduction in the California Avenue area
 - 30 percent reduction in the Stanford Research Park
 - 30 percent reduction in the El Camino Real Corridor
 - 20 percent reduction in other areas of the city

TDM Plans must be approved by the City and monitored by the property owner or the project proponent on an annual basis. The Plans must contain enforcement mechanisms or penalties that accrue if targets are not met and may achieve reductions by contributing to citywide or employment district shuttles or other proven transportation programs that are not directly under the property owner's control.

 Mitigation Measure TRANS-1b: Require new development projects to pay a Transportation Impact Fee for all those peak-hour motor vehicle trips that cannot be reduced via TDM measures. Fees collected would be used for capital improvements aimed at reducing motor vehicle trips and motor vehicle traffic congestion.

- Mitigation Measure TRANS-1c: The proposed Plan shall include policies to ensure collaboration with regional agencies and neighboring jurisdictions, and identification and pursuit of funding for rail corridor improvements and grade separation. Policies shall support grade separation of rail crossings along the rail corridor as a City priority, and the undertaking of studies and outreach necessary to advance grade separation of Caltrain to become a "shovel ready" project.
- Mitigation Measure TRANS-1d: Consistent with State requirements, the City shall adopt a Multimodal Improvement Plan to address impacts to Congestion Management Program facilities. In addition, the proposed Plan shall include policies to engage in regional transportation planning and advocate for specific transit improvements and investments, such as Caltrain service enhancements and grade separations, Dumbarton Express service, enhanced bus service on El Camino Real with queue-jump lanes and curbside platforms, high-occupancy vehicle (HOV)/high-occupancy toll (HOT) lanes, and additional VTA bus service.
- Mitigation Measure TRANS-1e: The proposed Plan shall include policies to encourage the PAUSD to analyze decisions regarding school assignments to reduce peak-period motor vehicle trips to and from school sites.
- Impact TRANS-2: The project would not cause a roadway segment to drop below its level of service standard, or deteriorate operations that already operate at a substandard level of service. (Less than Significant)
- Impact TRANS-3: The project would cause a freeway segment or ramp to drop below its level of service standard, or deteriorate operations that already operate at a substandard level of service. (Significant and Unavoidable)
 - Mitigation Measure TRANS-3a: The City shall require new development projects to prepare and implement TDM programs, as described in TRANS-1a. TDM programs for worksites may include measures such as private bus services and free shuttle services to transit stations geared towards commuters.
 - Mitigation Measure TRANS-3b: The proposed Comprehensive Plan shall include policies that advocate for efforts by Caltrans and the Valley Transportation Authority to reduce congestion and improve traffic flow on existing freeway facilities consistent with Statewide GHG emissions reduction initiatives.

Policies shall support the application of emerging freeway information, monitoring, and control systems that provide non-intrusive driver assistance and reduce congestion.

Policies shall support, where appropriate, the conversion of existing traffic lanes to exclusive bus and high-occupancy vehicle (HOV)/high-occupancy toll (HOT) lanes on freeways and expressways, including the Dumbarton Bridge, and the continuation of an HOV lane from Redwood City to San Francisco.

- Impact TRANS-4: The project would not impede the function of planned bicycle or pedestrian facilities. (Less than Significant)
- Impact TRANS-5: The project would not increase demand for pedestrian and bicycle facilities that cannot be met by existing or planned facilities. (Less than Significant)
- Impact TRANS-6: The project would impede the operation of a transit system as a result of congestion. (Significant and Unavoidable)
 - Mitigation Measure TRANS-6: The proposed Comprehensive Plan shall include policies to collaborate with transit agencies in planning for and implementing convenient, efficient, coordinated, and effective bus service.
- Impact TRANS-7: The project would not create demand for transit services that cannot be met by current or planned services. (Less than Significant)
- Impact TRANS-8: The project would create the potential demand for through traffic to use local residential streets. (Significant and Mitigable)
 - Mitigation Measure TRANS-8: The proposed Comprehensive Plan shall include policies to identify specific improvements that can be used to discourage drivers from using local, neighborhood streets to bypass traffic congestion on arterials.
- Impact TRANS-9: The project would create an operational safety hazard. (Significant and Mitigable)
 - Mitigation Measure TRANS-9: Implement Mitigation Measure TRANS-8.
- Impact Trans-10: The project would not result in inadequate emergency access. (Less than Significant)

b. Existing Conditions

The study area in the traffic memorandum prepared by Hexagon was based on transportation impact review standards set forth by the City of Palo Alto and the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program (CMP). The proposed project is estimated to generate fewer than 100 peak hour vehicle trips; therefore, a detailed traffic analysis in accordance with the VTA's CMP guidelines was not required (Appendix G).

Existing Intersection Conditions

The traffic study area includes the intersection of El Camino Real and Dinahs Court, approximately 210 feet south of the project site. The project would generate U-turns at the intersection of El Camino Real and Charleston Road/Arastradero Road, approximately 0.25 mile north of the project site. However, the El Camino Real and Charleston Road/Arastradero Road intersection was not included in the study area due to the low volume of estimated project-generated traffic compared to the existing traffic volume at the intersection.

El Camino Real is classified as an arterial road, designed to mainly serve through-traffic to and from expressways and freeways, and to provide access to adjacent properties (City of Palo Alto 2017a). To characterize existing conditions, Hexagon conducted AM and PM peak period traffic counts on January 24, 2019 at the El Camino Real/Dinahs Court intersection (study intersection). This is the closest intersection to the site and would experience the greatest increase in traffic following project implementation (Appendix G). Figure 4.5.1 shows the existing traffic volumes for the study intersection.

Traffic conditions were observed in the field during the typical weekday morning (7:00 AM - 9:00 AM) and evening (4:00 PM - 6:00 PM) peak hours in order to identify existing operational deficiencies and to confirm the accuracy of calculated intersection levels of service. Existing conditions on El Camino Real consist of heavy traffic volume during peak hours. During the AM and PM peak hours, congestion along El Camino Real results in long vehicular queues, and considerable delays for the minor streets (i.e. Dinahs Court). However, the field observations completed by



Figure 4.5.1 Existing Traffic Volumes at Study Intersection

Source: Hexagon Transportation Consultants, Inc. 2019

Hexagon did not reveal significant traffic-related issues, and the study intersection operated adequately during both the AM and PM peak hours of traffic. Thus, the reported LOS analysis appears to accurately reflect actual existing traffic conditions (Appendix G).

