COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT

DATE: October 23, 2019

TO: Planning Commission

FROM: Planning Staff

SUBJECT: EXECUTIVE SUMMARY: Introduction of a Draft Environmental Impact Report (EIR), prepared pursuant to the California Environmental Quality Act (CEQA) Guidelines to evaluate the impacts of the Canyon Lane roadway improvements and single-family residence project in the unincorporated area of Emerald Lake Hills. The 45-day public comment period for the Draft EIR is ongoing. NO DECISION IS BEING REQUESTED AT THIS TIME FOR THE PROJECT.

County File Number: PLN 2017-00010 (Casey)

PROPOSAL

The County of San Mateo Planning and Building Department, as lead agency pursuant to Section 15051 of the California Environmental Quality Act (CEQA) Guidelines, has completed a Draft Environmental Impact Report (EIR) that analyzes the potential environmental impacts of the Canyon Lane roadway improvements and single-family residence project. The 45-day public comment period started on September 5, 2019 and will conclude on November 11, 2019.

Project Description

The project proposed by the applicant involves the improvement of Canyon Lane and development of a single-family residence on one parcel. Construction associated with the improvement of Canyon Lane includes a paved roadway and emergency turnaround, a water main and underground electrical distribution line, and stormwater facilities. Additionally, a single-family residence with associated site improvements typical of residential development on a hillside, including onsite retaining walls and stormwater facilities, would be constructed on a legal parcel fronting Canyon Lane. The project involves a total of 3,765 cubic yards (c.y.) of grading, including 3,705 c.y. of cut and 60 c.y. of fill, and the removal of 45 trees (ranging in size from 6” to 29” dbh (diameter by breast height)).

The project would extend road and utility improvements to eleven other undeveloped parcels along Canyon Lane which is considered in the Draft EIR as growth-inducing, as future residential development of these lots is a reasonably foreseeable impact that will result from the project.

RECOMMENDATION

Receive Planning staff's presentation on the Draft EIR and provide the opportunity for the public to comment. The public may also submit written comments by November 11, 2019.

SUMMARY

In accordance with Appendix G of the CEQA Guidelines, the Draft EIR evaluates the potential of the proposed project to result in impacts related to nineteen environmental resource topics as a result of construction and operation of the project. The Draft EIR identifies two potentially significant and unavoidable environmental impacts generated by the project:

Biological Resources - Although there is a low probability for the San Mateo woolly sunflower to occur in the project area, based on rare plant surveys conducted during the blooming season, the project area does contain potentially suitable habitat for the species. If the species is discovered through preconstruction surveying of the project area, the project would need to avoid impacting any identified individuals or populations as any loss would be considered a significant impact due to the rarity of this species. If avoidance by the project is not possible, then the impact to this species would be significant and unavoidable. Therefore, the project could have a significant and unavoidable impact to the San Mateo woolly sunflower.

Hydrology and Water Quality - The project area is located approximately 850 feet downstream of the Emerald Lake Lower Dam and is in the dam's inundation zone. Although the risk of dam failure is low, the project area is located approximately 1.6 miles northeast of the Peninsula segment of the San Andreas Fault Zone. In the event of a catastrophic dam failure (e.g., one in which all the water is released), the majority of the project area would be inundated, resulting in flooding of the Canyon Lane roadway and residence(s) in the canyon. Flooding of Canyon Lane would cause pollutants from the project to be released and enter the Redwood Creek system, and eventually the San Francisco Bay. The applicant and current and future property owners would not have the ability or authority to make improvements to the dam that would ensure that the dam would not fail in an earthquake. Therefore, the release of pollutants if the project area were to be inundated from a catastrophic dam failure would be significant and unavoidable.

The Draft EIR concludes that the project would have a less than significant impact with mitigation, less than significant impact, or no impact on the remaining environmental resource topics analyzed. Attachment B of the accompanying staff report includes a complete list of recommended mitigation measures.

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COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT

DATE: October 23, 2019

TO: Planning Commission

FROM: Planning Staff

SUBJECT: INFORMATIONAL ITEM: Introduction of a Draft Environmental Impact Report (EIR), prepared pursuant to the California Environmental Quality Act (CEQA) Guidelines to evaluate the impacts of the Canyon Lane roadway improvements and single-family residence project in the unincorporated area of Emerald Lake Hills. The 45-day public comment period for the Draft EIR is ongoing. NO DECISION IS BEING REQUESTED AT THIS TIME FOR THE PROJECT.

County File Number: PLN 2017-00010 (Casey)

PROPOSAL

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Project Description:

The project proposed by the applicant involves the improvement of Canyon Lane and development of a single-family residence on one parcel. Construction associated with the improvement of Canyon Lane would include improving the existing 10 ft. wide gravel roadway into a 20 ft. wide paved roadway, constructing a single-span bridge over an intermittent creek on the north side of Canyon Lane to accommodate an emergency vehicle turnaround, and construction of a minimum 8-inch water line that would extend approximately 1,050 linear feet to connect the water mains at Glenwood Avenue and Vista Drive to provide water service and fire protection to 12 undeveloped parcels along Canyon Lane, including the parcel where a single-family residence is proposed (as part of the project). Other associated roadway improvements include a new underground electrical distribution line, and stormwater facilities along the south side of Canyon Lane. The roadway improvements will involve a total of 1,205 cubic yards (c.y.) of grading, including 1,145 c.y. of cut and 60 c.y. of fill, and the removal of 34 trees consisting of Monterey cypress and pine, valley oak, coast live oak, buckeye, California

bay laurel, and plum species (ranging in size from 7" dbh to 29" dbh (diameter at breast height)), including 25 trees within the County and 9 trees within the City of Redwood City.

The project also includes the construction of a three-level, approximately 3,800 sq. ft., single-family residence on an existing legal parcel fronting the south side of Canyon Lane. Site improvements for the parcel would be those typical of residential development on a hillside, including onsite retaining walls and stormwater facilities. Construction of the single-family residence will involve 2,560 c.y. of grading (cut), and the removal of 11 trees (ranging in size from 6" dbh to 20" dbh) consisting of valley oak, coast live oak, buckeye, and bay species.

The improvements to Canyon Lane would extend the road and utility improvements to eleven other undeveloped parcels along Canyon Lane that are currently inaccessible and without services, creating the potential for future development of single-family residences on each of these eleven parcels, subject to separate planning and building permits and possibly additional CEQA review. Although no development is currently proposed for these parcels, the impacts of their development are analyzed in the Draft EIR as a growth-inducing and reasonably foreseeable impact of the project.

RECOMMENDATION

Receive Planning staff's presentation on the Draft EIR and provide the opportunity for the public to comment. The public may also submit written comments by November 11, 2019.

BACKGROUND

Report Prepared By: Summer Burlison, Project Planner; 650/363-1815

Owner/Applicant: Mel Casey

Location: Canyon Lane, Emerald Lake Hills

APNs and Parcel Sizes:

Assessor Parcel Number	Approximate Square Footage
057-221-060	6,419
057-221-070	9,285
057-221-090	6,604
057-221-100	5,790
057-221-110	6,057
057-222-210	8,534

057-222-220 & 230	17,760
057-222-240 & 250	19,370
057-222-260	10,570
057-222-270	12,183
057-222-280	11,156
057-222-290 & 300	16,673

Existing Zoning: RH/DR (Residential Hillside/Design Review)

General Plan Designation: Low Density Residential

Sphere-of-Influence: Redwood City

Existing Land Use: Existing gravel path; undeveloped

Water Supply: The project includes installing a new water main from Glenwood Avenue to Vista Drive as part of the Canyon Lane roadway improvements. The applicant proposes to seek water service from the City of Redwood City, which requires approval of an Outside Service Agreement by the City of Redwood City and the San Mateo Local Agency Formation Commission (LAFCo).

Sewage Disposal: The Emerald Lake Heights Sewer Maintenance District, operated by the County of San Mateo Public Works Department, is the sewer service provider for the existing 6-inch sewer main underlying Canyon Lane. The sewer main was installed by the County of San Mateo in late 1970's to early 1980's.

Flood Zone: Zone X (area of minimal flooding); Community Panel Number 06081C0285E, effective October 16, 2012.

