County of San Mateo
Planning and Building Department

INITIAL STUDY
ENVIRONMENTAL EVALUATION CHECKLIST
(To Be Completed by Planning Department)

1. **Project Title:** New Single-Family Dwelling and Interior Second Unit

2. **County File Number:** PLN 2018-00458

3. **Lead Agency Name and Address:** County of San Mateo Planning and Building Department 455 County Center, 2nd Floor, Redwood City, CA 94063

4. **Contact Person and Phone Number:** Laura Richstone, Project Planner; 650/363-1829, LRichstone@smcgov.org

5. **Project Location:** Sunshine Valley Road, Moss Beach (vacant parcel)

6. **Assessor's Parcel Number and Size of Parcel:** 037-156-130

7. **Project Sponsor's Name and Address:** David Jaehning, 25 Forest Side Avenue, San Francisco, CA 94127

8. **Name of Person Undertaking the Project or Receiving the Project Approval (if different from Project Sponsor):** N/A

9. **General Plan Designation:** Medium Density Residential Urban

10. **Zoning:** R-1/S-17/DR/CD (Single-Family/Midcoast Combining District/Design Review/Coastal Development)

11. **Description of the Project:** Design Review, Certificate of Compliance Type A, Coastal Development Permit, and Variance for the construction of a new 2,190 sq. ft. three-story single-family residence to include an interior 730 sq. ft. second unit on a 5,000 sq. ft. parcel and allow: (1) an 18-foot rear-yard setback where 20 feet is the minimum required, (2) a height of 31'-4'' where 28 feet is the maximum allowed, and (3) two tandem uncovered parking spaces located in the right side-yard setback, where two non-tandem covered parking spaces are required. The construction of a new 23-foot long bridge across an existing intermittent creek located at the front of the property is also proposed to provide access to the subject property. Ten trees (including eight significant and two non-significant trees) are proposed for removal and only minor grading is proposed.

12. **Surrounding Land Uses and Setting:** The 5,000 sq. ft. parcel is vacant and located on the south side of Sunshine Valley Road east of Crescent Avenue in a single-family residential area. Dean Creek (an intermittent creek) bisects the front of the parcel. Associated riparian vegetation is located just off the project parcel further to the east. In the past the parcel has been utilized as an extended side yard area for the residence located at 1855 Sunshine Valley Road and is improved with garden beds and an at grade patio area.

13. **Other Public Agencies Whose Approval is Required:** N/A

14. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?:** *(NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process (see Public Resources Code Section 21080.3.2.). Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality).*

    This project is not subject to Assembly Bill 52, as the County of San Mateo has no records of requests for formal notification of proposed projects within the County from any traditionally or culturally affiliated California Native American Tribes. However, the County seeks to satisfy the Native American Heritage Commission's best practices and has referred this project to all tribes within San Mateo County. As of the date of this report, no tribes have contacted the County requesting formal consultation on this project.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Significant Unless Mitigated" as indicated by the checklist on the following pages.

X	Aesthetics		Energy		Public Services
	Agricultural and Forest Resources	X	Hazards and Hazardous Materials		Recreation
X	Air Quality	X	Hydrology/Water Quality	X	Transportation
X	Biological Resources		Land Use/Planning	X	Tribal Cultural Resources
X	Climate Change		Mineral Resources		Utilities/Service Systems
X	Cultural Resources		Noise		Wildfire
X	Geology/Soils		Population/Housing		Mandatory Findings of Significance

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No

Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.

4. "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in 5. below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other California Environmental Quality Act (CEQA) process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.

    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c. Mitigation Measures. For effects that are "Less Than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources. Sources used or individuals contacted should be cited in the discussion.

1.	**AESTHETICS**. Except as provided in Public Resources Code Section 21099, would the project:				
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
1.a.	Have a substantial adverse effect on a scenic vista, views from existing residential areas, public lands, water bodies, or roads?			X	

Discussion: Due to the required 30-foot creek and riparian setbacks, this project includes and application for a Variance to allow: (1) an 18-foot rear-yard setback where 20 feet is the minimum required, (2) a height of 31'-4'' where 28 feet is the maximum allowed, and (3) two tandem uncovered parking spaces located in the right side-yard setback, where two non-tandem covered parking spaces are required.

The parcel is not located within a County or State Scenic Corridor. The Cabrillo Highway County Scenic Corridor is the closest adjacent scenic corridor and is located approximately 220 feet south of the project parcel. The project will not impact views from any public lands, water bodies, or the scenic corridor itself, due to the surrounding topography and dense vegetation. Though the project will be visible from Sunshine Valley Road, it is deeply set within the lot (37 feet away from the front property line), employs natural wood siding, a dark metal roof and will be partially screened by proposed landscaping. The landscaping, in combination with the location of the residence on the lot and the natural materials, will reduce the residence's scale and visibility from Sunshine Valley Road and will not have a substantial adverse effect on views from the road. On July 11, 2019, the Coastside Design Review Committee (CDRC) recommended approval of the residence, as proposed and recommended conditions to the San Mateo County Planning Commission, based on findings that include compliance with applicable Design Review standards such as the design of the residence, its compatibility with the neighborhood, use of materials and colors, and landscaping.

Source: Project Plans; Project Location; San Mateo County Zoning Regulations.

1.b.	Substantially damage or destroy scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	

Discussion: The project parcel is not located within a state scenic highway. The subject parcel has been utilized as an additional backyard and garden area for the adjacent residence and contains no historic buildings or rock outcroppings. The project parcel is located on the edge of a riparian corridor and will involve the removal of invasive and non-native vegetation along Dean Creek, the removal of ten trees (eight significant and two non-significant trees) and the removal of the turf and garden area associated with the neighboring residence. Though vegetation removal will be required to accommodate the proposed project, the project includes a plan to plant native riparian plant and tree species along Dean Creek and adjacent to the riparian corridor (see Section 4 for further discussion on riparian plantings). The project, including the revegetation with native riparian species will screen the project from the adjacent road, reduce its visual impact, and not substantially damage or destroy scenic resources.

Source: Project Plans; Project Location.

1.c.	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings, such as significant change in topography or ground surface relief features, and/or development on a ridgeline? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	

Discussion: The project parcel is zoned R-1/S-17/DR/CD (Single-Family Residential/Midcoast S-17 Combining District/Design Review/Coastal Development), is located in an urbanized area, and is adjacent to existing single-family residences located to the south, west, and north. Located approximately 1,000 feet to the west of the project parcel, Moss Beach Park (Park) is the nearest public park. The project parcel is relatively flat, contains a slight incline toward the rear property line, and is not located on a ridgeline. The project involves minimal grading due to the relatively flat nature of the parcel and will not create a significant change in topography. Due to the distance and exiting tree cover between the project parcel and the Park, views from the Park will not be impacted from the proposed structure.

Dean Creek is located at the front property line and a riparian corridor is located to the right of the project parcel. In compliance with Local Coastal Program (LCP) Policies, the structure maintains a 30-foot buffer from both Dean Creek and the edge of the riparian corridor located off site. These buffer areas place the structure deeper into the lot (37 feet from the front property line) and 15 feet from the right side property line reducing its visual impact and overall appearance. Though the development will involve vegetation and tree removal activities, the project includes a plan to revegetate the parcel with native riparian plant and tree species. The proposed revegetation will rehabilitate the native vegetation that was once on-site but was removed to accommodate gardens and turf for the neighboring residence and will provide screening from Sunshine Valley Road.

On July 11, 2019, the Coastside Design Review Committee (CDRC) recommended approval of the residence to the San Mateo County Planning Commission. As proposed and conditioned, the project is compliant with the applicable design review standards of the DR Zoning District and the Community Design Manual, and meets all applicable, General Plan, Local Coastal Program and Variance provisions.

Source: Project Plans; Project Location; San Mateo County Zoning Regulations; San Mateo County GIS.

1.d.	Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?		X		

Discussion: This project is located within a Design Review (DR) District. Lighting standards within the DR District include reducing the overall number of exterior lights and designing/locating exterior lights so as to confine and direct rays to the subject property and prevent glare in the surrounding area. While the property does not currently have any light sources, it is located adjacent to a single family residence which has existing light sources and is visible from Sunshine Valley Road. The project includes six new bollard lights along the bridge/driveway, one light at the front entrance, and one light at the rear entrance of the residence. No lights are proposed facing the riparian corridor to

reduce overall lighting and impacts to the riparian corridor. The presence of the proposed exterior lights where none had existed before would increase overall nighttime ambient lighting of the area. As indicated by cut sheets provided by the applicant, the proposed lights are certified dark sky compliant in an effort to meet the design review standards and reduce light pollution as much as possible. The project was reviewed and approved by the CDRC and found to be in compliance with the DR exterior lighting standards. To further reduce potential impacts, the following mitigation measure is recommended:

Mitigation Measure 1: All exterior lights shall be certified dark sky compliant. Prior to the final approval of the building permit, exterior lighting shall be inspected to verify installed lighting is dark sky compliant.

Source: Project Plans; Project Location; San Mateo County Zoning Regulations.

1.e.	Be adjacent to a designated Scenic Highway or within a State or County Scenic Corridor?				X

Discussion: The nearest adjacent County Scenic Corridor is the Cabrillo Highway Scenic Corridor which is located approximately 220 feet south of the project parcel. Due to the dense vegetation of the area, the project site is not visible from Cabrillo Highway or the Cabrillo Highway Scenic Corridor. No visual impacts are expected.

Source: Project Site; San Mateo County GIS.

1.f.	If within a Design Review District, conflict with applicable General Plan or Zoning Ordinance provisions?			X	

Discussion: The project is located within a Design Review District and complies with all applicable General Plan, LCP, and Zoning Provisions. See Sections 1.c and 1.d for further discussion.

Source: Project Plans; Project Location; San Mateo County Zoning Regulations; San Mateo County Local Coastal Program; San Mateo County General Plan.

1.g.	Visually intrude into an area having natural scenic qualities?			X	

Discussion: The project site is located adjacent to a riparian corridor in a heavily vegetated single-family residential Midcoast Design Review District area. Though three stories in height, the appearance and scale of the residence will be reduced due to its deep location within the lot (i.e., 37 feet from the front property line). Proposed landscaping will provide screening from Sunshine Valley Road and the utilization of a dark colored roof and natural cedar wood siding will help the structure blend in with the surrounding natural vegetation. Due to its location, proposed landscaping, reduced exterior lighting (see Section 1.d for further discussion), utilization of natural colors and materials, and compliance with the Design Review Standards (as reviewed and approved by the CDRC in July 2019), the project will have a less than significant impact on the visual quality of the area.

Source: Project Plans; Project Location; San Mateo County Zoning Regulations.

2. AGRICULTURAL AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
2.a.	For lands outside the Coastal Zone, convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X

Discussion: The project parcel is located within the Coastal Zone. The parcel is identified as "Urban and Built-Up Land" on the California Important Farmland Finder and the California Farmlands of Statewide Importance Map. The parcel is not located within an area that is mapped or designed as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. As such, the project will not convert Farmland to a non-agricultural use.

Source: San Mateo County Geographic Information System; California Department of Conservation Important Farmland Finder Map, https://maps.conservation.ca.gov/DLRP/CIFF/; California Department of Conservation – San Mateo County Important Farmland Map, 2018.

2.b.	Conflict with existing zoning for agricultural use, an existing Open Space Easement, or a Williamson Act contract?				X

Discussion: The project parcel is not contracted or encumbered by an Open Space Easement or a Williamson Act Contract, nor are there any surrounding lands under Contract or encumbered by any such Open Space Easement. The project parcel is located near the County Urban/Rural boundary and sits approximately 85 feet away from undeveloped, vacant parcels zoned for agricultural use. These agriculturally zoned parcels are located further east on Sunshine Valley Road and are zoned RM-CZ/DR/CD (Resource Management-Coastal Zone/Design Review/Coastal Development). Though the project parcel is located near parcels that could potentially be used for agricultural purposes (per their zoning designation), these adjacent parcels are located within a riparian corridor as noted in the Biological Impact Assessment Report (Attachment E). Any future agricultural activities on these parcels will be limited due to potential environmental and biological impacts associated with working within riparian corridor. As such, the construction of a single-family residence and interior second unit in a single-family residentially zoned area is not expected to conflict with surrounding single-family development nor agriculturally zoned parcels located near the project parcel.