Existing Public Transit

The Santa Clara Valley Transit Authority (VTA) is the public transit agency that serves the project area. Transit service is provided to the project site vicinity via VTA Route 22 and Rapid Route 522, which both extend from the Palo Alto Transit Center to the Eastridge Transit Center with approximately 15-minute headways. There are two bus stops located just south of the El Camino Real and Dinahs Court intersection and across from the project site in front of existing restaurant (The Sea by Alexander's Steakhouse, 4269 W. El Camino Real), both of which provide access to the Route 22 and Rapid Route 522 lines (Appendix G).

Existing Bicycle Facilities

Bicycle facilities in the immediate vicinity of the project site consist of bike lanes along Arastradero Road and Charleston Road, and between Foothill Expressway and Rengstorff Avenue. The 2012 Palo Alto Bicycle + Pedestrian Transportation Plan lists several improvements for bicycle and pedestrian facilities in the study area, including installing a Class III shared bikeway along El Camino Real, between Maybell Avenue and the city limits (Appendix G).

Existing Pedestrian Facilities

Pedestrian facilities in the traffic study area consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections. El Camino Real has sidewalks along both sides, and marked crosswalks have pedestrian push-buttons along all approaches of the El Camino Real/Dinahs Court intersection, except along the southern approach. Therefore, the overall network of sidewalks and crosswalks in the study area has adequate connectivity and provides pedestrians with safe routes to existing transit services and other points of interest in the vicinity of the project site (Appendix G).

4.5.2 Impact Analysis

a. Methodology and Significance Thresholds

The City of Palo Alto prepared its Environmental Criteria Used by the City of Palo Alto in 2007. According to the City's Environmental Criteria and Appendix G of the State CEQA Guidelines, the project would have a significant impact on transportation if it would:

- 1. Cause an intersection to drop below its level of service standard, or if it is already operating at a substandard level of service, deteriorate by more than a specified amount;
- 2. Cause a roadway segment to drop below its level of service standard, or deteriorate operations that already operate at a substandard level of service;
- 3. Cause a freeway segment or ramp to operate at LOS F or contribute traffic in excess of 1 percent of segment capacity to a freeway segment or ramp already operating at LOS F;
- 4. Impede the development or function of planned pedestrian or bicycle facilities;
- 5. Increase demand for pedestrian and bicycle facilities that cannot be met by current or planned services;
- 6. Impede the operation of a transit system as a result of congestion or otherwise decrease the performance of safety of such facilities;

- 7. Create demand for transit services that cannot be met by current or planned services;
- 8. Create the potential demand for through traffic to use local residential streets; cause any change in traffic that would increase the Traffic Infusion on Residential Environment (TIRE) index by 0.1 or more;
- 9. Create an operational safety hazard;
- 10. Result in inadequate emergency access;
- 11. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks; or
- 12. Cause queuing impacts based on a comparative analysis between the design queue length and the available queue storage capacity. Queuing impacts include, but are not limited to, spillback queues at project access locations; queues at turn lanes at intersections that block through traffic; queues at lane drops; queues at one intersection that extend back to impact other intersections, and spillback queues on ramps.

The Initial Study (Appendix B) includes a summary of the Comprehensive Plan EIR findings, which determined that impacts relating to potential demand for through traffic to use local residential streets and for Comprehensive Plan buildout to cause an operational safety hazard would be significant but mitigable.

Project-specific impacts related to roadway level of service, bike and pedestrian facilities, construction, transit service demand, and emergency access were found to be less than significant (Appendix B). The project-specific analysis, herein, is based on the traffic memorandum prepared by Hexagon (Appendix G).

In addition, the updated CEQA Guidelines and Senate Bill 743 changed the criteria for determining what constitutes a significant transportation-related environmental impact to rely upon quantification of vehicle miles traveled (VMT) instead of level of service. Section 15064.3(c) states that the requirement to use the VMT criteria only applies on and after July 1, 2020. Although a lead agency may elect to apply the criteria in Section 15064.3(b) sooner, the City of Palo Alto has not adopted these criteria as of the date of this report. Therefore, this section does not apply to the proposed project or the analysis in this EIR.

The amount of traffic generated by the proposed development was estimated by applying industry standard trip generation rates to the type and size of the development. The standard trip generation rates are from the Institute of Transportation Engineers (ITE) publication entitled Trip Generation Manual, 10th Edition. Table 4.5-1 shows trip generation for the proposed project, indicating the project would result in a net increase of 275 daily trips. As the project is located along the El Camino Real corridor, the City requires a 30 percent trip reduction to be achieved through implementation of a transportation demand management (TDM) program; therefore, a 30 percent trip reduction was applied to the project's trip generation (Daily Trips).

			AM Peak Hour Trips		PM Peak Hour Trips			
Land Use	Size	Daily Trips	In	Out	Total	In	Out	Total
Proposed Use								
Boutique Hotel ¹	100 rooms ²	817	31	22	53	32	58	60
TDM Plan (30%) ³		(245)	(9)	(7)	(16)	(10)	(8)	(18)
Subtotal		572	22	15	37	22	20	42
Existing Use								
Restaurant ⁴	3.3 ksf⁵	(297)	-	-	-	(17)	(8)	(25)
Total Project Trips		275	22	15	37	5	12	17

Table 4.5-1 Project Trip Generation

() denotes subtraction

All rates are from Institute of Transportation Engineers, Trip Generation Manual, 10th Edition, 2017. Average rates used.

¹ With incorporation of 30% trip reduction as part of a required Transportation Demand Management (TDM) plan, as required by the 2030 Palo Alto Comprehensive Plan

² Traffic analysis conservatively assumes 100 rooms

³ In accordance with the 2030 Palo Alto Comprehensive Plan, the project site is located in the El Camino Real Corridor. Thus, a comprehensive Transportation Demand Management (TDM) plan is required to reduce vehicle trips b at least 30 percent.