Setting: The project area encompasses approximately 3.8 acres of undeveloped land, east of Lower Emerald Lake and west of Garrett Park, situated within a hillside canyon surrounded by single-family residential homes scatted throughout the adjacent hills in the Emerald Lake Hills area of San Mateo County. Canyon Lane is a relatively level, 10-ft. wide private gravel roadway that commences at its intersection with Glenwood Avenue (an improved public roadway located within the City of Redwood City's jurisdictional boundary) and extends approximately 550 ft. west before crossing into the jurisdictional boundary of San Mateo County. The gravel roadway continues approximately 0.19 miles to its terminus. Currently, a gate blocks vehicles from entering the unimproved roadway. An intermittent creek that serves as a drainage channel for water release from the Lower Emerald Lake flows parallel to the north side of Canyon Lane.

The hillside canyon along Canyon Lane consists of natural slope and vegetation, including oak forest and grassland, with 12 privately owned undeveloped parcels fronting the unimproved gravel roadway that is proposed to be improved.

Project Background: Canyon Lane was created as part of the Emerald Lake Park subdivision, as a private roadway easement commencing at Glenwood Avenue (in the City of Redwood City), recorded in the County Office of the Recorder in 1920. Construction of Canyon Lane was never completed and, as such, it is what is commonly referred to as a "paper street". In the early 1980's, the City of Redwood City built George L Garrett Memorial Park (Garrett Park) on several publicly owned parcels located near the intersection of Glenwood Avenue and Canyon Lane, where the front portion of the Canyon Lane paper street had been established. This portion of the private roadway easement will be realigned to follow the portion of constructed gravel roadway south of Garrett Park that exists today as a result of a sewer main the County installed in the late 1970's to early 1980's.

CEQA Process Chronology:

Date		Action
December 10, 2018	-	Notice of Preparation of an EIR filed with the State Clearinghouse, with copies issued to various agencies, organizations, and the public for a 30-day public comment period, which ended on January 10, 2019.
December 18, 2018	-	Public scoping meeting held in accordance with CEQA Guidelines Section 15082 to inform the public on the environmental review process and to receive public comments on the scope for the EIR.
September 25, 2019	-	Notice of Completion of a Draft EIR filed with the State Clearinghouse, Notice of Availability issued to various agencies, organizations, and the public for a 45-day public comment period, which ends on November 11, 2019.
October 23, 2019	-	Planning Commission informational hearing to introduce the Draft EIR during the 45-day public review period.

DISCUSSION

A. CEQA LEAD AND RESPONSIBLE AGENCIES

The County of San Mateo, in its role as the principal agency responsible for approving the project, is serving as lead agency pursuant to CEQA Guidelines Section 15367. As lead agency, the County of San Mateo has obtained the consulting services of SWCA Environmental Consultants to prepare the

environmental review for the project. The County of San Mateo Planning Commission, or Board of Supervisors if appealed, will be the decision-making body for certifying the Final EIR.

The project also requires discretionary approvals from City of Redwood City and San Mateo LAFCo for the Outside Service Agreement necessary to extend the City of Redwood City's water service outside of the City's jurisdictional boundary to serve the project. The City and LAFCo are serving as responsible agencies pursuant to CEQA Guidelines Section 15381.

B. PURPOSE OF THE EIR

The purpose of this EIR is to assess the impacts that may result from approval of the project. The EIR will be used to inform the Planning Commission, and the Board of Supervisors on appeal, when considering the following discretionary actions:

- Action on a Grading Permit application for the improvement of Canyon Lane, the construction of a single-span bridge across an unnamed creek at the north side of the roadway as part of a required turnaround area for emergency vehicles, and construction of one single-family residence;
- Action on a Design Review application for construction of the single-family residence;
- Action on a variance application to allow grading in excess of 1,000 cubic yards for the single-family residence;
- LAFCo's and Redwood City's actions on an Outside Service Agreement application to extend City water service outside of the City's jurisdictional boundaries.

C. PROJECT OBJECTIVES

The primary objectives of the project are as follows:

- Improve Canyon Lane in order to facilitate routine and emergency access to 12 parcels that would become developable. The objectives of the individual future property owners may vary, but, assuming project approval, owners of the lots could construct single-family homes in accordance with zoning restrictions, with any necessary subsequent environmental review, and after approval of all necessary planning and building permits.
- Provide housing, and the opportunity for future housing on lots associated with the project, on a site that is currently zoned for single-family housing.

- Assist in maximizing housing opportunities in San Mateo County, while maintaining the predominantly single-family character of the neighborhood.

D. DEVELOPABLE PARCELS

The improvements to Canyon Lane would extend road and utility services to eleven (11) additional undeveloped parcels along Canyon Lane that are currently inaccessible and without services; thereby, creating the potential for future development of residences on these remaining eleven parcels. Since no development is currently proposed for these parcels, pursuant to CEQA Guidelines Section 15126.2(d), the future development of these parcels is analyzed in the Draft EIR as a growth-inducing and reasonably foreseeable impact as a result of the project.

The future development of the eleven remaining parcels would each require Grading Permit and Design Review approval that would be subject to additional CEQA review to determine whether all potential impacts were adequately analyzed by this EIR, if the project qualifies for a Categorical Exemption, or if additional environmental review is warranted.

E. SUMMARY OF KEY PROJECT IMPACTS

The Draft EIR evaluates the potential of the proposed project to result in impacts to the environment as a result of construction and operation of the project. A significant impact is a substantial or potentially substantial change to resources in the proposed project area or the area adjacent to the proposed project. Impacts are classified using the following categories:

IMPACT CATEGORY	IMPACT DESCRIPTION
Significant and Unavoidable	Adverse effects that cannot be fully and effectively mitigated.
Less than Significant with Mitigation	Adverse effects that can be substantially reduced or avoided by the implementation of mitigation measures.
Less than Significant	Limited impact without resulting in a substantial adverse effect that would be considered significant.
No Impact	No impact.

In accordance with Appendix G of the CEQA Guidelines, the following sections summarize the key project impacts related to the nineteen (19) environmental resources assessed in the Draft EIR by impact category. *For a complete list of recommended mitigations, see Attachment B. Additionally, a detailed assessment of all project impacts is contained within the completed Draft EIR.*

1. Significant and Unavoidable Impacts

The Draft EIR finds that the project would have potentially significant and unavoidable impacts on Biological and Hydrology and Water Quality resources, as the following impacts could not be mitigated:

a. Biological Resources

The project area provides potentially suitable habitat (i.e., coast live oak forest and/or California annual grassland habitat) for two seasonally-timed rare plant species, Bent-flowered fiddleneck and San Mateo Woolly sunflower. Two rare plant surveys were conducted during the May through June blooming season for these rare plant species, following a season of good rainfall (approximately 114 percent of normal) providing optimal conditions for the detection of these rare plants. Neither plant species was observed during the field surveys. However, due to the presence of potentially suitable habitat within the project area for these species, preconstruction surveys are being recommended prior to the commencement of construction.

Although the chance of future detection of the species is expected to be low, in the event the San Mateo woolly sunflower is discovered during a preconstruction survey, the project would need to avoid impacting any identified individuals or populations; any loss would be considered a significant impact due to the rarity of this species. If project avoidance is not possible, then the impact to this species would be significant and unavoidable because mitigation to a less than significant level would likely not be feasible due to the very limited occurrences of this species for preservation elsewhere.

Other Biological Impacts – Less than significant impact with mitigation

Several special-status animal species were determined to have a potential to occur in the project area, including Western pond turtle, San Francisco dusky-footed woodrat (5 nests were identified within the project area in 2019), and roosting bats. Additionally, the Migratory Bird Treaty Act protects all migratory birds, including active nests and eggs. Mitigation measures are recommended that require preconstruction surveys and potential construction schedule restrictions to minimize the potential for adverse project impacts on these species.

Project implementation would result in permanent impacts to 0.103 acre of riparian coast live oak forest habitat due to tree removal, road widening, road paving, and bridge installation (for emergency vehicle turnaround). Some roadwork will occur under overhanging riparian

canopy and result in temporary impacts to 0.144 acre of riparian canopy. Additionally, a total of 45 trees, including 9 trees within the City of Redwood City's jurisdiction and 11 trees on the parcel for single-family residential development, are proposed for removal. These trees consist of Monterey cypress and pine, valley oak, coast live oak, buckeye, California bay laurel, and plum species ranging in size from 6" dbh to 29" dbh. Mitigation measures recommended to reduce these project impacts on vegetation to a less than significant level include avoidance to the extent feasible, revegetation of temporary impacted riparian habitat, and compensation for tree removal subject to County and City replacement ratios (being 3:1 and 1:1, respectively) either within the project area, off-site in a location deemed reasonably equivalent to the project site, or in a combination of on-site and off-site locations.