Source: Project Location; San Mateo County GIS.					
2.c.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forestland to non-forest use?			X	
Discussion: The project parcel is not designated as Farmland (see response to Section 2.a). Forest land is defined as *land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits (PRC 12220(g)).* Though the parcel supports more than 10% native tree cover, forest resources management is not feasible given parcel size (5,000 sq. ft.) and the residential land use designation of the parcel. **Source:** Project Plans, California Department of Conservation Important Farmland Finder Map, https://maps.conservation.ca.gov/DLRP/CIFF/ ; Public Resources Code.					
2.d.	For lands within the Coastal Zone, convert or divide lands identified as Class I or Class II Agriculture Soils and Class III Soils rated good or very good for artichokes or Brussels sprouts?			X	
Discussion: The subject parcel is located within the Coastal Zone. The Natural Resources Conservation Service (NRCS) has developed a Land Capability Classification System as a way to group and classify soils on the basis of their capability to produce crops without deterioration over a long period of time. The NRCS Web Soil Survey has identified the non-irrigated Land Capability Class ratings of the soils on the project parcel as Class 3. Class 3 soils are defined by the NRCS as *soils that have severe limitations that reduce the choice of plants or require special conservation practices*. Per the General Plan Productive Soils Resources with Agricultural Capability Map the project site is not identified as being able to support the cultivation of artichokes or Brussel sprouts. The project parcel is zoned for single-family residential development and has not been used for agricultural purposes or the cultivation of agricultural commodities in the past. Historically, the project parcel has been disturbed and utilized as a garden/backyard area for the adjacent residence. Though the development would result in the conversion of Class 3 soils to residential use, with no current agricultural use of the project site or adjacent properties, the proposed development would not result in the significant loss of agricultural land or soil capability. **Source:** Zoning Maps; Natural Resources Conservation Service Web Soil Survey; San Mateo County General Plan Productive Soil Resources Soils with Agricultural Capability Map; Local Coastal Program Midcoast Agriculture Map.					
2.e.	Result in damage to soil capability or loss of agricultural land?			X	
Discussion: See Section 2.d for further discussion. **Source:** Zoning Maps; Natural Resources Conservation Service Web Soil Survey; San Mateo County General Plan Productive Soil Resources Soils with Agricultural Capability Map.					

2.f.	Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? *Note to reader: This question seeks to address the economic impact of converting forestland to a non-timber harvesting use.*				

Discussion: The project parcel is zoned for single-family residential development (R-1/S-17/DR/CD) and as such, is not located in a Timberland Preserve Zoning District nor is timber harvesting a permitted use on this property. The project parcel is dominated by riparian vegetation and mature trees. While the parcel supports more than 10% native tree cover, forest resources management is not feasible given parcel size (5,000 sq. ft.) and the residential land use designation of the parcel. The proposed development of a single family residential structure with an interior second unit is an allowed use in the R-1 (single-family residential) District. The project does not conflict with the zoning, would not require a rezoning of the area, nor interfere with timberland production elsewhere on appropriately zoned lands.

Source: San Mateo County Zoning Maps; Public Resources Code; San Mateo County Zoning Regulations.

3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
3.a.	Conflict with or obstruct implementation of the applicable air quality plan?		X		

Discussion: The Bay Area 2017 Clean Air Plan (CAP), developed by the Bay Area Air Quality Management District (BAAQMD), is the applicable air quality plan for San Mateo County. The CAP was created to improve Bay Area air quality and to protect public health and climate.

The proposed project would not conflict with or obstruct the implementation of the BAAQMD's 2017 CAP. The project and its operation involve minimal hydrocarbon (carbon monoxide: CO2) air emissions, whose source would be exhaust from vehicle trips (e.g., construction vehicles and personal cars of construction workers), whose primary fuel source is gasoline, during its construction. Due to the site's residential location and assuming construction vehicles and workers are based in commercial areas (either on the Coastside or Bayside), potential project air emission levels from construction would be increased from general levels. However, any such construction-related emissions would be temporary and localized and would not conflict with or obstruct the Bay Area Air Quality Plan. Similarly, once constructed ongoing use of the single-family residence and second unit would have minimal impacts to air quality standards. The BAAQMD has established thresholds of significance for construction emissions and operational emissions. As defined in the

BAAQMD's 2017 CEQA Guidelines, the BAAQMD does not require quantification of construction emissions due to the number of variables that can impact the calculation of construction emissions. Instead, the BAAQMD emphasizes implementation of all feasible construction measures to minimize emissions from construction activities. The BAAQMD provides a list of construction-related control measures that they have determined, when fully implemented, would significantly reduce construction-related air emissions to a less than significant level. These control measures have been included in Mitigation Measure below.

Mitigation Measure 2: The applicant shall require construction contractors to implement all the Bay Area Air Quality Management District's Basic Construction Mitigation Measures, listed below:

a. Water all active construction areas at least twice daily.

b. Apply water two times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking, and staging areas at construction sites. Also, hydroseed or apply non-toxic soil stablizers to inactive construction areas.

c. Sweep daily all paved adjacent public streets daily (preferably with water sweepers) if visible soil material is carried onto them.

d. Limit traffic speeds on unpaved roads within the project parcel to 15 miles per hour.

e. All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

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 [CCR]). Clear signage shall be provided for construction workers at all access points.

g. Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand etc.) that can be blown by the wind.

h. Replant vegetation in disturbed areas as quickly as possible.

I. Install erosion control measures to prevent silt runoff to public roadway and/or into Dean Creek.

j. All haul trucks transporting soil, sand, or other loose material on and off site shall be covered.

k. Roadways and building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

l. A publicly visible sign with the telephone number and person to contact at the project site regarding dust complaints shall be posted. 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.

Also, see the discussion to Question 7.1 (Climate Change: Greenhouse Gas Emissions), relative to the project's compliance with the County Energy Efficiency Climate Action Plan.

Source: BAAQMD CEQA Guidelines, May 2017; Project Plans.

3.b.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?		X		

Discussion: The San Francisco Bay Area Air Basin is a State designated non-attainment area for Ozone, Particulate Matter (PM10), and Fine Particulate Matter (PM-2.5). On January 9, 2013, the Environmental Protection Agency (EPA) issued a final rule to determine that the Bay Area attained the 24-hour PM-2.5 national standard. However, the Bay Area will continue to be designated as "non-attainment" for the national 24-hour PM-2.5 standard until the BAAQMD submits a "re-designation request" and a "maintenance plan" to the EPA and the proposed re-designation is approved by the EPA. A temporary increase in PM-2.5 in the project area is anticipated to occur during construction since these PM-2.5 particles are a typical vehicle emission. Therefore, any increase in these criteria pollutants would be significant. The temporary nature of the proposed construction and California Air Resources Board vehicle regulations will reduce the potential effects of increased PM-2.5 to a less than significant impact. Implementation of the following Mitigation Measure 2 would minimize increases in non-attainment criteria pollutants generated from project construction to a less than significant level.

Source: Project Plans, Bay Area Air Quality Management District.

3.c.	Expose sensitive receptors to substantial pollutant concentrations, as defined by the Bay Area Air Quality Management District?		X		

Discussion: Sensitive receptors are facilities or land uses such as schools, hospitals, or residential areas where people live, play, convalesce, or a place where insensitive individuals spend significant amounts of time. Sensitive individuals, such as children and the elderly, are those most susceptible to poor air quality.

The project site is located in a residential area with sensitive receptors (i.e., single-family residences) located to the west, south, and north of the project parcel. Pollutant concentrations associated with the occupation of the single-family residential structure and interior second unit are expected to less than significant. However, though pollutant emissions generated from the construction of the proposed project will primarily be temporary in nature they have the potential to negatively impact nearby sensitive receptors. As such, implementation of Mitigation Measure 2 will minimize potentially significant exposure of pollutants to nearby sensitive receptors to a less than significant level.

Source: Project Plans, Project Location.

3.d.	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?		X		

Discussion: Once operational, the proposed project, which includes the construction of a single-family residence, interior second unit, and 23-foot long access bridge over Dean Creek, will not result in adverse emissions. The project has the potential to generate emissions during construction such as noise and odor. However, any such odors will be temporary and are expected to be minimal. Mitigation Measure 3 below is recommended to reduce noise emissions related to

the construction of the proposed development to a less than significant level.

Mitigation Measure 3: Noise sources associated with demolition, construction, repair, remodeling, or grading of any real property shall be limited to the hours from 7:00 a.m. to 6:00 p.m., weekdays and 9:00 a.m. to 5:00 p.m., Saturdays. Said activities are prohibited on Sundays, Thanksgiving, and Christmas (San Mateo Ordinance Code Section 4.88.360).

Source: Project Plans.

4. BIOLOGICAL RESOURCES. Would the project:

		Potentially Significant Impacts	*Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
4.a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		

Discussion: A Biological Impact Report (Attachment E) conducted Coast Ridge Ecology (dated August 2018) and a memorandum to the Biological Impact (Attachment F) conducted by SWCA Environmental Consultants (dated January 2019) were prepared. The site was surveyed on July 12, and July 20, 2018 by two CRE biologists – Patrick Kobernus and Jennifer Radtkey. The CRE biologists conducted a reconnaissance-level field survey of the project parcel and visual inspections of the surrounding parcels to document the existing biological conditions of the site and determine the potential for special-status species to occur within the project area.

The CRE biologists noted the presence of an intermittent creek (Dean Creek) on the property. At the northern edge of the subject property Dean Creek consist of an 8-foot wide (bank to bank) and 4-foot deep earthen channel. The intermittent creek runs along the northern edge of the property parallel to Sunshine Valley Road. To the west, the creek is culverted under the driveway of the adjacent residence and upstream of the subject property, Dean Creek turns southeast and flows through the vacant lands to the east.

According to the CRE biologists, the parcel is comprised of two plant communities: landscape ruderal and ruderal (weedy) vegetation. Per the Biological Impact Report (BIR), a majority of the project parcel (82%) acts as a backyard area for the adjacent residence and consists of raised garden beds, ornamental plants, non-native grasses, and two mature trees (a Monterey cypress and redwood tree) that shade most of the site. The remainder of the parcel (approximately 467 sq. ft.) is comprised of ruderal vegetation along Dean Creek. This vegetation includes a mixture of native and non-native plants and shrubs. The CRE biologists assessed the project parcel and identified the potential for four special-status animals to occur within or adjacent to the project parcel. Species with the potential to occur on the project parcel are discussed below:

<u>California Red-Legged Frog (CRLF)</u>

The California red-legged frog (*Rana draytonii*) is federally listed as threatened under the Federal Endangered Species Act (FESA) and is a designated state species of special concern. CRLFs

typically require a permanent water sources with a minimum depth of 2.5 feet for breeding and prefer freshwater ponds, slow-flowing streams, and/or marshes with heavily vegetated shores as breeding habitat. CRLFs are also known to disperse up to 2 miles from breeding habitats during the autumn, winter, and spring rains and can be found in freshwater and slightly brackish ponds, and marshes, grasslands, riparian woodlands, oak woodlands, and coniferous forests.

As noted above, an intermittent creek runs along the northern edge of the project parcel. In addition, two creeks (Montara Creek and Vicente Creek) and two agricultural ponds are located within 0.5 miles and 0.75 miles (respectively) of the subject parcel. There are six recorded occurrences of CRLF within 3 miles of the project site with the two closets locations occurring within a mile to the northwest and northeast of the project parcel along Montara Creek. The CRE biologists determined that the intermittent creek along the northern boundary of the project parcel does not provide necessary wetland habitat for breeding. Though no CRLFs were observed during the field visits to the site, CRE did determine that there is a reasonable likelihood that CRLFs could occur on the property and utilize the intermittent creek to disperse to adjacent habitats. Potential impacts include harassment or harm to the CRLF during dispersal and degradation of water quality resulting from discharge of sediment into Dean Creek during construction. The proposed project could potentially impact CRLFs. Due to the regional rarity of this species, increased mortality of the CRLF would be substantial under CEQA. Implementation of the mitigation measures below will reduce potential impacts to the CRLF to a less than significant level.

<u>San Francisco Garter Snake (SFGS)</u>

The San Francisco garter snake (*Thamnophlis sirtalis tetrataenia*) is listed under the FESA and CESA as Endangered. They are highly aquatic, endemic to the San Francisco Bay Area, and occur sympatrically with their primary prey species, the CRLF. The SFGS prefers to use emergent and bankside vegetation such as cattails, bulrushes and spike rushes for cover.