 $^{\rm 4}$ Existing restaurant opens at 11:30AM, and does not generate AM peak hour trips

⁵ ksf = thousand square feet

Source: Hexagon 2019, Appendix G

As shown in Table 4.5-1, the project would increase the number of trips traveling to and from the site by 275 daily trips, and the project would add an estimated 37 a.m. peak hour trips and 17 p.m. peak hour trips. Based on the trip generation and distribution assumptions (Appendix G), 100 percent of the project traffic would travel on El Camino Real, a six-lane road designed to carry relatively high levels of vehicle traffic.

The threshold to prepare a detailed traffic analysis according to the VTA's Congestion Management Program (CMP) is 100 peak hour vehicle trips. The modest number of net new trips (37 AM peak hour and 17 PM peak hour) associated with the project does not warrant a detailed traffic study and would not significantly alter the area's transportation network and operations. Additionally, the project would generate U-turns at the intersection of El Camino Real and Charleston Road/Arastradero Road. However, the intersection was not analyzed given the low volume of traffic the project is estimated to generate compared to the existing volume at the intersection. The project would not create conflicts with applicable plans, ordinance, or policies related to the City's circulation system and would not cause an intersection or roadway segment to drop below its level of service standard (Appendix G).

According to the project plans, the proposed project would include widening the existing 8-footwide sidewalk to 12 feet wide along the project frontage on El Camino Real. The additional pedestrian space would provide adequate access to the hotel lobby area, which aligns with applicable goals found in the 2030 Palo Alto Comprehensive Plan and the 2012 Palo Alto Bicycle + Pedestrian Transportation Plan to provide improvements for bicycle and pedestrian connectivity as well as encourage and support bicycling and walking. Hexagon also reviewed existing transit, bicycle, and pedestrian facilities in the project site vicinity and determined the project would have no impact on the development or function of planned transit, bicycle, and pedestrian facilities, that the project would not increase demand for such facilities beyond existing capacity, nor impede the operation of existing facilities (Appendix G). The proposed project would not create potential demand for through traffic to use local residential streets based on project-generated trips and would not result in inadequate emergency access, and would not change air traffic patterns. Therefore, further analyses of Thresholds 1 through 8, 10, and 11 are not warranted; refer to the Initial Study (Appendix B).

The Initial Study included discussion pertaining to the two proposed driveways for the project based on the analysis completed in the traffic memorandum (Appendix G), and concluded that existing onstreet parking and street trees along El Camino Real would reduce the appropriate sight distance for the proposed driveways. Therefore, the impacts associated with Thresholds 9 and 12 are described below.

b. Project Impacts and Mitigation

Threshold 9: Would the project create an operational safety hazard?

Impact T-1 THE TWO PROPOSED DRIVEWAYS ON EL CAMINO REAL WOULD MEET THE REQUIRED SITE DISTANCE REQUIREMENTS AND IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

The Comprehensive Plan EIR found a significant but mitigable impact to operational safety caused by increased congestion that would increase the potential for drivers to divert onto local streets, which could result in an increase in accidents and incidents with pedestrians and bicyclists. As illustrated in Figure 12, Trip Distribution and Assignment, and discussed in Section 16, *Transportation*, of the Initial Study (Appendix B), 100 percent of the project traffic would travel on El Camino Real, a six-lane road designed to carry relatively high levels of vehicle traffic. The proposed project would not add a significant number of trips to local collector streets. Further, the project would not result in significant traffic congestions. Therefore, the proposed project would not substantially contribute to the Comprehensive Plan EIR's identified operational safety impact from increased congestion.

Inadequate site circulation, site access, queueing spaces, or sight distances from project driveways can result in operational traffic safety hazards. The following is based on information provided in the traffic memorandum prepared by Hexagon (Appendix G) and includes discussions related to project design, anticipated traffic volumes at the site's driveways, site circulation, truck access and circulation, access driveways, sight distances, and parking layout.

Project Driveway Design and Operations

The project would include two driveways on El Camino Real for vehicular access to the project site. These would be in the same general location as the existing restaurant driveways. According to the evaluation conducted by Hexagon (Appendix G), the 22-foot-wide northern driveway and the 20-foot-wide southern driveway would both meet the City's minimum driveway width requirement of 20 feet.

The project-generated trips estimated to occur at the project driveway are 31 inbound trips and 22 outbound trips during the AM peak hour, and 32 inbound trips and 28 outbound trips during the PM peak hour. Although high traffic volumes exist near the project site, observations of existing traffic operations along El Camino Real showed adequate gaps in traffic for the relatively small number of trips that the project would generate. Outbound vehicle queues are expected to rarely exceed one or two vehicles in length during the peak hours. Inbound vehicles are not expected to queue because most traffic would be directed to the subterranean garage. Only drop-offs and deliveries would use the northern driveway.

Parking Garage

The proposed parking garage's lowest height clearance is 8 feet and 1 inch, which would be adequate for passenger vehicles. Parking stalls were sized to meet the City's off-street parking design standards, and the two-way drive aisles meet the City's minimum width requirements to allow sufficient room for vehicles to back out of the parking spaces.

Pursuant to the Chapter 18.54, Parking Facility Design Standards, of the Palo Alto Municipal Code (PAMC), garage ramps are to have no greater than a 22 percent slope with transition grades of 11 percent over a minimum length of 10 feet. The project site plan shows a slope of approximately 18 percent for the garage driveway ramp, with transition grades of 9 percent. Therefore, the proposed slope of the garage ramp adheres to the standards as specified in PAMC Chapter 18.54.

Passenger vehicles accessing the parking area of the garage would be required to make a sharp 90degree right turn at the bottom of the ramp. The radius of the right turn would not allow vehicles to stay in their lane, and instead would encroach into the lane of vehicles traveling in the opposite direction. Therefore, this would create a potentially significant safety hazard and Mitigation Measure T-1 would be required to reduce the impact to a less than significant level.