Approximately 0.006 acre and 0.008 acre of aquatic habitat would be permanently and temporarily impacted, respectively, due to roadway widening/improvements and bio-swale construction. The new bridge for emergency vehicle turnaround is not expected to require work in aquatic habitat; however, grading and other soil disturbances associated with project construction can increase the potential for soil and sediment to enter waterways. Therefore, mitigation measures are recommended to avoid and minimize fill placement within onsite drainage swales, avoid impacts to the intermittent drainage channel, and mitigate any direct permanent fill impacts on aquatic habitat below the ordinary high-water mark at a 1:1 ratio to reduce the potential for project impacts on aquatic habitat to less than significant.

b. Hydrology and Water Quality

The project would have the potential to release pollutants due to project inundation. The project area is located approximately 850 feet downstream of the Emerald Lake Lower Dam and is in the dam's inundation zone. Dam failure in San Mateo County is considered to have a low probability of occurrence, according to the County's Office of Emergency Services Hazard Vulnerability Assessment but has a high impact if it does occur. The California Department of Water Resources, Division of Safety of Dams, has determined that the Emerald Lake Lower Dam is in satisfactory condition and a risk of catastrophic failure is low. Although the risk of dam failure is low, the project area is located approximately 1.6 miles northeast of the Peninsula segment of the San Andreas Fault Zone. In the event of a catastrophic dam failure (e.g., one in which all the water is released), the majority of the project area would be inundated, resulting in flooding of the Canyon Lane roadway and residences in the canyon. Flooding of Canyon Lane would cause pollutants to be released and

enter the Redwood Creek system, and eventually the San Francisco Bay. The applicant and current and future property owners of the developable parcels along Canyon Lane would not have the ability or authority to make improvements to the dam that would ensure that the dam would not fail in an earthquake. Therefore, the release of pollutants if the project area were to be inundated from a catastrophic dam failure would be significant and unavoidable.

2. Less than Significant Impact with Mitigation

The Draft EIR finds that the project would have potentially significant environmental impacts that could be reduced to less than significant with the implementation of mitigation measures. Below summarizes the key project impacts for each assessed environmental resource.

a. Aesthetics. The project would alter the visual character and quality of the generally undeveloped project area through the introduction of residential improvements to the immediate area. The project will require the removal of 45 trees, ranging in size from 6" dbh to 29" dbh, which includes 11 trees on the individual parcel for single-family residential development. Additionally, the project would slightly increase ambient light levels in the area. The proposed improvements and development would be consistent with the suburban characteristics of the surrounding residentially developed neighborhood and would be consistent with the General Plan, Zoning Standards, and Design Review Standards for residential development in the Emerald Lake Hills area. Mitigation measures are recommended for a Landscaping Plan and Light Fixture Plan that will ensure landscaping is designed to help screen the single-family residence from surrounding neighborhood views and minimize lighting impacts to the area.

b. Air Quality. Project construction activities would generate ROG (reactive organic gases), NO_x (nitrogen oxides), PM_{10} (coarse particulate matter), and $PM_{2.5}$ (fine particulate matter) emissions from mobile and stationary construction equipment exhaust and fugitive dust from grading activity and soil exposed to wind. Based on emission estimates for the project using the California Emissions Estimator Model (CalEEMod), the project would not generate pollutant emissions above applicable thresholds provided in the 2017 Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines. However, the BAAQMD recommends the implementation of Basic Construction Mitigation Measures, regardless of whether or not construction-related emissions exceed applicable thresholds, to help reduce fugitive dust emissions. Accordingly, these basic mitigation measures that include watering exposed surfaces daily, limiting

vehicle speeds on unpaved roads, preventing mud and dirt from being tracked onto public roadways, proper maintenance and tuning of construction equipment, among other practices, are recommended in the Draft EIR.

c. Cultural Resources (including Tribal Cultural Resources). Based on a Cultural Resources Assessment, which included a records search, review of historic maps and aerial imagery, and pedestrian survey of the project area, no significant cultural resources[1] were found in the project area.

The results of a search of the Native American Heritage Commission's (NAHC) Sacred Lands File for the project area were negative. Additionally, the County sent consultation request letters to six local Native American tribes[2] identified by the NAHC that may be traditionally or culturally affiliated with the project area. The County received no responses from this outreach.

Since it is possible that unanticipated discoveries of cultural resources or human remains may occur during ground-disturbing activities associated with project construction, mitigation measures have been recommended to identify the necessary steps for appropriate professional consultation to ensure project impacts are minimized on any resources.

d. Geology and Soils. The project would have the potential to directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking and landslides due to active faults within the region and a shallow active landslide located along the proposed water line path near Vista Drive. Additionally, grading activities associated with the project, including approximately 1,200 cubic yards (c.y.) for the roadway improvements and another 2,500 c.y. for construction of the single-family residence, could result in substantial soil erosion. The Draft EIR recommends mitigation measures to reduce these impacts to a less than significant level by requiring engineering plans that adhere to the seismic design criteria and erosion control and revegetation requirements outlined in the project Geotechnical Site Investigation, and depict the strategy for removing and replacing the landslide deposit with engineered fill to

[1] Resources that neither meet the criteria for listing on the California Register of Historical Resources, nor qualify as a unique archaeological resource under CEQA PRC Section 21083.2 are considered significant.

[2] The six local Native American affiliations identified by the NAHC for the project area include: Amah Mutsun Tribal Band, Amah Mutsun Tribal Band of Mission San Juan Bautista, Costanoan Rumsen Carmel Tribe, Indian Canyon Mutsun Band of Costanoan, Muwekma Ohlone Indian Tribe of the San Francisco Bay Area, and Ohlone Indian Tribe.

achieve a factor of safety for the water line installation near Vista Drive.

The project could also directly or indirectly destroy a unique paleontological resource or site or unique geological feature as Pleistocene-aged alluvial fan deposits having a high paleontological sensitivity have been identified in the project area. However, the development of a Paleontological Resources Monitoring and Mitigation Plan, as recommended in the Draft EIR, that includes standards for worker training, resource monitoring, and the salvage and curation of any significant fossils that are encountered would reduce any potential impacts to a less than significant level.

e. Greenhouse Gas Emissions. The project would have the potential to generate greenhouse gas (GHG) emissions, primarily during construction through the use of construction equipment and worker vehicles. While the BAAQMD does not establish GHG emission thresholds of significance for construction-related emissions, the Draft EIR recommends mitigation measures that encourage construction workers living outside of San Mateo County to carpool to the project site, limit construction vehicle and equipment idling to the extent feasible, and require all off-road construction diesel engines to meet Tier 2 California Emission Standards for Off-Road Compression-Ignition Engines.

f. Hazards and Hazardous Materials. The project would temporarily involve the routine use, transport, storage, and disposal of hazardous materials throughout construction to operate and maintain construction equipment and machinery. Paint would also be used on interior and exterior surfaces of the single-family residence. The Draft EIR recommends the development and implementation of a Construction Safety Plan to ensure the exposure of the public, construction workers, and the environment to potentially hazardous materials throughout construction would be less than significant.

g. Noise. The project could generate a substantial temporary increase in ambient noise levels in the project vicinity during construction, with the highest noise levels during construction expected during excavation and grading activities, including truck hauling. Mitigation measures are recommended to reduce temporary construction-related noise to a less than significant impact to the area through the use of mufflers, quiet models of air compressors, prohibiting unnecessary idling of internal combustion engines, among other practice. Additionally, construction will be limited to the County's allowance of Monday through Friday from 7:00 a.m. to 6 p.m. and Saturdays from 9:00 a.m. to 5 p.m.

h. Wildfire. Fire behavior modeling predicts fuels in the project area would burn with mostly low to moderate intensity due to 93 percent of the burnable fuels in the project area having a low to moderate spread rate, a low flame length, and fine fuel load. Construction of the residence would use ignition-resistant materials and would incorporate design features to reduce wildfire risk (e.g., adherence to defensible space zones set forth by CalFire). Project construction would decrease fuel loading in the immediate project vicinity as native woodland vegetation is removed and thinned in order to accommodate the roadway improvements. Additionally, the improved roadway would inherently function as a fuel break. Potential ignition sources would be increased during construction activities due to the use of internal combustion engines associated with vehicles and construction equipment, along with the installation of underground electrical distribution lines within the roadway which could act as an ignition source. In order to reduce the potential wildfire risk throughout project construction, mitigation measures are recommended that require fire safety control measures be implemented, including a Fire Awareness and Avoidance Plan, and roadside fuel reduction measures prior to the start of grading and construction activities.