Based on the lack of suitable wetland and upland habitat on site, CRE determined that the project parcel does not support suitable breeding habitat for the SFGS. SFGSs have been recorded on separate instances 1 and 2 miles (respectively) away from the subject property. Though no SFGSs were observed during the field surveys, due to the number and proximity of creeks and ponds within 1-mile of the subject parcel, CRE determined that SFGSs could utilize the Dean Creek as a movement corridor between breeding habitats and determined that there is a moderate potential for the SFGS to be found on site. As with the CRLF potential impacts to the SFGS include harassment or harm during dispersal and degradation of water quality resulting from sediment discharge into Dean Creek during construction. Implementation of the mitigation measures below will reduce potential impacts to the CRLF to a less than significant level.

<u>Saltmarsh Common Yellowthroat (SCY)</u>

The saltmarsh common yellowthroat (SYC) is a native warbler and is a California species of special concern. The SYC is a year round resident of San Mateo County and can be found in dense vegetation in wetlands, marshes, estuaries, moist scrub and riparian areas for nesting and foraging.

The SCY has been recorded approximately 2 miles southeast of the subject parcel at the Princeton Marsh but was not observed during the field surveys of the site. CRE did note however, that the project site and the undeveloped land to the east of the subject parcel contains suitable vegetative nesting and foraging habitat to support the species and determined that there was a moderate potential for the SYC to be found on site. Construction of the project has the potential to impact nesting SCYs. Implementation of the mitigation measures below will reduce potential impacts to the SYC to a less than significant level.

<u>San Francisco Dusky-footed Woodrat (SFDW)</u>

The San Francisco dusky-footed woodrat (SFDW) is California species of special concern. The SFDW is primarily nocturnal and builds stick structures (middens) for nesting to protect the woodrat

from seasonal temperature extremes and predators. The SFDW primarily east woody plants including leaves, flowers, nuts, acorns, and berries.

During the biological surveys of the site, CRE biologists observed woodrat middens within the arroyos willow thicket to the east of the subject parcel. The observed middens were more than thirty from the property boundary. CRE concluded that it is likely that the SFDW could use the project parcel as a foraging site. Though no woodrats were observed on-site, construction of the proposed project has the potential to impact woodrats foraging on site. Implementation of the mitigation measures below will reduce potential impacts to the SFDW to a less than substantial level.

Mitigation Measure 4: Water Quality – The applicant shall not apply insecticides or herbicides at the project site during project implementation or long-term operational maintenance where there is the potential for these chemical agents to enter Dean Creek or other waterbodies and/or lands that contain potential habitat for the identified special-status species.

Mitigation Measure 5: Water Quality – Construction of the 23-foot long bridge across Dean Creek shall occur only during the dry season when there is no water present within the creek to reduce the transport of sedimentation. A biologist shall be onsite during the construction of the bridge to ensure the creek is not impacted. A letter from the biologist verifying compliance with this mitigation measure shall be submitted to the Planning and Building Department prior to final approval of the building permit.

Mitigation Measure 6: Water Quality – To prevent impacts associated with hazardous materials, fugitive dust, sediment, or other construction-related materials, prior to the Current Planning Section's approval of a building permit, the applicant shall submit an Erosion and Sediment Control Plan, subject to review and approval by the project planner. The plan shall have been reviewed by a qualified biologist prior to submittal to the County. The plan shall include measures to prevent runoff into Dean Creek along the northerly edge of the project area and demonstrate compliance with other erosion control requirements and mitigation measures. This shall include the installation of silt fences or straw wattles between work areas and any water sources such as the drainage swale, and around any spoil piles (e.g., loose asphalt, dirt, debris, construction-related materials) that could potentially discharge sediment into habitat areas. If straw wattles are used, they shall be made of biodegradable fabric (e.g., burlap) and free of monofilament netting.

Mitigation Measure 7: Wildlife Encounters – If any wildlife is encountered during Project activities, said encounter shall be reported to a qualified biologist and wildlife shall be allowed to leave the work area unharmed. Animals shall be allowed to leave the work area of their own accord and without harassment. Animals shall not be picked up or moved in any way.

Mitigation Measure 8: California Red-Legged Frog and San Francisco Garter Snake –

a. An exclusion fence shall be installed along the easterly and southerly property lines. The fence shall be at least 3 feet in height and trenched 6 inches deep. Furthermore, the fence shall be installed so that there are no openings or gaps through which a frogs or snakes could move into the project area. The exclusionary fencing shall have escape funnels in the fence every 100 feet or less for trapped snakes or frogs to exit the project area.

b. A pre-construction survey for CRLFs and SFGs shall be conducted no less than 48 hours prior to the start of project activities (including equipment and materials staging) by a CDFW certified biologist.

c. All crewmembers shall attend an Environmental Awareness Training presented by a qualified biologist. The training shall include a description of the special-status species that may occur in the region, the project Avoidance and Minimization Measures, Mitigation Measures, the limits of the project work areas, applicable laws and regulations, and penalties for non-compliance. Colored photocards of CRLFs and SFGSs shall remain on the project site during

construction. Upon completion of training, crewmembers shall sign a training form indicating they attended the program and understood the measures. Completed training form(s) shall be provided to the Project Planner before the start of project activities.

d. Following the start of construction activities, a qualified biologist or trained biological monitor shall inspect the site weekly to monitor the integrity of the exclusionary fencing, confirm the limit of work and equipment is within the project boundaries, and assess the overall project adherence to the mitigation measures.

Mitigation Measure 9: San Francisco Dusky-Footed Woodrat – The construction contractor shall install woodrat exclusion fencing along the southern and easterly property lines in accordance with Drawing No. A112 on the site plan.

a. Woodrat exclusion fencing shall be installed prior to the start of construction including equipment and materials staging.

b. Woodrat exclusion fencing shall be the same exclusion fencing that will be installed for the California red-legged frog and San Francisco garter snake. The escape funnel provided for the snakes and frogs shall have a small enough escape funnel (i.e., less than 3'' x 3'' exit) to prevent woodrats from passing through.

c. If woodrat nests are observed within the project area outside of the breeding season (February to July) the project biologist may dismantle the nest (outside of the breeding season), allowing individuals to relocate to suitable habitat within the adjacent open space areas.

d. If woodrat nests with young are observed within the project site, an exclusion fence shall be erected around the nest site. The fencing shall provide adequate enough area to provide foraging habitat for the woodrats at the discretion of the project biologist. Site preparation (i.e., grubbing and grading) within the fenced area shall be postponed or halted until young have left the nest. A biological monitor shall be onsite during periods when disturbance activities occur near the active nest to ensure no inadvertent impacts will occur to the nests.

Mitigation Measure 10: Saltmarsh Common Yellowthroat – If construction activities are proposed during the nesting season (February 15 – August 31), a qualified biologist shall inspect the property, including large trees within 250 feet of the property for nesting raptors, and any vegetation within 50 feet of the property for other nesting birds. If any nests or nesting activity is observed, the contractor shall consult with a CDFW biologist to determine appropriate protection measures.

Source: Coastal Ridge Ecology, Biological Impact Report, dated August 2018; SWCA Biological Impact Report Memorandum, dated January 2019.

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

Discussion: Policy 7.7 (*Definition of Riparian Corridors*) of the San Mateo County Local Coastal Program (SMC LCP) defines riparian corridors as the *"limit of riparian vegetation" (i.e., a line determined by the association of plant and animal species normally found near streams, lakes and other bodies of freshwater: red alder, jaumea, pickleweed, big leaf maple, narrow-leaf cattail, arroyo willow, broadleaf cattail, horsetail, creek dogwood, black cottonwood, and box elder). Such a corridor must contain at least a 50% cover of some combination of the plants listed.* In addition, Policy 7.11 (*Establishment of Buffer Zones*) establishes a buffer zone *on both sides of riparian*

corridors, from the "limit of riparian vegetation"…50 feet outward for perennial streams and 30 feet outward for intermittent streams.

Per the CRE biological surveys conducted on the project site and adjacent property, the project parcel is not located within a riparian corridor because less than 50% of the vegetative species on site are riparian. However, over 50% riparian vegetation (dominant species arroyo willow) was observed on the adjacent property to the east and further survey of the property to the east led CRE to map the limits of the riparian corridor on the property to the east. While the subject property does not lie within a riparian corridor, the 30 foot buffer zone extends onto the project property. The subject residence is located outside of the Dean Creek 30 foot intermittent creek buffer zone as required by the SMC LCP and outside the 30 foot edge of riparian buffer zone established/mapped by CRE.

The project includes the construction of a single-family residence (outside of the creek and riparian buffer zones), removal of non-native vegetation and replanting of native riparian vegetation within the 30-foot riparian buffer zone, and the construction of a 23-foot long access bridge/driveway across Dean Creek. These uses are permitted by per LCP Policy 7.12 (*Permitted Uses in Buffer Zones*) and 7.13 (*Performance Standards in Buffer Zones*). Implementation of the mitigation measures contained within Section 4.a, Section 3.a, Section 3.b, and the mitigation measures listed below will reduce potential impacts of the project on the adjacent riparian and Dean Creek habitats to a less than substantial level.

Mitigation Measure 11: To prevent potential erosion concerns within the bed and banks of Dean Creek, removal of invasive and non-native species will be limited to the areas outside the banks of Dean Creek. No vegetation removal shall occur within the bed or banks of the creek. Vegetation and debris resulting from vegetation removal shall be placed outside the creek channel and in a located where they cannot roll, wash, or move back into the creek channel.

Mitigation Measure 12: Vegetation removal shall occur during the dry season to minimize the potential for soil erosion and reduce the risk of bank destabilization.

Mitigation Measure 13: Native vegetation shall be planted in disturbed soil areas to further reduce potential erosion.

Mitigation Measure 14: Per the project plans, native species that shall be planted within the 30-foot riparian buffer include but are not limited to *Deschampsia cepitosa* ssp. *Holciformis, Festuca rubra, Sisyrinchium bellum, Achillea millefolium, Allium* sp., *Epilobium densiflorum, Limonium californicum,* and *Monardella* sp.

Mitigation Measure 15: New vegetation within the 30-foot buffer area shall be planted to achieve approximately 70% cover. Mulch shall be spread over exposed soil areas between plantings to prevent soil erosion within the buffer area.

Mitigation Measure 16: A qualified biologist shall be on-site to oversee the removal of invasive and non-native species and the replanting of native vegetation. A letter from the biologist verifying vegetation removal and replanting activities has occurred per these mitigation measures and shall be submitted to the Planning and Building Department within 10 business days of said activities.

Mitigation Measure 17: No construction parking or storage of construction materials shall be allowed within the 30-foot riparian corridor buffer area.

Source: Project Plans; Project Location; Coastal Ridge Ecology, Biological Impact Report, dated August 2018; SWCA Biological Impact Report Memorandum, dated January 2019.

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

Discussion: To meet the US Army Corps of Engineers definition of wetland, three characteristics must be demonstrated: wetland vegetation, wetland hydrology, and wetland soils. In addition, a wetland must have a hydrological connection to other wetlands and/or waters of the United States. Dean Creek, which runs along the northern edge of the project parcel is an intermittent stream with a defined channel that flows into the Pacific Ocean. The U.S. Fish and Wildlife Service is the principal Federal agency that provides information to the public on the extent and status of the Nation's wetlands. Per the U.S. Fish and Wildlife Service National Wetlands Inventory Mapper, Dean Creek is identified as a "Freshwater Forested/Shrub Wetland" habitat and classified as a (PSSA) Palustrine (P), scrub-shrub (SS), temporary flooded (A) wetland. This is a non-tidal wetland that dominated by woody vegetation less than 20 feet tall in which surface water is present for brief periods of time during the growing season but where the water table lies well below the ground surface during most of the season.

Though Dean Creek is located on the project parcel and identified as a type of wetland by the U.S. Fish and Wildlife Service, the proposed residence is located 30 feet away from the midpoint of the stream. The footings for the proposed 23-foot long access bridge which will traverse Dean Creek will be located outside the banks of Dean Creek and the removal of invasive and non-native plants will occur outside of the bed and banks of Dean Creek. Construction activities are not expected to result in impacts to the bed or banks of Dean Creek upon adherence to the mitigation measures contained within Sections 3.a, 3.b, 4.a and 4.b.

Source: Project Plans; Project Location; Coastal Ridge Ecology, Biological Impact Report, dated August 2018; SWCA Biological Impact Report Memorandum, dated January 2019; U.S. Fish and Wildlife Service, Wetland Mapper V2.