Truck Access and Circulation

PAMC Section 18.52.040, Off-Street Parking, Loading, and Bicycle Facility Requirements, states that a hotel building with a gross floor area between 10,000 square feet and 99,999 square feet is required to provide a minimum of one off-street loading/unloading space for truck access. The evaluation by Hexagon concludes that the project would include adequate loading space, as required by PAMC Section 18.52.040, and that the drop-off/pick-up area is adequate for truck access. The porte-cochere area was reviewed for truck access using truck turning-movement templates for a SU-30 truck type, which represent small emergency vehicles, garbage trucks, and small to medium delivery trucks. The analysis showed that the porte-cochere could accommodate trucks of this type (Appendix G). The porte cochere also includes the required loading space, adjacent to the building entrance within the drop-off/pick-up area. Additionally, the project includes a curb cut for trucks to access the on-site trash room located near the northern corner of the project site. The curb cut would ensure cars would not park and block the trash area.

Nearby Driveways

The location of the project driveways was reviewed with respect to other driveways near the project. Nearby driveways are located approximately 125 feet north and 75 feet south of the two proposed project driveways. While the project driveways would be close to the Crowne Plaza driveway south of the project, vehicles would be able to make turns in and out of the project driveways without affecting similar operations at the adjacent driveway, as driveways along El Camino Real generally allow only right turns and the project would generate a relatively small number of trips. Therefore, the proposed driveway locations are adequate.

Sight Distance

Providing the appropriate sight distance reduces the likelihood of a collision at a driveway or intersection and provides drivers with the ability to exit a driveway or locate sufficient gaps in traffic. Sight distance requirements vary depending on the roadway speeds. El Camino Real has a posted speed limit of 35 miles per hour (mph), for which the Caltrans stopping sight distance is 300

feet (based on a design speed of 40 mph). Thus, a driver exiting the project site must be able to see 300 feet to the left along El Camino Real prior to making a safe turn.

On-street parking is permitted currently along El Camino Real adjacent to the project. Combined with the existing street trees aligned along the project frontage, sight distance for vehicles exiting the site would be obscured when turning onto El Camino Real. Therefore, Mitigation Measure T-1 would be required to reduce the impact to a less than significant level.

Mitigation Measures

Prior to the issuance of building permits, the applicant shall implement Mitigation Measure T-1 to ensure adequate site circulation and sight distance.

T-1 Site Access and Circulation Enhancements

The following measures shall be incorporated into the project plans:

- Convex mirrors shall be placed at the bottom of the ramp down to the garage to assist drivers with the sharp turn by allowing vehicles going up or down the ramp to see each other around the turn.
- Red curb shall be painted between the two project driveways to prohibit on-street parking and ensure adequate sight distance from both project driveways.

Significance After Mitigation

Implementation of Mitigation Measure T-1 would reduce on-site circulation and driveway site distance impacts to a less than significant level by enhancing driver visibility on the garage ramp and ensuring appropriate site distances for the proposed driveways. Therefore, Mitigation Measure T-1 would reduce project impacts to a less than significant impact with mitigation incorporated.

Threshold 12: Would the project cause queuing impacts based on a comparative analysis between the design queue length and the available queue storage capacity? Queuing impacts include, but are not limited to, spillback queues at project access locations; queues at turn lanes at intersections that block through traffic; queues at lane drops; queues at one intersection that extend back to impact other intersections, and spillback queues on ramps.

Impact T-2 THE PROJECT WOULD PROVIDE ADEQUATE QUEUE STORAGE CAPACITY AND IMPACTS WOULD BE LESS THAN SIGNIFICANT.

El Camino Real carries heavy traffic volume during peak hours. During the AM and PM peak hours, congestion along El Camino Real results in some long vehicular queues, and considerable delays for the minor streets (i.e. Dinahs Court). The queuing analysis is used to determine the appropriate storage lengths for the high demand turn lanes where the project would add a substantial number of trips to these movements. Traffic conditions at the study intersection were evaluated using LOS based on a Poisson probability distribution methodology, and compared to the City of Palo Alto standards. The City's LOS standard for signalized intersections is LOS D, where the average delay per vehicle is between 35.1 to 55.0 seconds, or better.

Cornerstone completed field observations and evaluated the signalized study intersection against the City's standards, and determined the study intersection would operate at LOS A or better during the AM and PM peak hours under both scenarios with and without the project. However, the

southbound left-turn movement out of Dinahs Court onto El Camino Real currently operates at LOS E, due to a short green-light cycle and priority given to traffic moving north and south along El Camino Real.

Cornerstone's field observations at the study intersection showed a vehicle queue of no greater than six vehicles compared to a vehicle storage capacity of nine vehicles. Therefore, the vehicle storage capacity on Dinahs Road was determined to be adequate for existing traffic. The southbound left-turn movement at the study intersection would continue to operate at LOS E with the addition of project traffic. Cornerstone determined that project vehicles making a U-turn at the study intersection would experience significant delays; however, the addition of project-generated traffic is expected to have a minimal impact on intersection operations. The project would have a less than significant impact on off-site queuing.

Mitigation Measures

Impacts are less than significant without mitigation.

c. Cumulative Impacts

As discussed in Section 4.5.2(b), *Impact Analysis*, project-generated traffic is below the VTA's CMP threshold of 100 peak hour vehicle trips; therefore, a detailed project-specific traffic analysis inclusive of cumulative impacts is not required. As stated in the Initial Study (Appendix B), cumulative impacts associated with buildout of infill projects, such as the proposed project, were analyzed as part of the 2030 Comprehensive Plan EIR. The project is consistent with the Comprehensive Plan, and other existing and allowable land uses near the project are not significantly different than those studied in the cumulative analysis of the Comprehensive Plan EIR.

The Comprehensive Plan is a document that establishes a land use scenario and goals, policies, and objectives for development and growth throughout the city, through the year 2040. Thus, the impact analyses in the Comprehensive Plan EIR effectively constitute cumulative analyses of the approved land uses in the planning boundaries. The project would not result in significant transportation impacts peculiar to the project site, as discussed above in Section 4.5.2.