3. Less than Significant Impact

The Draft EIR finds that the project would have less than significant impacts on the following resources:

a. Energy. The project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources; or conflict with or obstruct a State or local plan for renewable energy or energy efficiency as any proposed and/or future development is required to comply with Building Energy Efficiency Standards that focus on improving the energy efficiency of newly constructed buildings.

b. Land Use and Planning. The project would not physically divide an established community as proposed improvements and development would be consistent with the surrounding single-family residential character of the Emerald Lake Hills area, as supported by the County of San Mateo and City of Redwood City General Plan and Zoning Regulations for the area. Grading for the proposed single-family residence will exceed the 1,000 cubic yard limit pursuant to the County's RH Zoning Regulations; however, the applicant is seeking a variance from this restriction, as allowed under the County's Zoning Regulations.

Population and Housing. The project would not induce substantial population growth in the area or displace existing people or housing.

The construction of a single-family residence, as proposed, would be expected to generate a population increase of up to three (3) people, based on the current average household size in the County. Additionally, the potential future construction of 11 new single-family residences on the remaining 11 developable parcels would be expected to generate a population increase of 33 people. These increases in population growth to the area are well below the rate of population increase over the past 8 years.

Public Services. The project would not result in substantial adverse physical impacts on public services, such as fire protection, police protection, public schools, parks, health services, or libraries based on an evaluation of existing public services abilities to adequately serve the needs of the proposed project, and the anticipated needs for the future development of the remaining 11 developable parcels.

e. Recreation. The project would not increase the use of existing neighborhood and regional parks or other recreational facilities, or require the expansion of any such facilities, in a manner that would cause substantial physical deterioration of the facility; or affect access to trails, parks or other recreation opportunities. The proposed project, and potential future development of the 11 other parcels, would only generate a small increase in population to the area, thus, not substantially increasing the use of neighborhood or regional park facilities, or demand expansion of any such facilities. Although occasionally used by nearby residents as an informal trail, Canyon Lane is not currently designated as a trail or part of a larger open space and will remain a private roadway post-project.

f. Transportation. The project would not conflict with any program, plan, ordinance, or policy for circulation systems; or be inconsistent with CEQA Guidelines Section 15064.3 for Vehicle Miles Traveled (VMT). Traffic flow was analyzed at two locations on Glenwood Avenue, near Garrett Park and Canyon Road, in accordance with the Traffic Infusion on Residential Environment (TIRE) Index, which represents the effects on traffic safety, pedestrians, bicycles, children playing near the street, and the ability to freely maneuver into and out of driveways. The TIRE Index is based on the idea that increases in traffic volume have a greater impact on the residential environment on a lower volume street than along a street with a higher level of baseline traffic. A change in the TIRE Index by 0.1 or more indicates a visibly recognized change in traffic.

The proposed single-family residence would only result in approximately one (1) vehicle trip during each of the AM and PM peak hours and therefore, would not increase traffic in the area beyond

capacities. The TIRE analysis for the project and future development of the 11 other parcels indicates an increase of 0.27 and 0.1 along Glenwood Avenue, near Garrett Park and Canyon Road, respectively. While the increase of 0.27 at Glenwood Avenue near Garrett Park is considered a noticeable change in traffic, the calculated trip generations of 113 weekday daily trips, 9 AM peak hour trips, and 12 PM peak hour trips on Glenwood Avenue are not expected to impact any level of service to local roadways or intersections near the project.

Additionally, project improvements include constructing an emergency vehicle turnaround on private property to accommodate the needs of fire apparatus to adequately serve the project area.

g. Utilities and Service System. The project would not generate a demand on utilities that would exceed service system capacities or require new or expanded facilities that could cause a significant environmental impact.

Water

The project's roadway improvements include installing a new 8-inch water main to provide water and fire service along Canyon Lane, extending between Glenwood Avenue to the east and Vista Drive to the southwest. A shallow active landslide exists near Vista Drive, within the proposed water main route, however, the Draft EIR's Geology and Soils Section would require the unstable landslide deposits be removed and replaced to mitigate any impact from the project.

The project proposes to receive water service from the City of Redwood City (City), which will require discretionary approval of an Outside Service Agreement by the City and San Mateo LAFCo, as the project is outside of the City's water service area. The City has an individual water supply guarantee of 10.93 million gallons per day (MGD), or approximately 12,243 acre-feet per year (AFY) from the San Francisco Public Utilities Commission's Hetch Hetchy system. Based on the latest data from 2017, the City supplied roughly 9,335 AFY of potable water to users, which is 2,908 AFY less than their guaranteed supply. Single-family residential development in the area has an estimated water use of 264 gallons per day (GPD). Thus, water use for the project (i.e., proposed single-family residence), would represent 0.002 percent of the City's guaranteed supply. Additionally, water use from the potential future development of the other 11 parcels along Canyon Lane would represent 0.20 percent of the City's guaranteed supply. Therefore, the City's water system has adequate capacity to supply the project, and future potential single-family residential development resulting from the project.

Wastewater

The project would utilize an existing 6-inch sewer main underlying Canyon Lane, maintained and operated by the Emerald Lake Heights Sewer Maintenance District (District) via the County of San Mateo's Department of Public Works. Sewers from the District drain into the City of Redwood City's wastewater system. The District is allowed 0.5 MGD of capacity flow to the City's system, which allocates approximately 0.004 percent of wastewater flows that would be generated by the project (i.e., proposed single-family residence) and potential future development of the other 11 parcels along Canyon Lane that would become developable as a result of the project.

Stormwater Drainage

The project would create approximately 22,000 sq. ft. of new impervious surface for the roadway improvements and approximately 4,660 sq. ft. of new impervious surface for the single-family residence. New storm drainage facilities along the roadway and individual facilities for the proposed single-family residence are proposed to retain and treat 80 percent of stormwater flows, incorporate Low Impact Development (LID) measures, and ensure that post-development flows and velocities do not exceed those that existed in the pre-development state, as required under the County's Municipal Regional Stormwater Permit and County Drainage Policy. Additionally, the project's stormwater system design will be required to account for routine and overflow drainage from the Emerald Lake Lower Dam.

4. No Impact

The Draft EIR finds that the project would have no impacts on Agricultural and Forestry resources or Mineral resources.

The project is located in the urban/suburban Emerald Lake Hills area of the County, which is zoned for single-family residential development. Therefore, the project will not have any impact to agricultural or forestry resources. Additionally, no mineral resources will be impacted by the project, as no resources were discovered in the project area based on research of the Department of Conservation and County of San Mateo General Plan databases for mineral resources.

F. ALTERNATIVES

In accordance with the CEQA Guidelines Section 15126, the Draft EIR analyzes two (2) project alternatives, along with a No Project Alternative, that were selected based on whether the alternative would avoid or substantially lessen significant impacts, whether the alternative would generally meet the project objectives and underlying fundamental purpose, and whether implementation of the alternative would be feasible. The selected alternatives were evaluated against the project to provide a comparison of environmental effects and to identify the Environmentally Superior Alternative. Below is a summary of each alternative.

1. Alternative 1: Reduced Roadway

The Reduced Roadway Alternative would limit the length of roadway improvement to that sufficient to reach the proposed single-family residence, approximately 550 ft. Except for that necessary to accommodate an emergency vehicle turnaround, the roadway would not extend beyond the proposed single-family residence to provide access to the other 11 currently inaccessible parcels.

This Alternative would result in reduced impacts compared to those identified for the project, including impacts on aesthetics; biological resources; energy consumption; greenhouse gas emissions; release of hazardous materials; water quality impacts; population increase; noise; public service, recreation, and utility demands; and transportation impacts.

The Reduced Roadway Alternative would partially meet the project objectives, as it would allow for the construction of one single-family residence on an underutilized site that is currently zoned for single-family residential development. However, this Alternative would fall short of meeting the project objectives related to maximizing housing opportunities within the County and providing the opportunity for future potential residential development in an area zoned for single-family residences.