4.d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?		X		

Discussion: Wildlife corridors are important for the persistence of wildlife in the landscape and facilitate movement between populations. Types of wildlife movement includes migration (i.e. one direction per season), inter-population movement (i.e., long-term genetic exchange), and small travel pathways (i.e. daily movement within an animal's home range). Per the discussion in Section 4.a CRE surveyed the project site and noted that the property is primarily suburban land use (i.e., ornamental gardens) with significant open space (undeveloped land) to the east of the project parcel. CRE determined that the project site is not likely an important/primary wildlife corridor, but noted that the intermittent stream at the northern edge of the project parcel (Dean Creek) may act as a potential minor travel corridor for local wildlife through the project parcel to reach the riparian forest located to the east of the project site. As the project does not involve work within the bed or banks of the stream, and with adherence to the mitigation measures contained within Section 4.a, it is not expected that the project would substantially interfere with the movement of wildlife species that may utilize Dean Creek.

Source: Coastal Ridge Ecology, Biological Impact Report, dated August 2018; SWCA Biological Impact Report Memorandum, dated January 2019.					
4.e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (including the County Heritage and Significant Tree Ordinances)?			X	
Discussion: The San Mateo County Significant Tree Ordinance defines a significant tree as any live woody plant with a single stem or trunk with a diameter of 12'' or more measured at 4.5-feet above grade. Per this definition, the project includes removal 10 total trees on-site consisting of eight significant trees (a 26'' diameter at breast height (dbh) redwood, a 26'' Monterey cypress, a 12'' dbh Arroyo Willow, and five ngaio trees ranging in size from 12'' to 16'' dbh) and two non-significant trees (7'' and 6'' dbh ngaio trees). None of the trees proposed for removal meet San Mateo County definition for heritage trees. A majority of the ngaio trees proposed for removal are located in the rear of the property and are proposed for removal to accommodate a proposed gabion wall with riparian species and rear yard hardscape. The arroyo willow and one ngaio tree located at the front of the parcel are proposed for removal to accommodate the access bridge and provide adequate line of site distance for accessing/existing the site. The Monterey cypress tree is proposed for removal due to its location within the development footprint of the building while the redwood tree is proposed for removal due to its close proximity to the front of the proposed residence. The County's Significant Tree Ordinance considers the proximity to existing or proposed structures; the necessity of removal to construct improvements; or otherwise allow economic or other enjoyment of property as factors for removal. The project and associated landscaping plan - which includes a proposal to revegetate the parcel with native grasses, install a gabion landscape wall with native plant species along the rear and left side of the property, and planting of two 6'' dbh white alder trees and two 6'' dbh western sycamore trees within the riparian buffer area – was reviewed and approved by the San Mateo County Coastside Design Review Committee for adherence with the Design Review Standards and Significant Tree Ordinance. Though the Significant Tree Ordinance typically requires a 1:1 re-planting requirement, the Design Review Committee has discretion over proposed landscaping plans and has the authority to reduce or increase this re-planting requirement. The proposal to removal ten trees and replant four trees in addition to other lower lying riparian species was reviewed and approved by the Coastside Design Review Committee and adheres to the County's Design Review Criteria and the Significant Tree Ordinance. **Source:** Project Plans; San Mateo County Significant Tree Ordinance; Kielty Arborist Report, dated November 2018; Tree360° Tree Inventory, dated February 2019.					
4.f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, other approved local, regional, or state habitat conservation plan?				X

Discussion: The project parcel is not located within or adjacent to the boundaries of any said conservation plan.

Source: California Department of Fish and Wildlife, California Natural Community Conservation Plans Map, dated April 2019.

4.g.	Be located inside or within 200 feet of a marine or wildlife reserve?				X

Discussion: The project parcel nor the project site is inside or within 200 feet of a marine or wildlife reserve.

Source: Project Location; California Department of Fish and Wildlife Services; National Wildlife Refuge System Locator.

4.h.	Result in loss of oak woodlands or other non-timber woodlands?			X	

Discussion: The project site does not contain any oak trees. Nonetheless, the project does propose to remove 10 non-timber woodland trees of various species (i.e., redwood, Monterey cypress, arroyo willow, and ngaio) of which eight require a permit to remove due to their size (i.e., 12'' dbh or greater). Replacement plantings are required for the regulated trees proposed for removal. See staff's discussion in Section 4.e above.

Source: Project Plans.

5. CULTURAL RESOURCES. Would the project:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
5.a.	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?		X		

Discussion: The project was referred to the Native American Heritage Commission (NAHC) to determine the site's potential for cultural resources. In a response letter dated July 17, 2019, the NAHC noted that the requested Sacred Lands File search results were negative. Though the NAHC has no records of cultural resources at the project site, a list of Native American Tribes who may have knowledge of cultural resources in the area was provided with the recommendation that the Lead Agency contact these tribes. Per the recommendation of the NAHC, San Mateo County contacted these tribes in July 2019 notifying them of the proposed project to determine if there would be a significant impact to tribal or cultural resources. As of December 2019, no Native American Tribes have contact San Mateo County requesting consultation for this project.

This project was also referred to the California Historical Resources Northwest Information Center of Sonoma State University to determine the potential for cultural or historical resources on the site. In a response letter dated July 25, 2019, the California Historical Resources Information System (CHRIS) noted that no cultural resources studies have been conducted within the project area and that one previous study conducted in 1970 may have included parts of the proposed project area but

It was unclear whether the study included the project parcel/project site

However in the CHRIS response letter, it was noted that based on the environmental setting, Native American resources in this part of San Mateo County have been found in areas populated by oak, buckeye, laurel, and hazelnut trees as well as sites near watercourse and bodies of water in the past. As the project site is located in a wooded areas, adjacent to a creek, approximately 1-mile from the coast, and near several other watercourses/small bodies of water, CHRIS determined that there is a moderate potential for unrecorded Native American resources to be present at the proposed project area.

In response to these concerns, an archaeological survey and report prepared by Holman & Associates Inc. was conducted. A site visit consisting of an intensive pedestrian survey of the parcel was performed by Holman & Associates Inc., archaeologist Kevin Dobinson on September 23, 2019.

The archaeologist noted that the property appears to have been leveled in the past and landscaped. Current landscaping in the form of several planter boxes, a garden area, and lawn currently exist on the project parcel. With 25-30% of surface soil visible during the site survey, the archaeologist noted that the soils on-site ranges from brown to grayish brown sandy silt with flecks of white mineral deposits distributed throughout. The archaeologist was able to examine the exposed ground surface areas for prehistoric artifacts, historic artifacts, soil discoloration that may indicate the presence of cultural midden, linear features, soil depressions, and other features indicative of the former presence of historic structures or buildings. No archaeological resources were identified on the project parcel during the field survey. As the NAHC Sacred Lands File Search, CHRIS records, and the field survey did not identify the presence of previously undocumented cultural or historical resources on or near the project area, the project archaeologist concluded that the project area has low potential for the presence of cultural and/or historical resources and recommended no further studies at this time.

Though the potential to discover cultural, paleontological or archaeological resources during construction is low the following mitigation measures are proposed:

Mitigation Measure 18: In the event that cultural, paleontological, or archaeological resources are encountered during site grading or other site work, such work shall immediately be halted in the area of discovery and the project sponsor shall immediately notify the Community Development Director of the discovery. The applicant shall be required to retain the services of a qualified archaeologist who meets the Secretary of the Interiors' Professional Qualification Standards for the purpose of recording, protecting, or curating the discovery as appropriate. The cost of the qualified archaeologist and of any recording, protecting, or curating shall be borne solely by the project sponsor. The archaeologist shall be required to submit to the Community Development Director for review and approval a report of the findings and methods of curation or protection of the resources. In addition, an archaeological report meeting the Secretary of the Interior's Standards detailing the findings of the monitoring will be submitted to the Northwest Information Center after monitoring has ceased. No further grading or site work within 50 feet of the area of discovery shall be allowed until the preceding has occurred.

Mitigation Measure 19: If a newly discovered resource is, or is suspected to be, Native American in origin, the resource shall be treated as a significant Tribal Cultural Resource, pursuant to Public Resources Code 21074, until the County has determined otherwise with the consultation of a qualified archaeologist and local tribal representative.

Source: Holman & Associates Inc., Archeological Report, dated September 2019; NAHC Response Letter, dated July 2019; CHRIS Response Letter, dated July 2019.

5.b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Section 15064.5?		X		

Discussion: See Section 5.a above for discussion.

Source: Project Location; California Register of Historical Resources, California Historical Resources Information System Review Letter, dated July, 2019; Holman & Associates Inc. Archaeological Report, dated September, 2019.

5.c.	Disturb any human remains, including those interred outside of formal cemeteries?		X		

Discussion: Minimal grading (40 cubic yards (c.y.) of cut and 10 c.y. of fill) is proposed for the project site. No grading is proposed to occur within the bed or banks of Dean Creek. Per the Holman & Associates archeology report, there are no known human remains located within the project area or surrounding vicinity. The following mitigation measure has been included in the event human remains are encountered.

Mitigation Measure 20: In the event of discovery or recognition of any human remains during project construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains and State of California Health and Safety Code Section 7050.5 shall be followed. The applicant shall then immediately notify the County Coroner's Office, the County Planning and Building Department, and possibly the State Native American Heritage Commission to seek recommendations from a Most Likely Descendant (Tribal Contact) before any further action at the location of the find can proceed. All contractors and sub-contractors shall be made aware of these requirements and shall adhere to all applicable laws including State Cultural Preservation laws. Disposition of Native American remains shall comply with CEQA Guidelines Section 15064.5(e).

Source: California Public Resources Code; Project Location; Holman & Associates Inc. Archaeological Report, dated September, 2019

6. ENERGY. Would the project:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
6.a.	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	

Discussion: Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the California Energy Commission) in June 1977 and are updated every 3 years (Title 24, Part 6, of the California Code of Regulations). Title 24 requires the design of building shells and building

components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On June 10, 2015, the California Energy Commission (CEC) adopted the 2016 Building Energy Efficiency Standards, which went into effect on January 1, 2017. On May 9, 2018, the CEC adopted the 2019 Building Energy Efficiency Standards, which will take effect on January 1, 2020. Under the 2016 Standards, residential buildings are 28% more energy efficient and nonresidential buildings are 5% more energy efficient than under the 2013 Standards. The proposed project would comply with the 2019 Building Energy Efficiency Standards which would be verified by the San Mateo County Building Inspection Section prior to the issuance of the building permit. The project would also be required adhere to the provisions of CALGreen and GreenPoints, which establishes planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. Additionally, the project proposes to install solar panels on the roof of the residence reducing the overall energy demands of the project once constructed and operational.

Construction

The construction of the project would require the consumption of nonrenewable energy resources, primarily in the form of fossil fuels (e.g., fuel oil, natural gas, and gasoline) for automobiles (transportation) and construction equipment. Transportation energy use during construction would come from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction employee vehicles that would use diesel fuel and/or gasoline. The use of energy resources by these vehicles would fluctuate according to the phase of construction, would be temporary, and would not require expanded energy supplies or the construction of new infrastructure. Most construction equipment during demolition/site preparation, grading, and foundation work would be gas-powered or diesel-powered, and the later construction phases would require electricity-powered equipment.

Operation

During operations, energy consumption would be associated with resident and visitor vehicle trips and delivery and supply trucks. The project is a residential development project near Highway 1 served by existing road infrastructure. Pacific Gas and Electric (PG&E) provides electricity to the project area. Currently, the existing site does not use any electricity because it is a vacant parcel. Therefore, project implementation would result in a permanent increase in electricity over existing conditions. However, such an increase to serve a single-family residence and second unit would represent an insignificant percent increase compared to overall demand in PG&E's service area. The nominal increased demand is expected to be adequately served by the existing PG&E electrical facilities and the projected electrical demand would not significantly impact PG&E's level of service. No natural gas distribution lines exist within the project vicinity. As is typical in this area of San Mateo County, natural gas is stored on-site in tanks and provided by private third-party entities on an as needed basis. The natural gas demands for a single-family residence and second unit are nominal and are not expected to result in a significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources. It is expected that nonrenewable energy resources would be used efficiently during operation and construction of the project given the financial implication of the inefficient use of such resources. As such, the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Impacts are less than significant, and no mitigation is required.

Source: California Building Code; California Energy Commission; Project Plans.