Table 3-1, *Cumulative Projects List*, in Section 3.3, *Cumulative Development*, of this Draft EIR provides a listing of all projects considered in the cumulative analysis of this project. Three of the six listed projects are located along El Camino Real (4190 El Camino Real, 3877 El Camino Real, and 4115 El Camino Real), approximately 0.25 to 0.9 mile north of the project site. These three projects and the proposed project have the potential for construction schedules and traffic to overlap. However, construction traffic impacts would be temporary and construction vehicles (i.e. trucks exceeding a maximum gross weight of seven tons, as defined in PAMC Section 10.48.020 (5)) would be limited to established truck routes pursuant to PAMC Section 10.48.040 (Through truck routes established). The entirety of El Camino Real, from the north city limit to the south city limit, is as established truck route that would be used for construction vehicle access for all cumulative projects and the proposed project, pending use of efficient routes to respective project sites.

Furthermore, development projects listed in Table 3-1 would also be required to be consistent with the local planning documents or mitigation would be required to assess the impacts that were not addressed in the Comprehensive Plan EIR. Therefore, the project's consistency with the Comprehensive Plan and project-specific transportation analysis in the Initial Study (Appendix B), traffic memorandum (Appendix G), and Subsection 4.5.2 above indicate that the project would not result in significant cumulative impacts that were not addressed in the Comprehensive Plan EIR.

Conformance with applicable Comprehensive Plan policies and project-specific standard conditions of approval for each respective project would ensure that potential transportation impacts during the project operation are individually limited and not cumulatively considerable. The project, in association with cumulative development in the vicinity, would not substantially increase traffic impacts or cause the traffic study area intersection to decrease LOS. Therefore, cumulative transportation impacts during construction and operation of the projects would be less than significant.

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5 Other CEQA Required Discussions

This section discusses the potential for growth-inducing impacts and irreversible environmental impacts to be caused by the proposed project. The City's 2030 Comprehensive Plan EIR discusses these issues in Chapters 7, CEQA-Mandated Sections, of the EIR. Overall, the EIR found that while implementation of the Comprehensive Plan would indirectly induce growth, the Plan would accommodate this growth in previously urbanized areas of the city, and the Comprehensive Plan would pace growth such that this growth occurs incrementally over a period of 15 years. Therefore, the Comprehensive Plan would not result in significant growth-inducing impacts. The 2030 Comprehensive Plan EIR found that implementation of the Plan would not result in significant growth-inducing impacts. The 2030 Comprehensive Plan EIR found that implementation of the Plan would not result in significant irreversible changes such as from damage from environmental accidents or the commitment of non-renewable resources.

5.1 Growth Inducement

Section 15126(d) of the CEQA Guidelines requires a discussion of a proposed project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The proposed project's growth-inducing potential is therefore considered significant if project-induced growth could result in significant physical effects in one or more environmental issue areas.

5.1.1 Population Growth

As discussed in Section 13, *Population and Housing*, of the Initial Study (Appendix B), the proposed project would involve the construction of a five-story hotel with 97 guest rooms and would not include permanent residences. Therefore, the project would not directly induce population growth to the City.

The proposed project would generate an estimated 42 new jobs that could indirectly generate population growth and a greater need for employee housing, not accounting for the removal of the existing restaurant. As discussed in the Palo Alto Comprehensive Plan 2015—2023 Housing Element (adopted November 2014), Palo Alto had an estimated 89,370 jobs in 2010 and it is projected that total jobs will reach 119,030 by 2040 (33 percent growth) (City of Palo 2014b) . The proposed addition of 42 jobs would be within the predicted growth and would be less than 0.05 percent of the estimated number of jobs in Palo Alto in 2010. This incremental increase in employment opportunities in the city would not substantially induce population growth through the provision of new jobs. Additionally, it is anticipated that employees of the hotel would be primarily drawn from existing residents or from nearby communities. No new roads or infrastructure are proposed. Therefore, the project would not result in direct or substantial indirect population growth within the City of Palo Alto or the region.

Additionally, the project involves redevelopment within a fully urbanized area that lacks significant scenic resources, native biological habitats, known cultural resource remains, surface water, or

other environmental resources. Therefore, population growth associated with the project would not result in significant long-term physical environmental effects.

5.1.2 Economic Growth

The proposed project would generate temporary employment opportunities during construction. Because construction workers would be expected to be drawn from the existing regional work force, construction of the project would not be growth-inducing from a temporary employment standpoint. However, the proposed project would also add long-term employment opportunities associated with operation of the hotel building and associated restaurant, café, and bar. Additionally, it is anticipated that employees of the hotel would be primarily drawn from existing residents or from nearby communities. Therefore, the project would have a minimal impact to the job/housing ratio in the city.

The proposed project would not induce substantial economic expansion to the extent that direct physical environmental effects would result. Moreover, the environmental effects associated with future development in or around Palo Alto are analyzed in the City's 2030 Comprehensive Plan EIR and would be addressed as part of the CEQA environmental review for future individual projects.

5.1.3 Removal of Obstacles to Growth

The proposed project is located in a fully urbanized area that is served by existing infrastructure. As discussed in Section 17, *Utilities and Service Systems*, of the Initial Study (Appendix B) and Section 4.5, *Transportation*, of this EIR, existing infrastructure would be adequate to serve the project. Minor improvements to water, sewer, and drainage connection infrastructure could be needed, but would be sized to specifically serve the proposed project. No new roads would be required. Because the project constitutes redevelopment within an urbanized area and does not require the extension of new infrastructure through undeveloped areas, project implementation would not remove an obstacle to growth.

5.2 Irreversible Environmental Effects

The CEQA Guidelines require that EIRs contain a discussion of significant irreversible environmental changes. This section addresses non-renewable resources, the commitment of future generations to the proposed uses, and irreversible impacts associated with the proposed project.

The proposed project involves infill development on a currently developed lot in the City of Palo Alto. Construction and operation of the project would involve an irreversible commitment of construction materials and non-renewable energy resources. The project would involve the use of building materials and energy, some of which are non-renewable resources, to construct the overall building floor area of 51,300 gross square feet. Consumption of these resources would occur with any development in the region and are not unique to the proposed project.