2. Alternative 2: Annexation

The Annexation Alternative would involve the annexation of the unincorporated project area into the City of Redwood City prior to the occurrence of development. Under this Alternative, the project would be subject to the City's zoning and land use requirements, which allows for a greater lot coverage allowance than the County's zoning standards. Since development under the Annexation Alternative could result in the construction of larger residences, this alternative may result in greater impacts to some environmental resources compared to those identified for the project, including aesthetics; biological resources; energy; greenhouse gas emissions and air quality; water quality; and noise. The mitigation

measures provided for the project would adequately address any potential increases in environmental impacts associated with the construction and operation of larger single-family residences. Additionally, the scope of construction and operation activities would largely be similar to those evaluated for the proposed project. Therefore, the Annexation Alternative is not anticipated to result in any additional significant impacts beyond those already discussed in the Draft EIR. The Annexation Alternative would also meet all of the objectives of the proposed project.

3. No Project Alternative

The No Project Alternative would maintain existing conditions at the project area. No construction would occur and therefore no environmental impacts would occur. The parcel associated with the proposed single-family residence and future developable parcels could be developed at a future time, subject to extension of the road and necessary services, pursuant to approval of all necessary planning and building permits, including CEQA review. The No Project Alternative would fail to meet any of the project objectives and underlying purpose as this Alternative would not provide residential development and opportunities for future development and would not assist in maximizing housing opportunities in San Mateo County.

4. Environmentally Superior Alternative

The CEQA Guidelines require an EIR to identify the Environmentally Superior Alternative, which is considered the alternative that most effectively reduces impacts while meeting project objectives. In the event that the No Project Alternative is the Environmentally Superior Alternative, an Environmentally Superior Alternative should be identified among the other alternatives.

Based on the alternative's analysis and comparison of impacts, the No Project Alternative is the Environmentally Superior Alternative as this alternative would avoid all impacts of the project and would not create any new significant impacts of its own. However, the No Project Alternative would fail to meet any of the basic project objectives. Therefore, the Reduced Roadway Alternative is identified as the Environmentally Superior Alternative among the other alternatives (excluding the No Project Alternative), strictly based on the analysis of the relative environmental impacts. The Reduced Roadway Alternative would not reduce the significant and unavoidable impact related to pollutant releases from inundation hazard to a less than significant level. Additionally, this alternative would only partially meet the project objectives, as it would fail to maximize housing opportunities within the County or provide opportunity for future residential development.

G. OTHER CEQA CONSIDERATIONS

CEQA Guidelines require that EIRs discuss the following considerations:

1. Growth-Inducing Impacts

CEQA Guidelines require that EIRs discuss the growth-inducing impacts of a project, which could be caused by projects that foster economic or population growth; the construction of additional housing in the area; or the removal of obstacles to population growth. The proposed improvements to Canyon Lane would facilitate the future development of 11 undeveloped parcels by providing access and utilities. Therefore, these 11 potentially developable parcels were analyzed throughout the Draft EIR as a growth-inducing impact that is a reasonably foreseeable result of approval of the project. The project would result in the direct increase of approximately 3 people within the County (based on current average household size in the County). If full build-out of the single-family residence and developable parcels were to occur, the growth-inducing impacts of the project would result in population growth of approximately 36 people. Population and housing growth as a result of the project is expected and planned, as these increases are accounted for in the Association of Bay Area Governments' Projections and the Regional Housing Needs Plan. Therefore, the growth-inducing impact as a result of the project would be less than significant.

2. Significant Irreversible Environmental Changes

CEQA Guidelines requires an EIR to consider significant, irreversible environmental changes that could result if the primary and secondary impacts would generally commit future generations to similar uses, the project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project, the project would involve a large commitment of nonrenewable resources, or the proposed consumption of resources is not justified (e.g., wasteful use of resources).

Nonrenewable energy consumption would occur during the project's construction and operational phases, in the form of direct and indirect consumption from the production of materials used for construction and the fuel used by construction equipment; typical household purposes (e.g., electricity consumption, heating, and for the fuel used by the future residence's personal vehicles); and energy associated with producing goods and services that are ultimately consumed by the future residences. Additionally, the use of nonrenewable resources during the initial and continued phases of a project may constitute an irreversible environmental change if a large commitment of resources makes their removal or reuse thereafter unlikely, particularly resources of finite supply. Several

irreversible commitments of limited resources would result from project implementation, such as the loss of natural gas, petroleum products, lumber, gravel, asphalt, metals, and water consumption. Construction- and operational-related energy consumption, and the use of nonrenewable resources associated with the project would be proportional to the size of the new residence(s) and of limited scale. Additionally, the project would incorporate energy efficiency and conservation design measures, as required by the California Green Building Standards and the County and City's Construction and Demolition Debris Ordinances that require recycling of certain materials and products. Therefore, project impacts of significant, irreversible environmental changes would be less than significant.

3. Cumulative Impacts

In accordance with the CEQA Guidelines, the Draft EIR considers cumulative impacts on the environmental that may result from the implementation of the project when considered with past, present, and probably future projects. Cumulative impacts are changes in the environment that result from the incremental impact of development of the proposed project and all other nearby "related" projects. For purposes of the Draft EIR, all projects located in the City of Redwood within one mile of the project site and all projects in the County within the Emerald Lake Hills Community were considered in the cumulative impact analysis. Each resource topic was evaluated for potential cumulative impacts and was found to result in no greater significance impact than concluded within each topic section of the Draft EIR for the project.

H. NEXT STEPS

Once the 45-day public comment period for the Draft EIR has ended, staff will evaluate and respond to all received comments in accordance with CEQA Guidelines Section 15088 and proceed in preparing a Final EIR to present to the Planning Commission for certification.

I. DISTRIBUTION

The County has issued a notification of availability of the Draft EIR to the following:

- State Clearinghouse
- California Department of Water Resources, Division of Safety of Dams
- County of San Mateo reviewing agencies
- City of Redwood City reviewing agencies
- San Mateo LAFCo
- Emerald Lake Country Club
- Committee for Green Foothills

- Property owners within a 500 ft. radius of the project area, per current tax assessment rolls
- Interested parties from the County's Pre-Application Public Workshop (2016) and EIR Scoping Meeting (2018), based on sign-in logs

ATTACHMENTS

A. Vicinity Map
B. Potential Project Impacts and Recommended Mitigation Measures
C. Draft EIR – Due to file size, a copy of the Draft EIR (with Appendices) is available at the following locations for review:
   (1) Electronic version available at: https://planning.smcgov.org/canyon-lane-roadway-improvements-development-emerald-lake-hills
   (2) Print version available at: County of San Mateo Planning and Building Department, 455 County Center, 2nd Floor, Redwood City, CA 94063

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COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT A