6.b.	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.				X

Discussion: The project design and operation would comply with State Building Energy Efficiency Standards, appliance efficiency regulations, and green building standards. Therefore, the project does not conflict with or obstruct state or local renewable energy plans and will not have a significant impact. Furthermore, the development would not cause inefficient, wasteful and unnecessary energy consumption.

Source: Project Plans

7.	**GEOLOGY AND SOILS**. Would the project:				
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
7.a.	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving the following, or create a situation that results in:				
	i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? *Note: Refer to Division of Mines and Geology Special Publication 42 and the County Geotechnical Hazards Synthesis Map.*				X

Discussion: Faults in closest proximity to the project site include the San Gregorio-Seal Cove fault located (off-shore) 0.8 km to the west and the San Andreas fault located 11 km to the northeast. While located relatively close to the faults listed above, the project site is not located in a mapped Alquist-Priolo Earthquake Fault Zone or a special study area where a fault rupture is likely to occur. Project construction will not cause a direct or indirect potential rupture of a known earthquake fault.

Source: State of California Department of Conservation, California Geological Survey, Alquist-Priolo Regulatory Map; Sigma Prime Geosciences, Inc. Geotechnical Study, dated August 2018; Wayne Ting & Associates, Inc. Geotechnical Study Update, dated May 2019.

	ii. Strong seismic ground shaking?			X	

Discussion: The project site is expected to experience violent ground shaking for a high intensity of 7.5 (Modified Mercalli Intensity (MMI)) earthquake scenario on the San Gregorio Fault and very strong shaking for a 7.2 MMI earthquake scenario on the San Andreas Fault. The principal concern related to human exposure to ground shaking is that strong ground shaking can result in structural

damage to buildings, potentially jeopardizing the safety of its occupants. The single-family residence and interior second must meet minimum State building standards for earthquakes. Adherence to applicable building codes will reduce the likelihood of potential substantial adverse effects, including the risk of loss, injury, or death resulting from strong seismic ground shaking. No further mitigation is necessary.

Source: Association of Bay Area Governments, Shaking Hazard Map; Project Plans.

iii. Seismic-related ground failure, including liquefaction and differential settling?		X		

Discussion: Differential compaction occurs during moderate and large earthquakes when soft or lose soils densify and settle unevenly across a site. Soil borings conducted by the project geotechnical consultant classified the upper 11.5 feet of subsurface soils as medium stiff to very stiff clays. The geotechnical consultant determined the likelihood of significant damage to a structure from differential compaction is low.

Liquefaction occurs when loose saturated sandy soils lose strength and flow like a liquid during earthquake events. One soil boring encountered groundwater at an average 3-foot depth with no groundwater encountered below 4 feet. As the underlying soil did not appear to be saturated the geotechnical engineer believes that a perch water table in a shallow deposit was intercepted. The geotechnical engineer concluded that the high clay content of the underlying soil has a low potential for liquefaction and anticipated less than 1.5 inches of settlement due to liquefaction. To reduce the likelihood of damage to the proposed structure due to differential compaction and/or liquefaction the flowing mitigation measure is recommended.

Mitigation Measure 21: The project shall be designed and constructed to follow the recommendations outlined in the Sigma Prime Geosciences, Inc., Geotechnical Study, geotechnical report dated August 2018 and the Wayne Ting & Associates, Inc., Geotechnical Study Update, dated May 2019.

Source: Sigma Prime Geosciences, Inc. Geotechnical Study, dated August 2018; Wayne Ting & Associates, Inc. Geotechnical Study Update, dated May 2019.

iv. Landslides?				X

Discussion: Based on the U.S. Geological Survey's Landslide Susceptibility Map of 1972, the project site is located in Landslide Susceptibility I (areas least susceptible to landslides). A site specific geotechnical study prepared by Sigma Prime Geosciences (Attachment I) and Wayne Ting & Associates, Inc. (Attachment J) was conducted to evaluate the potential geotechnical hazards on the site. Per the geotechnical studies, the potential for landslides on the site was not considered to be significant due to its flat nature and underlying soils.

Source: Sigma Prime Geosciences, Inc. Geotechnical Study, dated August 2018; Wayne Ting & Associates, Inc. Geotechnical Study Update, dated May 2019.

v. Coastal cliff/bluff instability or erosion? *Note to reader: This question is looking at instability under current conditions. Future, potential instability is looked at in Section 7 (Climate Change).*				X

Discussion: The project parcel is not located near any coastal cliffs or bluffs.

Source: Project Location.					
7.b.	Result in substantial soil erosion or the loss of topsoil?		X		
Discussion: The construction of the project involves 40 cubic yards (c.y.) of cut (associated with the foundation and back yard gabion wall) and 10 c.y. of fill with a total land disturbance of 2,178 square feet. These grading activities are minor in nature, confined to the project site, and do not require a Grading Permit. While the occupation and use of the single-family residence and second unit is not expected to result in significant erosion or loss of topsoil, project construction may result in erosion. To reduce erosion, the applicant has included an erosion control plan to contain soil on the site during construction and ensure that sediment does not flow into the creek located at the front of the property. The erosion control plan in conjunction adherence to Mitigation Measure 2 will prevent the loss of topsoil and reduce onsite erosion. **Source:** Project Plans.					
7.c.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, severe erosion, liquefaction or collapse?		X		
Discussion: The California Geological Survey Geologic Data Map identifies the generalized rock types within the project site as "Qoa", which is described as Pliocene "older alluvium, lake, playa, and terrace deposits" and as "grMz", which is described as "granite, quartz, monzonite, granodiorite, and quartz diorite." These geologic units are typical of the area. Lateral spreading is the horizontal displacement of relatively flat alluvium material towards an open or "free" face (i.e., a creek bank in this instance). As Dean Creek is located approximately 30 feet from the proposed structure, the Wayne Ting & Associates, Inc., geotechnical report identified that the project site has a high potential for lateral spreading (approximately 9.9 inches) during a seismic event. To reduce the likelihood of damage due to lateral spreading adherence to the recommendations within the geotechnical report (Attachment J) and the following mitigation measure is recommended. **Mitigation Measure 22:** At building permit submittal, the foundation system shall be able to address both the lateral spreading and liquefaction potential of the site to the satisfaction of the County's Geotechnical Section and Building Inspection Section. **Source:** Wayne Ting & Associates, Inc. Geotechnical Study Update, dated May 2019.					
7.d.	Be located on expansive soil, as defined in Table 18-1-B of Uniform Building Code, creating substantial direct or indirect risks to life or property?			X	
Discussion: Expansive soils can undergo volume changes with changes in moisture content. Specifically, when wetted during the rainy season, expansive soils tend to swell and when dried (as during the summer months) these soils shrink. Structures located on expansive soils tend to experience cyclic seasonal heave and settlement which can affect the structural stability of structures. Based on the laboratory testing of the project site's soils had low potential for expansion. The geotechnical report concluded that the shrink and well of the soils is not expected to have a					

substantial impact on the proposed project provided that the project adheres to the design and structural recommendations for the foundation and proposed flatwork contained within the geotechnical report. **Source:** Sigma Prime Geosciences, Inc., Geotechnical Study, dated August 2018; Wayne Ting & Associates, Inc., Geotechnical Study Update, dated May 2019.					
7.e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
Discussion: The project site is located within the urban mid-coast area and is able to tie into the existing wastewater infrastructure that underlies Sunshine Valley Road via a new lateral connection. Granada Sanitary District (the waste water purveyor of the area) has indicated that the current wastewater system has the ability and capacity to serve the project parcel. The proposed project would not require the use of a septic system or other alternative wastewater disposal system. Therefore, there would be no impact. **Source:** Project Plans; Project Location; San Mateo County GIS.					
7.f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		
Discussion: Based on the project parcel's existing surrounding land uses, and the conclusion of an archeological study conducted on site, it is not likely that the project parcel would host any paleontological resource or site or unique geologic feature. As discussed in Question 7.c, geology within the project site is typical of the surrounding area. Mitigation Measures in Section 5.a and 5.c will ensure that if any resources are encountered potential impacts will be reduced to less than significant levels. **Source:** Project Plans; San Mateo County GIS.					

8.	**CLIMATE CHANGE**. Would the project:	***Potentially Significant Impacts***	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
8.a.	Generate greenhouse gas (GHG) emissions (including methane), either directly or indirectly, that may have a significant impact on the environment?		X		
Discussion: Greenhouse Gas Emissions (GHG) include hydrocarbon (carbon monoxide; CO2) air emissions from vehicles and machines that are fueled by gasoline. Project-related vehicle trips (e.g., construction vehicles and personal vehicles of construction workers) and machinery associated with the proposed grading and construction of the single-family residence, second unit,					

and access bridge/driveway will result in the temporary generation of GHG emissions along travel routes and at the project site. Even assuming construction vehicles and workers are based in and traveling from urban areas, the potential project GHG emission levels from construction would be considered minimal. Although the project scope is not likely to generate significant amounts of greenhouse gases, Mitigation Measure 2 will ensure that any impacts are less than significant. **Source:** Project Plans; Project Location.					
8.b.	Conflict with an applicable plan (including a local climate action plan), policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	
Discussion: The San Mateo County Energy Efficiency Climate Action Plan (EECAP) identifies implementation measures for the reduction of GHG emissions resulting from development consistent with state legislation, including construction idling. The majority of GHG emissions from the project are expected to occur during the construction phase, primarily from vehicle exhaust. GHG emission from the habitation of the single-family residence and second unit will be associated with vehicle trips, will not conflict with the EECAP, and are expected to be less than significant. Furthermore, the construction of one single-family residence and interior second unit is below the BAAQMD GHG screening criteria of 56 dwelling units for single-family development. As such, operational project GHG emissions would be less than significant. **Source:** Project Plans, 2013 San Mateo County Energy Efficiency Climate Action Plan.					
8.c.	Result in the loss of forestland or conversion of forestland to non-forest use, such that it would release signifi-cant amounts of GHG emissions, or significantly reduce GHG sequestering?			X	
Discussion: As defined by Public Resources Code Section 12220 (g), forestland is land that can support 10% native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. While the 5,000 sq. ft. project parcel contains more than 10% native tree over in its current condition, and the project proposes to remove 10 trees on-site, the proposed tree loss is relatively insignificant when compared to the dense tree coverage of the surrounding vicinity. Thus, the proposed tree removals will not release significant amounts of GHG emissions or significantly reduce GHG sequestering in the area. Furthermore, new trees will be planted to mitigate for the significant trees proposed for removal. **Source:** Public Resources Code, Section 12220(g); San Mateo County EECAP; Project Plans.					
8.d.	Expose new or existing structures and/or infrastructure (e.g., leach fields) to accelerated coastal cliff/bluff erosion due to rising sea levels?				X
Discussion: The project is not located on or near a coastal cliff/bluff. As such, the project will not expose people or structures to significant risk involving coastal cliff/bluff erosion resulting from sea level rise.					

Source: Project Location; San Mateo County GIS.					
8.e.	Expose people or structures to a significant risk of loss, injury or death involving sea level rise?				X
Discussion: The project parcel is located over 0.5 miles from the Pacific Ocean and sits approximately 76-feet above sea level. As such, the project will not expose people or structures to significant risk involving sea level rise. **Source:** Project Location; Project Plans; San Mateo County GIS.					
8.f.	Place structures within an anticipated 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
Discussion: The project site is not located in an anticipated 100-year flood hazard area as mapped by the Federal Emergency Management Agency (FEMA). The project site is located in FEMA Flood Zone X, which is considered a minimal flood hazard (Panel No. 06081C119F, effective September 2, 2017). FEMA Flood Zone X areas have a 0.2% annual chance of flooding, with areas with one (1) percent annual chance of flooding with average depths of less than 1-foot. Therefore, the project impact would be less than significant. **Source:** Project Location, County GIS Maps, Federal Emergency Management Agency Flood Insurance Rate Map 06081C119F, effective September 2, 2017.					
8.g.	Place within an anticipated 100-year flood hazard area structures that would impede or redirect flood flows?			X	
Discussion: The project parcel not located in an anticipated 100-year flood hazard area as mapped by FEMA. Though Dean Creek is located at the font of the project parcel, the banks of the creek are measured at 8 feet from bank to bank and the bed of the creek sits approximately 4 to 5 feet below the average ground elevation of the project parcel. In addition, the proposed single-family residence and interior second unit is setback 30 feet away from the midline of the creek as required by LCP Policies. Due to the fact that the project parcel is not located within a 100-year flood hazard area, the intermittent nature of the creek, the deep cut of the channel, its wide banks, and building's distance from the creek, it is not expected that the project would impede or redirect flood flows. **Source:** Project Plans; Project Location; Federal Emergency Management Agency Flood Insurance Rate Map 06081C119F, effective September 2, 2017.					