The proposed project would also irreversibly increase local demand for non-renewable energy resources such as petroleum products and natural gas. However, the project would be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6, of the California Code of Regulations, *California's Energy Efficiency Standards for Residential and Nonresidential Buildings*) and the California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations). The California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California, and the

Green Building Standards Code requires solar access, natural ventilation, and stormwater capture. Consequently, the project would not use unusual amounts of energy or construction materials and impacts related to consumption of non-renewable and slowly renewable resources would be less than significant. Again, consumption of these resources would occur with any development in the region, and is not unique to the proposed project.

Additional vehicle trips associated with the proposed project would incrementally increase local traffic and regional air pollutant and GHG emissions. However, as discussed in Section 3, *Air Quality*, and Section 7, *Greenhouse Gas Emissions*, of the Initial Study (Appendix B), development and operation of the project would not generate air quality or GHG emissions that exceed those anticipated in the City's 2030 Comprehensive Plan EIR or that would result in a significant impact. Additionally, Section 4.5, *Transportation*, of this EIR concludes that long-term impacts associated with the proposed project would be less than significant based on City and regional thresholds.

The project would also require a commitment of law enforcement, fire protection, water supply, wastewater treatment, and solid waste disposal services. However, as discussed in Section 14, *Public Services*, and Section 17, *Utilities and Service Systems*, of the Initial Study, impacts to these service systems would be consistent with those anticipated under the City's 2030 Comprehensive Plan EIR and would not be significant.

CEQA requires decision makers to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. The analysis contained in this EIR concludes that the proposed project would not result in a significant and unavoidable impact related to CEQA environmental issue areas.

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6 Alternatives

As required by Section 15126.6 of the *CEQA Guidelines*, this EIR examines a range of reasonable alternatives to the proposed project that would attain most of the basic project objectives but would avoid or substantially lessen the significant adverse impacts. Section 15126.6 also requires consideration of the "No Project" alternative, regardless of whether it would achieve the project objectives or lessen its environmental effects.

As described in Chapter 2, *Project Description*, of this EIR, the project entails demolition of the existing restaurant building and construction of a five-story hotel building, including a subterranean parking garage. The project objectives, as noted in Section 2.6, *Project Objectives*, of this EIR are as follows:

- 1. Provide an approximately 97-room hotel with full-service amenities in an area of Palo Alto with high demand.
- Satisfy four-star soft brand criteria and standards including but not limited to providing a fitness center, bar and restaurant, meeting room, room service, and serviceable dining and outdoor garden space.
- 3. Redevelop an available underutilized parcel, currently developed at a floor area ratio (FAR) of 0.34 into a more efficient, economically productive use with an FAR of 2.0.

Included in this analysis are two alternatives, including the CEQA-required "no project" alternative, that involve changes to the project that may reduce the project-related environmental impacts as identified in this EIR. Alternatives have been developed to provide a reasonable range of options to consider that would help decision makers and the public understand the general implications of revising or eliminating certain components of the proposed project. As noted above, CEQA requires that EIRs examine alternatives to the proposed project that would avoid or substantially lessen the significant adverse impacts. As demonstrated in Chapter 4, *Environmental Impacts*, of this EIR, the proposed project would not result in significant and unavoidable adverse environmental impacts. All impacts would be less than significant or less than significant with mitigation. Nonetheless, the two alternatives considered would reduce potential environmental impacts.

The following alternatives are evaluated in this EIR:

- Alternative 1: No Project Alternative
- Alternative 2: No Exterior Balcony or Outdoor Restaurant Seating Alternative

Detailed descriptions of the alternatives are included in the impact analysis for each alternative. The potential environmental impacts of each alternative are analyzed in Sections 6.1 through 6.3.

6.1 Alternative 1: No Project Alternative

6.1.1 Description

The No Project Alternative assumes that the proposed hotel building, subterranean parking, landscaping and other site improvements associated with the proposed project are not constructed.

The current one-story restaurant building would remain under this alternative. The No Project Alternative would not fulfill any Project Objectives because the existing conditions would not promote high-profile economic activity on the project site, and there would be no design or construction of a 97-room hotel. This alternative does not preclude future redevelopment of the site.

6.1.2 Impact Analysis

a. Biological Resources

The No Project Alternative would not involve demolition of the on-site structures nor construction of a hotel building, and therefore there is no potential to affect biological resources through tree removal or disturbance of nesting birds. Therefore, Mitigation Measures BIO-1 and BIO-2 would not be required. No impacts to biological resources would occur as a result of this alternative. Impacts would be reduced compared to those of the proposed project, which would be less than significant with mitigation incorporated.

b. Cultural Resources

The No Project Alternative would not involve construction, which would eliminate potential impacts to previously unidentified archaeological resources, paleontological resources, and human remains, and tribal cultural resources. Therefore, implementation of Mitigation Measures CR-1 and through CR-3 under this alternative would not be required. No impacts to cultural resources would occur as a result of this alternative. Impacts would be reduced compared to those of the proposed project, which would be less than significant with mitigation incorporated.

c. Geology and Soils

As the No Project Alternative would not involve demolition or construction, and therefore there would be no impacts regarding potentially expansive soils or liquefaction. Therefore, the geotechnical design considerations in Mitigation Measure GEO-1 would not be required as no construction would occur, and no impacts would occur as a result of the No Project Alternative. Impacts would be reduced compared to the proposed project, which would be less than significant with mitigation incorporated.

d. Noise

Under the No Project Alternative, on-site activities would not change and the operation of the onsite restaurant would continue. Therefore, noise levels would not increase compared to existing baseline levels, nor would construction-related noise occur, and therefore, Mitigation Measure N-1 would not be required. There would be no noise impacts as a result of the No Project Alternative. Impacts would be reduced compared to those of the proposed project, which would be less than significant with mitigation incorporated.

e. Transportation and Traffic

Under the No Project Alternative, transportation and traffic would remain at current conditions. Temporary traffic delays associated with construction activities under the proposed project would not occur. As shown in Table 4.5-1, current daily trips associated with the existing restaurant are higher in comparison to the trips associated with operation of the proposed project. However, there would be no change in daily vehicle trips associated with the No Project alternative. The No Project alternative would not require any site access or circulation considerations, as no changes are proposed to the existing site plan or use under this alternative, and therefore Mitigation Measure T-1 would not be required. Therefore, overall traffic impacts under the No Project Alternative would be reduced compared to the impacts of the proposed project, which would be less than significant with mitigation incorporated.