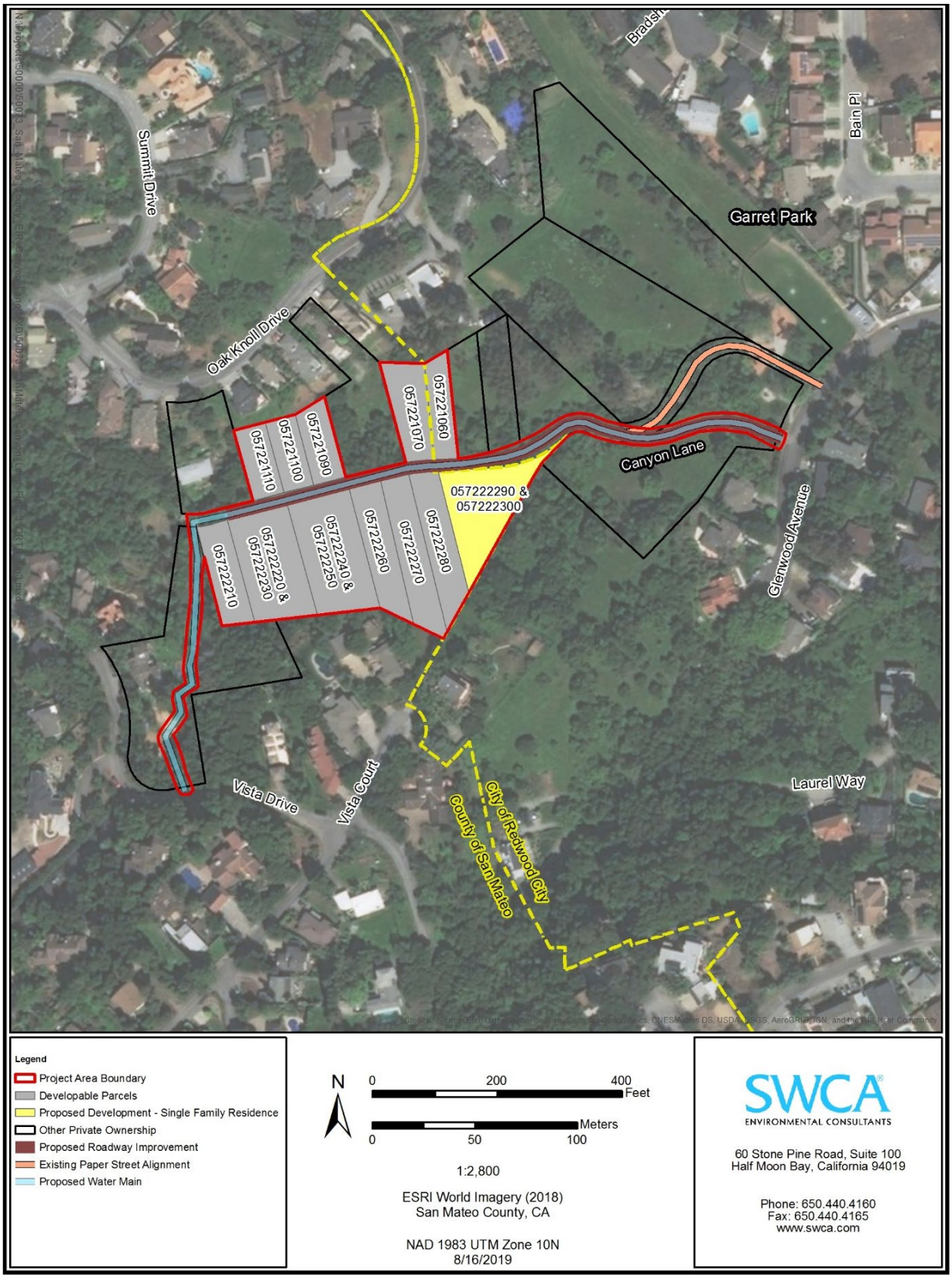

Figure 2-3. Proposed Project

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT B

Aesthetics Mitigation Measures	
AE/mm-1	The Applicant shall submit a detailed Landscaping Plan for review and approval by the City and County Planning Division and/or Arborist prior to issuance of a Grading Permit. The Plan shall indicate how the project landscaping shall screen most of the roadway and single-family residence from view from the surrounding neighborhood. The Landscaping Plan shall also indicate how the proposed landscaping would replace the existing vegetation and landscaping that would be removed for construction in accordance with Section 6565.21 of the County Zoning Regulations. The Landscaping Plan would also comply with the tree replacement program described in Program NR-45 of the City's General Plan Natural Resource Element.
AE/mm-2	The Applicant shall submit a Light Fixture Plan to the County Planning Department for review and approval prior to construction. The plan shall include the use of shielded light fixtures that direct light downward, prevent direct glare to nearby residences, and otherwise minimize lighting impacts on residential properties.
Air Quality Mitigation Measures	
AQ/mm-1.1	*a.* All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. *b.* All haul trucks transporting soil, sand, or other loose material off site shall be covered. *c.* All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. *d.* All vehicle speeds on unpaved roads shall be limited to 15 mph. *e.* All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. *f.* Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations). Clear signage shall be provided for construction workers at all access points. *g.* All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. *h.* Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.
Cultural and Tribal Resources Mitigation Measures	
CUL/mm-1.1	In the event that archaeological resources are exposed during construction, work in the immediate vicinity of the find must stop until a qualified archaeologist can evaluate the significance of the find. Construction activities may continue in other areas. If the discovery proves significant under the provisions of CEQA, additional work such as testing or data recovery may be warranted.
CUL/mm-1.2	In the event that human remains are exposed during construction; State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to California PRC Section 5097.98. The San Mateo County Coroner must be notified of the find immediately, and all work shall cease in the immediate vicinity of the find. If the human remains are determined to be ancient or likely Native American, the coroner will notify the NAHC, which will designate and notify a Native American Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within

	48 hours of notification and may recommend scientific removal and non-destructive analysis of human remains and items associated with Native American burials.
Geology and Soils Mitigation Measures	
GEO/mm-1.1	The project shall be constructed in accordance with the seismic design criteria provided in the Geotechnical Site Investigations for the Canyon Lane Roadway Improvements and Single-Family Residence. Building and engineering plans will be reviewed by San Mateo County prior to issuance of a building permit to ensure that the plans meet the requirements of the California Building Code.
GEO/mm-1.2	The Applicant shall mitigate the active landslide by removing and replacing the landside deposit with engineered fill. Prior to the issuance of a building permit, the Applicant shall submit for approval final engineering plans depicting how the landslide material would be removed and replaced. If the Applicant elects to pursue another mitigation strategy, the Applicant shall submit for approval additional engineering plans to ensure an appropriate factor of safety is achieved.
GEO/mm-1.3	The Applicant shall implement all erosion control measures and revegetation requirements provided in the Geotechnical Site Investigations.
GEO/mm-1.4	A professional paleontologist meeting the standards of the Society of Vertebrate Paleontology (SVP) should be retained to develop a project-specific Paleontological Resources Monitoring and Mitigation Plan (PRMMP) that includes the following provisions: 1. Worker Environmental Awareness Program (WEAP) training. Prior to the commencement of ground-disturbing activities the qualified paleontologist or their designee will provide a briefing to construction crews with information on regulatory requirements for the protection of paleontological resources and proper procedures to follow should unanticipated paleontological resources discoveries be made during construction. 2. Monitoring for Paleontological Resources. Prior to ground disturbance a qualified paleontological monitor shall be retained to monitor ground disturbing activities in geologic formations with high paleontological sensitivity (Pleistocene-aged alluvial fan deposits). The purpose of the monitor will be to identify any fossil material that may be encountered, document and determine its significance, and, if significant, supervise the salvage of the specimens. Significant specimens should then be curated with an accredited institution, such as the University of California Museum of Paleontology (UCMP), following the procedures established by the SVP (SVP 2010).
GEO/mm-1.5	In the event that paleontological resources are exposed during project work, regardless of the location or geologic units in which the fossils occur, work in the immediate vicinity of the find must stop until a qualified paleontologist can evaluate the significance of the find. Ground disturbing activities may continue in other areas outside an appropriate buffer, usually 50 feet. If the paleontologist determines the discovery to be significant, the fossil(s) should be salvaged.
Greenhouse Gas Mitigation Measures	
GHG/mm-1.1	To the extent feasible, construction workers living outside San Mateo County shall meet at designated areas and be transported (in carpools) to the project area.
GHG/mm-1.2	Idling of construction vehicles and equipment shall be minimized to the extent feasible. Construction foremen shall include briefing crews on vehicle use as part of pre-construction conferences. These briefings shall include discussion of “common sense” vehicle use.
GHG/mm-1.3	All off-road construction diesel engines shall meet Tier 2 California Emission Standards for Off-Road Compression-Ignition Engines.