9.	**HAZARDS AND HAZARDOUS MATERIALS**. Would the project:				
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
9.a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (e.g., pesticides, herbicides, other toxic substances, or radioactive material)?		X		
Discussion: The project involves the construction and operation of a single-family residence and second unit on a vacant parcel that is currently used as a garden area for the residence to the west. The construction of the project does not involve the use, transport, or disposal of hazardous materials. To ensure that the occupation of the residence does not introduce hazardous materials into Dean Creek adherence to Mitigation Measure 4 is recommended. **Source:** Project Plans.					
9.b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		X		
Discussion: See Section 9.a. above for discussion. **Source:** Project Plans.					
9.c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
Discussion: The project involves the construction and operation of a single-family residence and second unit and does not involve the use, transport, or disposal of hazardous materials. Though no public or private schools are located near the subject property, one music school is located 0.28 miles from the subject property. As the project is not located within 0.25 miles of an existing or proposed school no impacts are expected to occur. **Source:** Project Plans; Project Location.					
9.d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
Discussion: The California State Water Resources Control Board (SWRCB) maintains an online database system — Geotracker — that contains Statewide environmental data for Leaking					

Underground Storage Tank sites (LUSTs). LUSTs can cause significant public health and safety impacts due to contamination of drinking water aquifers, exposure to contaminated soil, and inhalation of vapors.

The project site and the remaining vacant parcels are not included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and therefore would not result in the creation of a significant hazard to the public or the environment.

Source: Project Location; California Department of Toxic Substances Control GeoTracker Map.

9.e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?			X	

Discussion: The project site is located over 2,000 feet north east of the easterly boundary of the Half Moon Bay Airport, a public airport operated by the County Department of Public Works. Development within certain proximities of the airport are regulated by the Final Half Moon Bay Airport and Land Use Compatibility Plan (ALUCP), as adopted by the City/County Association of Governments (C/CAG) on October 9, 2014. The overall objective of the ALUCP safety compatibility guidelines is to minimize the risks associated with potential aircraft accidents for persons and property on the ground in the event of an aircraft accident near an airport and to enhance the chances of survival of the occupants of the aircraft involved in an accident that occurs beyond the runway environment. The ALUCP contains safety zone land use compatibly standards that restrict land use development that could pose particular hazards to the public or to vulnerable populations in the event of an aircraft accident.

The project parcel is located at the edge of the Inner Turning Zone (ITZ, Safety Zone 3), where the risk level for accidents is considered to be moderate to high. Approximately 7% of aircraft accidents occur within the ITZ. The ITZ does not prohibit such uses as a single-family residence. The proposed use complies with the ITZ development conditions contained within the Safety Criteria Matrix of the ALCUP such as maintaining a less than 35-foot building height (the maximum height of the project is 33 feet tall).

Based on the discussion above staff has determined that the project complies with the safety compatibility criteria of the Half Moon Bay Airport and poses a less than significant impact.

Source: Project Plans; Project Location; 2014 Final Half Moon Bay Airport Land Use Compatibility Plan.

9.f.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?		X		

Discussion: The proposed single-family residence and interior second unit will be located on a privately owned parcel. The project involves the construction of a 23-foot long bridge to in order to receive access from Sunshine Valley Road due to the presence of Dean Creek (an intermittent stream) located along the northerly edge of the parcel. Construction vehicles will be required to park along the edge of Sunshine Valley Road due to lack of space on-site.

The project would not impair implementation of, or physically interfere with, an adopted emergency

response or evacuation plan. The proposed project is not expected impede, change the configuration of, or close any roadways that could be used for emergency purposes. However, if the project requires the partial closure of Sunshine Valley Road for construction purposes, the implementation of the mitigation measure below will reduce any such impact to a less than significant level.

Mitigation Measure 23: If any constraints are encountered that would confine traffic to one lane along Sunshine Valley Road, the applicant shall be required to submit a traffic control plan, consult with, and obtain an encroachment permit from the Department of Public Works (if required) prior to any such road closures. If any such road closure is required, the Department of Public Works shall notify the Coastside Fire Protection District and Sheriff's Department to ensure that any such road closure does not impede emergency access.

Source: Project Plans; Project Location; San Mateo County GIS.

9.g.	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

Discussion: The project site is located within the High Fire Hazard Severity Zone (State Responsibility Area). However, the project was reviewed and received conditional approval from the Coastside Fire Protection District subject to compliance with the California Building Code, hardwired smoke detectors, an automatic fire sprinkler system, the construction of a fire hydrant if one is not located within 500 feet of the project parcel, and the utilization of ignition resistant construction and materials among other fire prevention requirements. No further mitigation, beyond compliance with the standards and requirements of the Coastside Fire Protection District, is necessary

Source: Project Location, Project Plans; San Mateo County GIS, Coastside Fire Protection Letter, January 2019.

9.h.	Place housing within an existing 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X

Discussion: Refer to the discussion contained within Section 8.f.

Source: Project Location; County GIS Maps; Federal Emergency Management Agency Flood Insurance Rate Map 06081C119F, effective September 2, 2017.

9.i.	Place within an existing 100-year flood hazard area structures that would impede or redirect flood flows?				X

Discussion: Refer to the discussion contained within Section 8.f.

Source: Project Location, County GIS Maps, Federal Emergency Management Agency Flood Insurance Rate Map 06081C119F, effective September 2, 2017.

9.j.	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X

Discussion: In addition to the discussion contained under Section 8.f, no dam or levee is located in close proximity to the project parcel. Therefore, there is no risk of flooding due to failure of a dam or levee.

Source: Project Plans; Project Location; San Mateo County GIS; San Mateo County Hazards Maps, Dam Failure Inundation Area Map.

9.k.	Inundation by seiche, tsunami, or mudflow?				X

Discussion: The project site is not in located in a seiche, tsunami, or mudflow hazard zone

Source: Project Plans; Project Location; San Mateo County GIS Maps; San Mateo County Hazards Maps.

10. HYDROLOGY AND WATER QUALITY. Would the project:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
10.a.	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality (consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical stormwater pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash))?			X	

Discussion: The project would result in 1558 sq. ft. of new or replaced impervious surface area and has the potential to generate polluted Stormwater runoff during construction and operation. The construction of the project is required to comply with the County's Drainage Policy requiring post construction stormwater flows to be at, or below, pre-construction flow rates. Drainage analysis for the project was prepared by Sigma Prime, dated February 2019 detailing the proposed drainage system. The drainage report states that the proposed detention system is designed such that the post-development runoff is less than or equal to the pre-development runoff. Runoff from the project would be filtered through planters and would not direct flows onto neighboring properties. The project, including the drainage report and plans were reviewed and approved by the Department of Public Works. Based on the drainage report and review by the Department of Public Works the project is not expected to violate any water quality standards or waste discharge requirements.

Source: Project Plans; Project Location; San Mateo County GIS, Sigma Prime Geosciences Drainage Report, dated February 2019.				
10.b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
Discussion: The project parcel is vacant and serves as a garden area for the residence to the west of the project site. Any development on a vacant parcel would create additional impervious surface areas which could potentially impact groundwater supplies. The project would create 1558 sq. ft. of new impervious surface area to include the roof of the structure, driveway, front walkway, and rear patio. Runoff from these surfaces would be directed to onsite bioretention planters that would allow surface water to infiltrate into the groundwater system. The project site does contain any wells nor does the project propose to create any new wells. The project would connect to Montara Water and Sanitary District. **Source:** Project Plans; Project Location; Sigma Prime Drainage Report, dated February 2019.				
10.c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:				
i. Result in substantial erosion or siltation on- or off-site;		X		
Discussion: The project does not involve the alteration of the course of a stream or river. The project involves the construction of 1,558 sq. ft. of impervious surface associated with the single-family home, interior second unit, driveway, and patio/walkway areas. The proposed development on the project parcel will include drainage features that have been conditionally approved by the Department of Public Works and does not involve work within the bed or banks Dean Creek. While the proposed driveway/bridge structure will extend over the creek, the structure's footings will be placed outside of the banks of the creek and would not impede the flow of water within the creek below. Mitigation Measure 2 along with the submitted drainage and erosion control plans will address potential impacts during construction activities. As such, the project will not substantially alter the existing drainage patterns of the site nor result in substantial erosion or siltation. Upon mitigation, the project will have a less than significant impact. **Source:** Project Plans; Project Location.				
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;			X	

Discussion: Though the project will create 1,558 sq. ft. of impervious surface area, the project has been designed to meet the County's drainage standards. These standards include requiring post construction stormwater flows to be at or below pre construction flow rates. The storm drain system designed for this project meets this standard by proposing to detain runoff from impervious surface areas to rock filled level spreaders. The bioretention planters will disperse the velocity of water flow and allow water to percolate into the soils. Reviewed and conditionally approved by the Department of Public Works, the proposed drainage system will capture and retain water on-site and will not substantially increase the rate of amount of surface runoff in a manner which would result in flooding on- or off-site.

Source: Project Plans.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			X	

Discussion: Pursuant to the discussion in Section 10.a the proposed project would have a less than significant impact.

Source: Project Plans; Project Location; Sigma Prime Geosciences, Inc., Drainage Report, dated February 2019.

iv. Impede or redirect flood flows?			X	

Discussion: The proposed development does not involve the alteration of the course of a stream or a river. Additionally, the project is not located in a floodway or flood zone as identified by FEMA. Though Dean creek is located near the northerly property line of the project parcel, the proposed development located at minimum 30 feet away from the stream and 4 feet above the elevation of the creek bed. Due the fact that the parcel is not located within a floodway or flood zone and due to the structure's distance from and elevation above the Dean Creek, the proposed project is not expected to impede or redirect flood flows. No mitigation is necessary. Pursuant to the discussion in Sections 10.a and 10.c.i, the proposed project would have a less than significant impact.

Source: Project Location; County GIS Maps; Federal Emergency Management Agency Flood Insurance Rate Map 06081C119F, effective September 2, 2017

10.d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X

Discussion: Pursuant to the discussion in Section 9.k, the project is not located in a flood hazard, tsunami, or seiche zone.

Source: Project Location; San Mateo County GIS Maps; San Mateo County Hazards Maps; Federal Emergency Management Agency Flood Insurance Rate Map 06081C119F, effective September 2, 2017.

10.e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

Discussion: Pursuant to the discussion in Sections 10.a and 10.b, the proposed project would have a less than significant impact.

Source: Project Plans; Project Location; San Mateo County Hazards Map, Sigma Prime Geotechnical Study, dated August 2018; Wayne Ting & Associates Geotechnical Investigation, dated May 2019; Federal Emergency Management Agency Flood Insurance Rate Map 06081C119F, effective September 2, 2017.

10.f. Significantly degrade surface or ground-water water quality?			X	

Discussion: As discussed in Section 10.b, the project site does not contain any wells nor does the project involve any new wells. Thus, the project would pose a less than significant impact.

Source: Project Plans; Project Location; Sigma Prime Drainage Report, dated February 2019.

10.g. Result in increased impervious surfaces and associated increased runoff?			X	

Discussion: The project will create 1,558 sq. ft. of impervious surface area. A proposed on-site drainage system has been designed to direct roof runoff and increased surface flows into bioretention planters to reduce water velocity and retain water so that it can percolate into the ground. Through the construction and implementation of the proposed on-site drainage system, increased runoff from impervious surface areas will not create a significant impact. No mitigation is required.

Source: Project Plans; Sigma Prime Drainage Report, dated February 2019.

11. LAND USE AND PLANNING. Would the project:

	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
11.a. Physically divide an established community?				X

Discussion: The proposed project would result in infill development of a parcel near the boundary of an urban area adjacent to existing single-family development to the north, west and south and undeveloped lands to the east. The project does not include a proposal to divide lands or include development that would result in the division of an established community.

Source: Project Plans; Project Location.

11.b.	Cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

Discussion: Staff has reviewed the project and has not found a conflict with applicable policies of the County's Local Coastal Program (LCP) and applicable S-17/Design Review (DR) Zoning District regulations as discussed in Sections 1.c, 1.d, and all of Section 4 that would cause a significant environmental impact. Provided the recommended mitigation measures contained within this document are implemented, no significant impacts are expected to occur.

Source: San Mateo County Local Coastal Program; San Mateo County Zoning Regulations.