6.2 Alternative 2: No Exterior Balconies or Outdoor Restaurant Seating Alternative

6.2.1 Description

Similar to the proposed project, this alternative would involve demolition of the one-story restaurant building to construct a 5-story hotel. The project characteristics of this alternative are present in Table 6-1. Alternative 2 would not include exterior balconies or an outdoor restaurant seating on the patio.

Building Dimensions	Proposed Project	Alternative 2
Height/Stories	50 feet + 12 feet for mechanical screen ¹ 2-5 stories above grade 2 stories below grade for basement parking	Same
Building footprint	13,645 sf (52.6 percent)	12,964 sf (50 percent)
Floor-Area-Ratio (FAR)	2.0	1.9
# of Hotel Rooms	97 rooms	Same
Lot Coverage		
Hotel Area (Impervious)	13,890 sf	13,509 sf
Impervious Paved Area	6,897 sf	7,242 sf
Pervious Paved Area	782 sf	843 sf
Landscape Area (Pervious)	4,377 sf	4,352 sf
Floor Area		
Ground Floor	9,510 sf	9,477 sf
2 nd Floor	9,260 sf	8,850 sf
3 rd Floor	10,953 sf	10,967 sf
4 th Floor	10,953 sf	10,626 sf
5 th Floor	9,573 sf	9,379 sf
Total Floor Area	51,891 sf	51,861 sf

Table 6-1Comparison of Changes Between the Proposed Project and Alternative 2Characteristics

6.2.2 Impact Analysis

a. Biological Resources

Similar to the proposed project, Alternative 2 would involve demolition of the existing on-site structure and construction of a 5-story hotel. Alternative 2 would involve the same tree removal as the proposed project, and therefore, Mitigation Measures BIO-1 and BIO-2 would still be required. Biological resources impacts would be similar to the proposed project and less than significant with mitigation incorporated.

b. Cultural Resources

Similar to the proposed project, Alternative 2 would involve demolition of the existing on-site structure and construction of a 5-story hotel. Alternative 2 would involve a similar level of potential impacts to previously unidentified archaeological resources, paleontological resources, and human remains, and tribal cultural resources. Therefore, implementation of Mitigation Measures CR-1 and through CR-3 under this alternative would also be required under Alternative 2. Cultural resources impacts would be similar to the proposed project and less than significant with mitigation incorporated.

c. Geology and Soils

As with the proposed project, Alternative 2 would involve construction of a 5-story hotel on the project site, which contains several layers of soil with moderate expansion potential that could potentially experience liquefaction. Therefore, similar geotechnical design considerations as those listed in Mitigation Measure GEO-1 would be required. Geology and soils impacts under Alternative 2 would be the same as those under the proposed project and would be less than significant with mitigation incorporated.

d. Noise

Under Alternative 2, there would be no exterior balconies. Further, although there would be an outdoor patio, it would not include a dining area. Therefore, no outdoor conversations would occur on balconies, which may reduce noise impacts on nearby sensitive receptors. Outdoor patio noise would be slightly lessened as fewer people would be using the patio at one time. The noise level of 20 people talking simultaneously was measured at 63 dBA Lmax at receptors 3 feet away (American Journal of Audiology 1998). Using the same noise generation assumptions, this would result in noise levels of approximately 45 dBA Leq at the nearest sensitive receptors, located 25 feet from the project site. This would be less than the noise levels of approximately 58 dBA Leq under the proposed project. Therefore, noise impacts under Alternative 2 would be reduced compared to the proposed project due to the elimination of the exterior balconies and lack of outdoor dining area; however, Alternative 2 would still require Mitigation Measure N-1 to reduce construction impacts to a less than significant level. Therefore, under Alternative 2, though noise impacts would be slightly reduced, the overall significance level would be the same as the proposed project and would be less than significant with mitigation incorporated.

e. Transportation and Traffic

Construction and operational traffic impacts under Alternative 2 would be similar to those under the proposed project. Addition of the exterior balconies included in Alternative 2 would not increase

construction traffic. Further, because this alternative involves the same number of units as the proposed project it would not change the operational trip generation (shown in Table 4.5-1 in Section 4.5, *Transportation and Traffic*). Therefore, the added trips and associated added traffic delay at nearby intersections and roadways under this alternative would be the same as the proposed project. Impacts related to traffic congestion would be less than significant. The site access and circulation considerations would be the same under Alternative 2 as the proposed project, and Mitigation Measure T-1 would be required. Therefore, overall traffic impacts would be less than significant with mitigation, the same as under the proposed project.

6.3 Environmentally Superior Alternative

Table 6-2 indicates whether each alternative's environmental impact is greater than, less than, or similar to that of the proposed project for each of the issue areas studied. Based on the alternatives analysis provided above, Alternative 1 (No Project Alternative) would be the environmentally superior alternative. Of the action alternatives, Alternative 2 (No Exterior Balconies or Outdoor Restaurant Seating Alternative) would be the environmental superior alternative.

Alternative 1 assumes that the proposed hotel building, subterranean parking, and other accessories associated with the proposed project are not constructed. Current uses on the project site consisting of a one-story restaurant building would remain under this alternative. However, the No Project Alternative would not fulfill any Project Objectives because the existing conditions would not promote high-profile economic activity on the project site, and there would be no design or construction of a 97-room hotel. Under this alternative, no impact would occur. However, Alternative 1 would not fulfill the Project Objectives because the existing conditions would not promote high-profile economic activity on the project site, and there would be no design or construction of a Class-A commercial building under the City's Green Building Ordinance.