Hazardous Materials Mitigation Measures	
HAZ/mm-1.1	Prior to the issuance of a grading permit, the Applicant shall submit a construction safety plan to the County and City Planning Departments for review and approval. The purpose of the plan would be to minimize the exposure of the public, environment, and construction workers to potentially hazardous materials during all phases of project construction. The plan shall require implementing appropriate control methods and approved containment and spill-control practices (e.g. spill control plan) for construction chemicals and materials used and stored on site.
Noise Mitigation Measures	
NOI/mm-1.1	The Applicant shall incorporate the following conditions in all related construction contract agreements to reduce construction noise impacts in both San Mateo County and City of Redwood City: *i.* Muffle and maintain all equipment used on site. All internal combustion engine driven equipment shall be fitted with mufflers, which are in good condition. Good mufflers shall result in non-impact tools generating a maximum noise level of 80 dB when measured at a distance of 50 feet. *ii.* Utilize quiet models of air compressors and other stationary noise sources where technology exists. *iii.* Locate stationary noise-generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area. *iv.* Prohibit unnecessary idling of internal combustion engines. *v.* Control noise from construction workers' radios to the point where they are not audible at existing residences that border the project area. *vi.* Notify residents adjacent to the project area of the construction schedule in writing.
NOI/mm-1.2	Post a sign at the construction entrance to inform all contractors and subcontractors of the basic limitations upon noise and construction activities.
Biological Mitigation Measures	
BIO/mm-1.1	**Conduct Focused Preconstruction Surveys**. Prior to construction, a focused survey in the appropriate blooming season for bent-flowered fiddleneck (March-June) will be conducted within the coast live oak forest and California annual grassland.
BIO/mm-1.2	**Avoid Populations of Bent-Flowered Fiddleneck**. To the extent practicable, the Applicant will avoid impacts on bent-flowered fiddleneck if any individuals are identified during the surveys described in BIO/mm-1.1. All plants are to be avoided and will be protected by a buffer zone established prior to site grading, trenching, or road widening. The buffer will be established 50 feet from the perimeter of the population or the individual plants, or as otherwise determined by a qualified botanist. Additional protective measures may be required by the qualified botanist to protect the plants from all impacts; for example, use of silt fencing or temporary shielding from work areas using tarps or similar to protect any individuals from dust deposition. Avoidance is the preferred form of mitigation for this species. Project impacts (including impacts within the designated buffer) on up to a maximum of 20 percent of the individuals of the population on the project area would not result in significant impacts to bent-flowered fiddleneck. If more than 20 percent of the individuals of this species were to be impacted by project implementation, then the impact would be considered significant and require further mitigation as described in BIO/mm-1.3
BIO/mm-1.3	**Preservation, Enhancement, and Management**. If avoidance of bent-flowered fiddleneck is not feasible, and more than 20 percent of individuals in the project area population would be impacted, mitigation will be provided via the preservation, enhancement, and management of occupied habitat for this species. Habitat that currently supports the species will be preserved in perpetuity.

	The mitigation habitat will be of equal or greater habitat quality compared to the impacted areas, as determined by a qualified botanist, in terms of soil features, extent of disturbance, vegetation structure, and dominant species compositions, and will contain at least as many individuals of the bent-flowered fiddleneck as are impacted by project activities. The permanent protection and management of mitigation lands will be ensured through an appropriate mechanism, such as a conservation easement or fee title purchase. A Habitat Mitigation and Monitoring Plan (HMMP) will be developed and implemented for mitigation lands. That plan will include at a minimum the following information: • A summary of habitat impacts and the proposed mitigation • A description of the location and boundaries of the mitigation site and descriptions of existing site conditions • A description of measures to transplant individual plants or seeds from the impact area to the mitigation site, if appropriate (which will be determined by a qualified botanist) • Proposed management activities to maintain high-quality habitat conditions for the focal species • A description of habitat and species monitoring measures on the mitigation site, including specific objective final and performance criteria, monitoring methods, data analysis, reporting requirement, monitoring schedule, etc. • Contingency measures for mitigation elements that do not meet performance criteria The HMMP will be prepared by a qualified biologist, and the City County will need to approve the HMMP prior to the impact.
BIO/mm-2.1	**Conduct Focused Preconstruction Surveys**. Prior to construction, a focused survey in the appropriate blooming season for San Mateo woolly sunflower (May-June) will be conducted within the coast live oak forest, including the proposed water line area with serpentine geology.
BIO/mm-2.2	**Avoid Populations of San Mateo woolly sunflower**. To the extent practicable, the Applicant will avoid impacts on San Mateo woolly sunflower if any individuals are identified during the surveys described in Mitigation Measure BIO/mm-2.1. All plants are to be avoided and will be protected by a buffer zone established prior to site grading, trenching, or road widening. The buffer will be established 50 feet from the perimeter of the population or the individual plants, or as otherwise determined by a qualified botanist. Additional protective measures may be required by the qualified botanist to protect the plants from all impacts; for example, use of silt fencing or temporary shielding from work areas using tarps or similar to protect any individuals from dust deposition.
BIO/mm-3.1	**Preconstruction survey.** No more than one week prior to initial ground disturbance, a preconstruction survey for woodrat nests will be conducted within the project area by a qualified biologist. The survey will consist of walking the project limits and all areas within the project area looking for woodrat nests.
BIO/mm-3.2	**Disturbance-Free Buffers.** Dusky-footed woodrats are year-round residents. Therefore, avoidance mitigation is limited to designing the project to avoid direct impacts on woodrat nests to the extent feasible. Ideally, a minimum 10-foot buffer should be maintained between project construction activities and each nest to avoid disturbance. In some situations, a smaller buffer may be allowed if in the opinion of a qualified biologist removing the nest would be a greater impact than that anticipated due to project activities.
BIO/mm-3.3	**Relocation of Nest Materials.** If active woodrat nests are found within the project boundary during the preconstruction survey and avoidance is not feasible, the woodrats will be evicted from their nests prior to the removal of the nests and onset of ground-disturbing activities to avoid injury or mortality of the woodrats. A qualified biologist will disturb and slowly dismantle the woodrat nest to the degree that all woodrats leave the nest and seek refuge outside of the project activity area. If dependent woodrat young are observed within the nest during dismantling, the biologist will stop dismantling, and install a buffer to allow additional time for the adults and young to disperse offsite. Once adults and young have dispersed offsite, the biologist will then complete dismantling of the

	nest. Subsequently, the nest sticks will be relocated; these materials will be piled at the base of a nearby tree or shrub outside of the activity area. The spacing between relocated nests will not be less than 20 feet, unless a qualified biologist has determined that the habitat can support higher densities of nests.
BIO/mm-4.1	**Preconstruction survey.** No more than 24 hours prior to initial ground disturbance, a preconstruction survey for the western pond turtle will be conducted by a qualified biologist. The survey will consist of walking along the riparian corridor looking for turtles along the drainage features. If an adult or juvenile western pond turtle is found, project activities near the turtle will cease until the individual has been captured and relocated to suitable habitat outside of the activity area by a qualified biologist.
BIO/mm-5.1	**Avoidance.** To the extent feasible, construction activities should be scheduled to avoid the nesting season. If construction activities are scheduled to take place outside the nesting season, all impacts to nesting birds protected under the MBTA and California Fish and Game Code will be avoided. The nesting season for most birds in San Mateo County extends from February 1 to August 31.
BIO/mm-5.2	**Preconstruction/Pre-disturbance Surveys.** If it is not possible to schedule construction activities between September 1 and January 31, then pre-construction surveys for nesting birds should be conducted by a qualified ornithologist to ensure that no nests will be disturbed during project implementation. We recommend that these surveys be conducted no more than seven days prior to the initiation of construction activities. During this survey, the ornithologist will inspect all trees and other potential nesting habitats (e.g., shrubs, California annual grasslands, and buildings) in and immediately adjacent to the impact areas for nests. If an active nest is found sufficiently close to work areas to be disturbed by these activities, the ornithologist should determine the extent of a construction-free buffer zone to be established around the nest (300 feet for raptors, 100 feet for non-raptors) to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during project implementation.
BIO/mm-5.3	**Inhibition of Nesting.** If construction activities will not be initiated until after the start of the nesting season, all potential nesting substrates that are scheduled to be removed by the project should be removed prior to the start of nesting seasons. This will preclude the initiation of nests in this vegetation, and prevent the potential delay of the project due to the presence of active nests in these substrates.
BIO/mm-6.1	**Pre-Construction Bat Survey.** Prior to tree removal or grading of rocky outcrops, a qualified bat biologist shall conduct a visual and acoustic survey of the project area to identify if bats are roosting within trees or rocky outcrops within the project area. Sensitive habitat areas and roost sites should be avoided to the maximum extent possible. If no roosting sites or bats are observed during the survey, a letter report detailing the survey observations shall be sent to the CDFW and no further mitigation is necessary. If roosting bats or indications of bat roosts are observed within the project area and cannot be avoided, CDFW will be consulted to determine if bat roost replacement is required. If required, roost replacement will be implemented before construction activities begin. Roost replacement, if required, will be implemented using suggested mitigation strategies such as those described in the Caltrans' California Bat Mitigation Techniques, Solutions, and Effectiveness report[1] and will be based on species-specific roosting requirements. Roost replacement will be conducted on site to the extent feasible. If roosting bats or indications of bat roosts are observed within project trees to be removed, tree removal shall be conducted between September 1 and March 30 to avoid impacts to maternal bat roosts. During tree removal and where potential bat roosts were identified, a qualified bat biologist shall be present and tree removal will begin with portions of the tree that do not provide suitable roost habitat (e.g., low limbs lacking forage). Trees will be disassembled at a speed in coordination with the on-site qualified bat biologist that allows any roosting bats to vacate the tree.