11.c.	Serve to encourage off-site development of presently undeveloped areas or increase development intensity of already developed areas (examples include the introduction of new or expanded public utilities, new industry, commercial facilities or recreation activities)?				X

Discussion: The project scope includes the construction of a single-family residence, interior second unit, and an access bridge within a single-family zoned area. Existing single-family residences are located to the west, north, and south of the project parcel. With the construction of the access bridge, the project would receive access from Sunshine Valley Road and would be connected to existing municipal water and sanitary services provided by Montara Water and Sanitary District. Electricity to the proposed residence will be provided by an existing utility pole located to the right of the project site within the public right-of-way. Though new utility lines will be installed to serve the proposed development these will be private lines/connections, will not be available (or permitted) for other parcels to use, and will not extend to adjacent parcel.

Source: Project Plans.

12. MINERAL RESOURCES. Would the project:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
12.a.	Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State?				X

Discussion: The proposed project neither involves nor results in any extraction or loss of mineral resources. Therefore, the project poses no impact.

Source: Project Plans.

12.b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Discussion: There are no known mineral resources on the project parcel; therefore, the proposed project will not result in the loss of availability of a locally important mineral resource recovery site as delineated on a local general plan, specific plan, or other land use plan.

Source: Project Plans; San Mateo County General Plan Mineral Resources Map.

13. NOISE. Would the project result in:

	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
13.a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	

Discussion: The proposed project would not produce any long-term significant noise sources. However, the project can generate excessive short-term noise associated with construction and grading activities. The short-term noise generated during grading and construction activities will be temporary, where volume and hours are regulated by Section 4.88.360 (*Exemptions*) of the San Mateo County Ordinance Code for Noise Control which limits noise sources associated with demolition, construction, repair, remodeling, or grading of any real property to the hours from 7:00 a.m. to 6:00 p.m., weekdays and 9:00 a.m. to 5:00 p.m., Saturdays. This section prohibits such activities on Sundays, Thanksgiving, and Christmas and limits noise levels produced by construction activities to a maximum of 80-dBA level at any one moment. Therefore, the County's noise regulations would limit potential temporary noise impacts to a less than significant level. Once construction is complete, the project is not expected to generate significant amounts of noise.

Source: Project Plans; Project Location; San Mateo County Noise Ordinance.

13.b. Generation of excessive ground-borne vibration or ground-borne noise levels?			X	

Discussion: Generation of excessive ground-borne vibration or noise levels is expected during grading and construction activities. However, construction activities that typically generate the most severe vibrations, such as blasting and pile driving, would not occur for the project. Adherence to the San Mateo County Noise Ordinance (discussed in Section 13.a above) will ensure that the impact is less than significant. Furthermore, habitation of the proposed single-family residence and second unit is not expected to generate excessive ground-borne vibration or noise levels.

Source: Project Plans; Project Location; San Mateo County Ordinance.

13.c.	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, exposure to people residing or working in the project area to excessive noise levels?			X	

Discussion: The project site is located approximately 2,000 feet north and eastward of the northern boundary of the Half Moon Bay Airport, a public airport operated by the County Department of Public Works. The project site is not located within the airport's noise exposure contours. Thus, the proposed project would not expose its occupants to excessive noise levels. Therefore, the project poses a less than significant impact.

Source: Project Plans; Project Location, Final Half Moon Bay Airport Land Use Compatibility Plan, 2014.

14.	**POPULATION AND HOUSING**. Would the project:				
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
14.a.	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X

Discussion: The proposed single-family residential structure with interior second unit is accessible using existing roads and would be served by existing utility infrastructure and would therefore not induce any significant population growth. Therefore, the project poses no impact.

Source: Project Plans; Project Location; San Mateo County GIS.

14.b.	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Discussion: The proposed single-family residence and second unit will be located on a vacant parcel; therefore, no existing housing will be displaced during the construction and operation/ habitation of the proposed project. Therefore, the project poses no impact.

Source: Project Plans; Project Location.

15. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
15.a.	Fire protection?				X
15.b.	Police protection?				X
15.c.	Schools?				X
15.d.	Parks?				X
15.e.	Other public facilities or utilities (e.g., hospitals, or electrical/natural gas supply systems)?				X

Discussion: All proposed project improvements are to occur completely on the privately owned subject parcel. Given that the project results in the addition of one single-family residence and second unit within a residentially zoned area, any increase in the use of existing neighborhood or regional parks or other recreational facilities would be minor. This increased use will not result in impacts of such a significant level that physical deterioration of any such facility will occur or be accelerated. The project will result in the fire authority (Coastside Fire Protection District) expanding their service to include the subject parcel. However, as the subject parcel is located immediately adjacent to an existing residence already served by the fire authority, the expansion of service to include the subject parcel is minor and will not impact the fire authority's ability to respond to emergencies or service the area. In addition, though the project involves the construction of a bridge to access the property, the fire authority reviewed and conditionally approved the proposal on the condition that the bridge be sized and engineered to accommodate fire trucks and emergency access vehicles. There no expectation that the proposed project will disrupt acceptable service ratios, response times or performance objectives of fire, police, schools, parks, or any other public facilities or energy supply systems.

Source: Project Plans; Project Location; Coastside Fire Protection District.

16. RECREATION. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
16.a. Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
Discussion: The project (future occupants of and visitors to the new residence and second unit) would not significantly increase the use of existing parks or other recreational facilities. The current accessibility to, and use of, Moss Beach Park (located approximately 0.22 miles to the west) and the upper reaches of the Fitzgerald Marine Reserve (located 0.38 miles to the west) will not be affected by the project. Potential project impact on the use of neighborhood or regional parks or other recreational facilities would be less than significant and significant physical deterioration of any such facilities as related to the project is not expected to occur or be accelerated from the construction of a single-family residence and second unit. Therefore, the project poses no impact. **Source:** Project Location; San Mateo County GIS.				
16.b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X
Discussion: The project does not include or require the construction or expansion of recreational facilities. **Source:** Project Plans.				

17. TRANSPORTATION. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
17.a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, and parking?			X	
Discussion: As proposed, and as required by the conditional approval of the Coastside Fire Protection District, the access bridge is designed to meet the minimum access standards for emergency vehicles. The development of a single-family dwelling and interior second unit is exempted from the development and implementation of a traffic impact analysis and mitigation plan. Traffic trips (comprised of both owners/tenants and guests) generated by the new residence and				

second unit is not expected to introduce any significant increase in vehicles on Sunshine Valley Road, and thus will pose no significant safety impact to other vehicles, pedestrians or bicycles. The adequacy of access, along Sunshine Valley Road, to and from the site has been reviewed by both the County's Department of Public Works and the Coastside Fire Protection District, who have concluded that such access complies with their respective policies and requirements. Therefore, the project poses a less than significant impact and no mitigation is required.

Source: Project Plans; San Mateo County Department of Public Works; Coastside Fire Protection District.

17.b.	Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) *Criteria for Analyzing Transportation Impacts*? *Note to reader: Section 15064.3 refers to land use and transportation projects, qualitative analysis, and methodology.*			X	

Discussion: Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. A project's effect on automobile delay does not constitute a significant environmental impact under CEQA. Per Section 15064.3, an analysis of vehicle miles traveled (VMT) attributable to a project is the most appropriate measure of transportation impacts. Other relevant considerations may include the effects of the project on transit and non-motorized travel. It should be noted that currently, the provisions of Section 15064.3 apply only prospectively; determination of impacts based on VMT is not required Statewide until July 1, 2020. Per Section 15064.3(b)(3), a lead agency may analyze a project's VMT qualitatively based on the availability of transit, proximity to destinations, etc.

Due to its location in the urban Midcoast Moss Beach area east of Highway 1, the project is located within 0.2 to 0.4 miles to several public transit stops. The site's proximity to public transit would reduce VMT associated with the proposed single-family residence and second unit. In addition, given that the project includes only one single-family residence and one second unit, traffic generated by the project would not have a substantial effect on the operation of local roadways and intersections, nor does the project include any modifications to the existing circulation system in the project vicinity that would result in a traffic safety hazard. The proposed residential use of the parcel would be compatible with the existing urban residential development in the project area. Therefore, the project would result in a less-than-significant impact.

Source: Project Plans; San Mateo County GIS.

17.c.	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X

Discussion: The project parcel is served by an existing paved road (Sunshine Valley Road) and would be accessed via a 23-foot long bridge across Dean Creek. Per the review and conditional approval by Public Works and the Coastside Fire Protection District the bridge is required to meet emergency access requirements per the Fire Protection District and line of sight distance requirements per the Department of Public Works to ensure that ingress and egress onto the parcel does not conflict with traffic or create a dangerous approach. The project does not propose the permanent utilization of equipment that would be incompatible with the existing vehicular traffic in

Sunshine Valley Road and/or any of the other connecting roads. No mitigation is necessary. **Source:** Project Plans; Project Location.				
17.d. Result in inadequate emergency access?		X		
Discussion: The project includes construction of an access bridge across a creek located at the front of the property. Upon review of the proposed bridge the Coastside County Fire Protection District conditionally approved the project. The following mitigation measure is recommended to ensure that the access bridge meets fire code standards for emergency access. **Mitigation Measure 24:** All bridges used for fire department access shall meet Cal-Trans HS-20-44 loading standards and have a minimum rated capacity of 25 tones (live load). Upon building permit submittal, a registered civil or structural engineer shall certify rated capacity of the bridge. Upon construction and prior to a building final, the bridge shall have the rated capacity posted on both entries. **Source:** Project Plans; Coastside Fire Protection District.				

18. TRIBAL CULTURAL RESOURCES. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
18.a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place or 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:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)				X
Discussion: The project site is vacant and is not listed in the California Register of Historical Resources. Furthermore, the project is not listed in a local register of historical resources, pursuant to any local ordinance or resolution as defined in Public Resources Code Section 5020.1(k). **Source:** Project Location; California Register of Historical Resources, California Historical Resources Information System Review Letter, dated July 2019; County General Plan; Holman & Associates Inc., Archaeologist Report, dated September 2019.				

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Subdivision (c) of Public 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.)		X		

Discussion: This project is not subject to Assembly Bill 52 for California Native American Tribal Consultation requirements, as no traditionally or culturally affiliated tribe has requested, in writing, to the County to be informed of proposed projects in the geographic project area. However, a Sacred Lands File and Native American Contacts List Request was sent to the Native American Heritage Council (NAHC) in June 2019. A Sacred Lands File search was completed by the NAHC and no sacred lands were found in the subject area. In following the NAHC's recommended Best Practices, the County has also contacted local Native American tribes who may have knowledge of cultural 37 resources in the project area. As of the date of this report, no tribe has requested consultation.

While the project is not expected to cause a substantial adverse change to any potential tribal cultural resources, the following mitigation measures are recommended to minimize any potential significant impacts to unknown tribal resources:

Mitigation Measure 25: Should any traditionally or culturally affiliated Native American Tribe respond to the County's issued notification for consultation, such process shall be completed and any resulting agreed upon measures for avoidance and preservation of identified resources be taken prior to implementation.

Mitigation Measure 26: In the event that tribal cultural resources are inadvertently discovered during project implementation, all work shall cease until a qualified professional can evaluate the find and recommend appropriate measures to avoid and preserve the resources in place, or minimize adverse impacts to the resource. Those measures shall be approved by the County Planning Department prior to implementation and prior to continuing any work associated with the project.

Mitigation Measure 27: Any inadvertently discovered tribal cultural resources shall be treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

Source: California Office of Historic Preservation; San Mateo County Listed Historical Resources.

19. UTILITIES AND SERVICE SYSTEMS. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
19.a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
Discussion: The proposed single-family residence and interior second unit would connect to and receive sewage and water services from the Montara Water and Sanitary District. The proposed project does not involve or require any water or wastewater treatment facilities that would exceed any requirements of the Regional Water Quality Control Board. In addition, the project would connect to PG&E infrastructure for electric power. The project would result in 1,558 sq. ft. of impervious surface area and has the potential to generate polluted stormwater runoff during project operation, the permanent project would be required to comply with the County's Drainage Policy requiring post construction stormwater flows to be at, or below, pre-construction flow rates. The proposed drainage system design, which has been reviewed and approved by the Department of Public Works, would accommodate the proposed project, and ensure pre-construction runoff levels are maintained or reduced. Based on these findings, the project impact is expected to be less than significant. **Source:** Project Plans; Project Location: San Mateo County GIS; Sigma Prime Drainage Report, dated February 2019.				
19.b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				X
Discussion: The water needs related to the construction and habitation of a single-family residence and interior second unit are not high intensity uses and are not expected to tax the existing water supply. Furthermore, the Montara Water and Sanitary District has reviewed the project, confirmed that the project parcel has a connection to the system, and indicated that they have adequate water and sewer capacity to serve the project. No adverse impacts are expected to occur. **Source:** Project Plans; Montara Water and Sanitary District.				
19.c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
Discussion: See 19.b. above for discussion.				