Alternative 2 would involve demolition of the one-story restaurant building to construct a 5-story hotel. Alternative 2 would not include exterior balconies or an outdoor restaurant seating. Under Alternative 2, noise impacts would be reduced compared to the proposed project due to the lack of exterior balconies and outdoor restaurant seating and would be less than significant. However, impacts related to operational noise would also be less than significant under the proposed project. Alternative 2 would meet the Project Objectives listed in Section 2.6, *Project Objectives*.

Table 6-2 Impact Comparison of Alternatives

Issue	Proposed Project Impact Classification	Alternative 1: No Project Alternative	Alternative 2: No Exterior Balconies or Outdoor Restaurant Seating Alternative
Biological Resources	=	+	=
Cultural Resources	=	+	=
Geology and Soils	=	+	=
Noise	=	+	+
Transportation and Traffic	=	+	=

+ Superior to the proposed project (reduced level of impact)

- Inferior to the proposed project (increased level of impact)

= Similar level of impact to the proposed project

7 References

7.1 Bibliography

- American Journal of Audiology. 1998. Vol. 7 21-25. October 1998. Doi: 10.1044/1059-0889(1998/012)
- BridgeNet. 2008. Noise Analysis Task 2 for Horsham CarMax, Horsham, Pennsylvania. June 26, 2008.
- California Building Standards Commission. 2017. California Building Standards Code. http://www.bsc.ca.gov/ (Accessed August 2018).
- California Department of Fish and Wildlife (CDFW). 2018. Biogeographic Information and Observation System (BIOS). https://map.dfg.ca.gov/bios/ (Accessed August 2018).
- California Department of Transportation (Caltrans). 2013a. Technical Noise Supplement to the Traffic Noise Analysis Protocol. (CT-HWANP-RT-13-069.25.2) September. Available at: http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013B.pdf
- . 2013b Transportation and Construction Vibration Guidance Manual. (CT-HWANP-RT-13-069.25.3) September. Available at: http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf
- City of Palo Alto. 2001. Tree Technical Manual. https://www.cityofpaloalto.org/civicax/filebank/documents/6436 (Accessed September 2018).

- _____. 2014b. 2015-2023 Housing Element. Palo Alto, CA. November 10, 2014.
- . 2016a. Comprehensive Plan Update Environmental Impact Report for the City of Palo Alto Volume 1: Draft EIR. SCH # 2014052101 (Accessed July 2019).
- . 2016b. Sustainability and Climate Action Plan Framework. Palo Alto, CA. November 2016. https://www.cityofpaloalto.org/civicax/filebank/documents/64814 (Accessed July 2019).
- ____. 2017b. Municipal Code.

http://library.amlegal.com/nxt/gateway.dll/California/paloalto_ca/paloaltomunicipalcode?f =templates\$fn=default.htm\$3.0\$vid=amlegal:paloalto_ca (Accessed August 2018).

____. 2017c. Green Building in Palo Alto.

http://www.cityofpaloalto.org/gov/depts/ds/green_building/green_building_in_palo_alto.a sp (Accessed August 2018).

- ____. 2017d. Sustainability Implementation Plan (SIP) Key Actions 2018-2020. https://www.cityofpaloalto.org/civicax/filebank/documents/63141 (Accessed July 2019).
- ____. 2019. City of Palo Alto Bulidingeye. https://paloalto.buildingeye.com/planning (Accessed July 2019).
- Cornerstone Earth Group (Cornerstone). 2018. Geotechnical Investigation for The Caterina Hotel Project (4256 El Camino Real, Palo Alto, California). Dated 14 September 2018. Included as Appendix E.
- Crocker, Malcom J. (Editor). 2007. *Handbook of Noise and Vibration Control Book*, ISBN: 978-0-471-39599-7, Wiley-VCH, October.
- DSA Engineers. 2003. Investigation of Dumpster Noise Controls. Portland, OR. November 19, 2003.
- Federal Highway Administration (FHWA). 2006. FHWA Highway Construction Noise Handbook. (FHWAHEP-06-015; DOT-VNTSC-FHWA-06-02). Available at: http://www.fhwa.dot.gov/environment/construction_noise/handbook. Accessed November 2018.
- Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment*. November. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/researchinnovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf
- Hexagon Transportation Consultants, Inc. (Hexagon). 2019. Memorandum: Transportation Analysis for 4256 El Camino Real Hotel in Palo Alto, California. Dated 28 January 2019. Included as Appendix G.
- Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (AMBAG). 2017. Play Bay Area 2040. http://files.mtc.ca.gov/library/pub/30060.pdf (Accessed July 2019).
- Santa Clara Valley Transportation Authority (VTA). 2017 Congestion Management Program Document. http://vtaorgcontent.s3-us-west-1.amazonaws.com/Site_Content/2017_CMP_Document.pdf (Accessed July 2019).
- _____. 2018. Santa Clara Countywide Bicycle Plan. http://vtaorgcontent.s3-us-west-1.amazonaws.com/Site_Content/SCCBP_Final%20Plan%20_05.23.2018.pdf (Accessed July 2019).

Rincon Consultants. 2018a. Tree Protection and Preservation Plan. Included as Appendix C.

- _____. 2018b. Cultural Resources Assessment. Included as Appendix D.
- _____. 2018c. Noise Measurement Data and Noise Model Output. Included as Appendix F.
- RK Engineering Group. 2014. Agua Mansa High-Cube Noise Impact Study. County of San Bernardino, California.

http://www.sbcounty.gov/Uploads/lus/Environmental/AguaMansaDist/Noise_Impact_Stud y.pdf (accessed April 2019).

United States Fish and Wildlife Service (USFWS). 2018a. National Wetlands Inventory. https://www.fws.gov/wetlands/data/mapper.html (Accessed August 2018).

_____. 2018b. Critical Habitat Portal. https://ecos.fws.gov/ipac/ (Accessed August 2018).

West Hollywood, City of. 2014. Recirculated Draft Environmental Impact Report for the Melrose Triangle Project. Section 4.10: Noise. January 2014. http://www.weho.org/Home/ShowDocument?id=14574 (accessed August 2018).

7.2 List of Preparers

This EIR was prepared by the City of Palo Alto, with the assistance of Rincon Consultants, Inc. Consultant staff involved in the preparation of the EIR are listed below.

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