[1] Johnston D., G. Tatarian, E. Pierson. 2004. California Bat Mitigation Techniques, Solutions, and Effectiveness. Prepared for California Department of Transportation and California State University Sacramento Foundation. December 29, 2004.

BIO/mm-7.1	**Prevent Spread of Weeds and Invasive Species**. The project proponent will employ the following Best Management Practices (BMPs) for weed control to avoid and minimize the spread of invasive plant species: • Prior to grading or soil disturbance, infestation of French broom within areas of direct permanent or temporary disturbance will be removed and all vegetative material will be incinerated off-site or disposed of in a high-temperature composting facility that can compost using methods known to kill weed seeds, taking care to prevent any seed dispersal during the process by bagging material or covering trucks transporting such material from the project area. • Following project construction, native seed from a local source will be planted on all disturbed ground that will not be landscaped and maintained. This will prevent the germination of the majority of seeds from non-native, invasive plant species. • Non-invasive landscaping plantings will be established in areas to be landscaped, and native species should be used in landscaping to the extent practicable. • Heavy equipment used in the project activity area will be washed prior to and following work at the site, before the equipment is used in other ground-disturbing activities, to prevent spread of weed seeds.
BIO/mm-8.1	**Avoidance of Riparian Impacts**. To the extent feasible, impacts to the riparian habitat will be avoided. Removal of riparian vegetation and trees will be limited to the minimum extent required to construct the project.
BIO/mm-8.2	**Revegetate Impacted Riparian Habitat.** Wherever temporary impacts within riparian habitat would remove vegetation from the ground surface, the areas will be reseeded with a native seed mix to stabilize soils, prevent the growth of weed infestations, and maintain water quality functions within the riparian corridor.
BIO/mm-8.3	**Provide Compensatory Mitigation to Replace Lost Trees**. The project will comply with the Redwood City and/or San Mateo County tree removal ordinances, as applicable, and obtain a tree removal permit for ordinance-sized trees. Trees to remain in place will have tree protection zones established around the canopy drip line zone to avoid serious injury or loss. Compensation for all riparian tree removal will be provided. All significant trees subject to removal in the County shall be mitigated at a 3:1 ratio, as required by Section 12,024 of the County Municipal Code, or as otherwise directed by the County Arborist or Community Development Director. All trees subject to removal in the City shall be mitigated at a 1:1 ratio in accordance with City requirements, or as otherwise directed by the City Arborist. Tree mitigation may occur on site if feasible for the area (as determined by the Community Development Director), or the mitigation may be located off site in a location deemed reasonably equivalent to the project site, or in a combination of on site and off site. For any replacement trees that cannot be reasonably placed on or off site, the Community Development Director shall require an in-lieu payment in accordance with County standards. An open space or conservation easement, or other similar instrument, will be recorded on property associated with the mitigation lands to protect the created habitats and associated plant and wildlife resources in perpetuity. A Riparian Mitigation & Monitoring Plan (RMMP) for riparian habitat creation and tree planting will be prepared by a qualified restoration ecologist and will provide, at a minimum, the following: • Habitat impacts summary and proposed habitat mitigation actions. • Goals of the restoration to achieve no net loss. • The location of the mitigation sites and existing site conditions. • Mitigation design including: - Proposed site construction schedule

	- Description of existing and proposed soils, hydrology, geomorphology, and geotechnical stability - Site preparation and grading plan - Invasive species eradication plan, if applicable - Soil amendments and other site preparation - Planting plan (plant procurement/propagation/installation) - Maintenance plan - Monitoring measures, performance and success criteria - Monitoring methods, duration and schedule - Contingency measures and remedial actions - Reporting measures The RMMP will be prepared by a qualified biologist, and the County will need to approve the RMMP prior to the impact.
BIO/mm-9.1	**Avoidance and Minimization.** Project activities will be conducted in a way that minimizes and avoids fill placement within the regulated drainage swales on site. A clear span bridge with abutments placed outside the top of bank may be used to avoid construction impacts to the unnamed tributary of Arroyo Ojo de Agua (intermittent drainage).
BIO/mm-9.2	**Compensate for Permanent Impacts on Drainage Swales.** Potential impacts within the regulated habitats on site include both temporary and permanent effects. Temporary impacts may occur as part of construction access, grading, staging, or stockpiling of materials. Direct, permanent fill impacts may include road widening, culvert lengthening, and placement of a bio-swale feature in the existing minor drainage features. Direct permanent fill impacts on aquatic habitat below the ordinary high water mark of the drainage features will be mitigated at a ratio of 1:1. This mitigation will be described in detail and included in the RMMP discussed in BIO/mm-8.3. No mitigation is required for temporary impacts that occur only over one dry season period (May 1 to September 30) and that are seeded, returned to original contours, or landscaped prior to the next rainy season. Direct impacts from culvert lengthening can be mitigated by use of an open-bottom culvert such that a native bottom can return to the drainage feature.
BIO/mm-10.1	**Tree Protection Zones**. Trees that are intended to remain in the project area will be protected during project construction to the extent feasible. Protection will include the establishment of Tree Protection Zones (TPZs), which at a minimum will include the installation of a fence around the drip line of ordinance-sized trees, restructured construction activity within the dripline, and the posting of appropriate signage on the fence. These measures create an area of protection around the trees and reduce the threat of damage. Ordinance-sized trees that are subject to ground-disturbing construction activities within any portion of their dripline will be considered lost, unless a certified arborist determines that the tree is unlikely to be severely damaged or killed by such activities.
BIO/mm-10.2	**Tree Protection Plan (TPP).** All ordinance-sized trees to be removed, avoided, or protected will be depicted on project plans. A TPP will be generated by a certified arborist to include all trees that are to be avoided or protected in the study area.
BIO/mm-10.3	**Tree Destruction Permit and Tree Replacement.** The project proponent will comply with the local ordinances and submit permit applications for removal, trimming, damage, or relocation of all trees covered by the ordinance. Any trees to be removed may require replacement according to the discretion of the local authority. Typically, replacement trees within the County are to be California native species, planted as near as possible to the original location, with a minimum of 5-inch box size, as required by Section 12,024 of the County Municipal Code, or as otherwise directed by the County and/or City Arborist. Replacement trees within the City are to be California native species, typically planted as near as possible to the original location, with a 24-inch box

	size for trees greater than 18 inches in diameter (measured between 6 and 36 inches above grade) and a minimum 5-inch box size (approximately 15 gallons) for trees less than 18 inches (measured between 6 and 36 inches above grade). The replacement trees will be planted on site to the extent feasible and the project proponent will comply with all other replacement requirements imposed by the local authority. If replacement on site is not feasible, the Applicant will conduct the alternative mitigation for the tree loss, such as in lieu fee payment, as acceptable to the local authority.
	Wildfire Mitigation Measures
WF/mm-1.1	Smoking during project construction shall be prohibited except in designated areas, at least 20 feet from any combustible chemical/material and off of dry vegetation.
WF/mm-1.2	To minimize potential construction-related fire hazards, a Fire Awareness and Avoidance Plan shall be prepared. The Plan shall include the following measures: *a.* Fire preventative measures addressing cutting and grinding and welding *b.* Maintaining fire extinguishers in every vehicle on site *c.* Maintaining appropriate firefighting equipment, such as shovels, axes, or Pulaski's in all rubber-tired construction vehicles *d.* Equipping all construction equipment with appropriate spark arrestors and functioning mufflers *e.* Communication with emergency response agencies These requirements shall be noted in plan specifications and the Fire Awareness and Avoidance Plan shall be included in the project plans. The County and City shall review the plans and inspect the project site prior to construction to ensure consistency with these requirements.
WF/mm-1.3	Prior to the commencement of grading and paving activities associated with Canyon Lane, roadside vegetation shall be cleared by at least 10 feet on each side of the roadway and up to 15 vertical feet.

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT C

Draft EIR

Due to file size, a copy of the Draft EIR (with Appendices) is available at the following locations for review:

Electronic version available at:
https://planning.smcgov.org/canyon-lane-roadway-improvements-development-emerald-lake-hills

Print version available at:
County of San Mateo Planning and Building Department,
455 County Center, 2nd Floor,
Redwood City, CA 94063