Source: Project Plans; Montara Water and Sanitary District.				
19.d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				X
Discussion: Construction of the proposed project is expected to generate solid waste on a temporary short term basis. The project will also result in the ongoing generation of solid waste after its construction as is typical for residential uses. As with the surrounding properties located in the Midcoast, the project site will receive municipal trash and recycling pick-up service by Recology. Though solid waste generation is not expected to result in inadequate landfill capacity the County's local landfill facility (Ox Mountain Landfill) has as a capacity/service life until 2034. **Source:** Project Plans; San Mateo County Integrated Waste Management Plan, 1999.				
19.e. Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?				X
Discussion: The solid waste generated by a new single-family residence and second unit is expected to be minimal. The project would receive solid waste collection service from Recology and is required to adhere to County ordinances with respect to waste reduction and recycling. The landfill cited in Section 19.d is licensed and operates pursuant to all Federal, State and local statutes and regulations as overseen by the San Mateo County Health System's Environmental Health Services and the San Mateo County Office of Sustainability. As a result, impacts related to Federal, State, and local management statues governing solid waste are not anticipated and no mitigation is required. **Source:** Project Plans.				

20.	**WILDFIRE**. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	***Potentially Significant Impacts***	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
20.a.	Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
Discussion: The project is located in a High Fire State Responsibility Area as identified by the County's GIS maps. No revisions to the adopted Emergency Operations Plan would be required as a result of the proposed Project. The nearest public service is the Coastside Fire Protection District Station No. 44 located approximately 0.5 miles north of the site at 501 Stetson Street, Moss Beach, CA 94038 and would not be impacted because primary access to all major roads would be maintained during construction and habitation of the residence and second unit. As discussed in Section 9 (*Hazards and Hazardous Materials*), the proposed project would not impair or physically interfere with an				

adopted emergency response or evacuation plan. Therefore, impacts would be less than significant, and no mitigation is required. **Source:** Project Plans; Project Location; San Mateo County GIS.					
20.b.	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			X	
Discussion: Wildland Urban Interface fires occur where combustible vegetation meets combustible structures, combining the hazards associated with wildfires and structure fires. The new residential structure constructed as a part of the project would include fire-resistant features that conform to modern fire and building codes, as well as fire detection or extinguishing systems. The newer residential structure would not be as vulnerable to fire as older structures are. The likelihood that a major structural fire will expand into a wildland fire before it can be brought under control is therefore significantly reduced. Similarly, wildfires will be less able to burn the building because of the preventative measures in place. Further, due to the proximity of the project site to the Coastside County Fire Station No. 44, and the very short expected response time to reported fires, the likelihood of injuries or pollutant emissions due to a wildfire is minimal. Therefore, the proposed project would not exacerbate wildfire risks or expose occupants to pollutant concentrations from a wildfire, or to the uncontrolled spread of wildfire. **Source:** Project Plans; Project Location.					
20.c.	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			X	
Discussion: The project does not involve a new road, fuel break, emergency water source, power line or other associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. **Source:** Project Plans.					
20.d.	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X
Discussion: The proposed on-site drainage facilities have been sized and appropriately placed to retain stormwater on-site and allow it to percolation into the ground. As the project would not increase the risk of wildfire or the severity of wildfires (see Section 20.a for further discussion) the project would not expose these structures to significant risk from flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. **Source:** Project Location; San Mateo County GIS.					

21. MANDATORY FINDINGS OF SIGNIFICANCE.				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
21.a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
Discussion: Without mitigation the project could potentially impact aesthetics, air, biological, climate, cultural, geological, hazardous materials, tribal, transportation, and water resources. Mitigation measures have been included to reduce these potential impacts to a less than significant level. **Source:** All Applicable Sources Previously Cited In this Document.				
21.b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)		X		
Discussion: As defined by the CEQA Guidelines, cumulative impacts reflect "the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." (CEQA Guidelines, Section 15355[b]). The Big Wave Wellness Center and Office Park, which is approved but has not yet started construction (located approximately 1.61 miles from the project site), and the Harbor Village RV Park which is in the permitting process and has not been granted approval (located 2.20 miles from the project site) are the only other major projects proposed for the area. Once construction is started there is an anticipated 15-year build out horizon for the Big Wave development. If approved, the proposed RV Park (which is a smaller scale project) which will take significantly less time to construct – approximately 10 to 12 months. Traffic patterns associated with the single-family residence and interior second unit are likely to be different than traffic patterns generated by the Big Wave and the RV Park, which may follow standard commute times.				

Based on the discussions in the previous sections, the project's potential impacts with respect to air quality, water, noise, and cultural resources etc., will be limited to the construction phase of the project and were determined to be less than significant with mitigation. Due to the "stand-alone" nature of this project in conjunction with the recommended mitigation measures contained throughout this document this project would have a less than significant cumulative impact upon the environment and no evidence has been found that the project would result in broader regional impacts. **Source:** All Applicable Sources Previously Cited in this Document.				
21.c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		
Discussion: As discussed in the previous sections, the proposed project is to construct a new single-family residence and second unit on a vacant parcel adjacent to other developed parcels. Based on the discussions in the previous sections where project impacts were determined to be less than significant or mitigation measures were required to result in an overall less than significant impact, the proposed project would not cause significant adverse effects on human beings, either directly or indirectly. **Source:** All Applicable Sources Previously Cited in this Document.				

RESPONSIBLE AGENCIES. Check what agency has permit authority or other approval for the project.

AGENCY	YES	NO	TYPE OF APPROVAL
Bay Area Air Quality Management District		X	
Caltrans		X	
City		X	
California Coastal Commission		X	
County Airport Land Use Commission (ALUC)		X	
Other: _____		X	
Regional Water Quality Control Board		X	
San Francisco Bay Conservation and Development Commission (BCDC)		X	
Sewer/Water District:		X	
State Department of Fish and Wildlife	X		
State Department of Public Health		X	
State Water Resources Control Board		X	
U.S. Army Corps of Engineers (CE)		X	

AGENCY	YES	NO	TYPE OF APPROVAL
U.S. Environmental Protection Agency (EPA)		X	
U.S. Fish and Wildlife Service		X	

MITIGATION MEASURES

	Yes	No
Mitigation measures have been proposed in project application.	X	
Other mitigation measures are needed.		X

The following measures are included in the project plans or proposals pursuant to Section 15070(b)(1) of the State CEQA Guidelines:

Mitigation Measure 1: All exterior lights shall be certified dark sky compliant. Prior to the final approval of the building permit, exterior lighting shall be inspected to verify installed lighting is dark sky compliant.

Mitigation Measure 2: The applicant shall require construction contractors to implement all the Bay Area Air Quality Management District's Basic Construction Mitigation Measures, listed below:

a. Water all active construction areas at least twice daily.

b. Apply water two times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking, and staging areas at construction sites. Also, hydroseed or apply non-toxic soil stablizers to inactive construction areas.

c. Sweep daily all paved adjacent public streets daily (preferably with water sweepers) if visible soil material is carried onto them.

d. Limit traffic speeds on unpaved roads within the project parcel to 15 miles per hour.

e. All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

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 [CCR]). Clear signage shall be provided for construction workers at all access points.

g. Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand etc.) that can be blown by the wind.

h. Replant vegetation in disturbed areas as quickly as possible.

I. Install erosion control measures to prevent silt runoff to public roadway and/or into Dean Creek.

j. All haul trucks transporting soil, sand, or other loose material on and off site shall be covered.

k. Roadways and building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

l. A publicly visible sign with the telephone number and person to contact at the project site

regarding dust complaints shall be posted. 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.

Mitigation Measure 3: Noise sources associated with demolition, construction, repair, remodeling, or grading of any real property shall be limited to the hours from 7:00 a.m. to 6:00 p.m., weekdays and 9:00 a.m. to 5:00 p.m., Saturdays. Said activities are prohibited on Sundays, Thanksgiving, and Christmas (San Mateo Ordinance Code Section 4.88.360).

Mitigation Measure 4: Water Quality – The applicant shall not apply insecticides or herbicides at the project site during project implementation or long-term operational maintenance where there is the potential for these chemical agents to enter Dean Creek or other waterbodies and/or lands that contain potential habitat for the identified special-status species.

Mitigation Measure 5: Water Quality – Construction of the 23-foot long bridge across Dean Creek shall occur only during the dry season when there is no water present within the creek to reduce the transport of sedimentation. A biologist shall be onsite during the construction of the bridge to ensure the creek is not impacted. A letter from the biologist verifying compliance with this mitigation measure shall be submitted to the Planning and Building Department prior to final approval of the building permit.

Mitigation Measure 6: Water Quality – To prevent impacts associated with hazardous materials, fugitive dust, sediment, or other construction-related materials, prior to the Current Planning Section's approval of a building permit, the applicant shall submit an Erosion and Sediment Control Plan, subject to review and approval by the project planner. The plan shall have been reviewed by a qualified biologist prior to submittal to the County. The plan shall include measures to prevent runoff into Dean Creek along the northerly edge of the project area and demonstrate compliance with other erosion control requirements and mitigation measures. This shall include the installation of silt fences or straw wattles between work areas and any water sources such as the drainage swale, and around any spoil piles (e.g., loose asphalt, dirt, debris, construction-related materials) that could potentially discharge sediment into habitat areas. If straw wattles are used, they shall be made of biodegradable fabric (e.g., burlap) and free of monofilament netting.

Mitigation Measure 7: Wildlife Encounters – If any wildlife is encountered during Project activities, said encounter shall be reported to a qualified biologist and wildlife shall be allowed to leave the work area unharmed. Animals shall be allowed to leave the work area of their own accord and without harassment. Animals shall not be picked up or moved in any way.

Mitigation Measure 8: California Red-Legged Frog and San Francisco Garter Snake –

a. An exclusion fence shall be installed along the easterly and southerly property lines. The fence shall be at least 3 feet in height and trenched 6 inches deep. Furthermore, the fence shall be installed so that there are no openings or gaps through which a frogs or snakes could move into the project area. The exclusionary fencing shall have escape funnels in the fence every 100 feet or less for trapped snakes or frogs to exit the project area.

b. A pre-construction survey for CRLFs and SFGs shall be conducted no less than 48 hours prior to the start of project activities (including equipment and materials staging) by a CDFW certified biologist.

c. All crewmembers shall attend an Environmental Awareness Training presented by a qualified biologist. The training shall include a description of the special-status species that may occur in the region, the project Avoidance and Minimization Measures, Mitigation Measures, the limits of the project work areas, applicable laws and regulations, and penalties for non-compliance. Colored photocards of CRLFs and SFGSs shall remain on the project site during construction. Upon completion of training, crewmembers shall sign a training form indicating they attended the program and understood the measures. Completed training form(s) shall

be provided to the Project Planner before the start of project activities.

d. Following the start of construction activities, a qualified biologist or trained biological monitor shall inspect the site weekly to monitor the integrity of the exclusionary fencing, confirm the limit of work and equipment is within the project boundaries, and assess the overall project adherence to the mitigation measures.

Mitigation Measure 9: San Francisco Dusky-Footed Woodrat – The construction contractor shall install woodrat exclusion fencing along the southern and easterly property lines in accordance with Drawing No. A112 on the site plan.

a. Woodrat exclusion fencing shall be installed prior to the start of construction including equipment and materials staging.

b. Woodrat exclusion fencing shall be the same exclusion fencing that will be installed for the California red-legged frog and San Francisco garter snake. The escape funnel provided for the snakes and frogs shall have a small enough escape funnel (i.e., less than 3'' x 3'' exit) to prevent woodrats from passing through.

c. If woodrat nests are observed within the project area outside of the breeding season (February to July) the project biologist may dismantle the nest (outside of the breeding season), allowing individuals to relocate to suitable habitat within the adjacent open space areas.

d. If woodrat nests with young are observed within the project site, an exclusion fence shall be erected around the nest site. The fencing shall provide adequate enough area to provide foraging habitat for the woodrats at the discretion of the project biologist. Site preparation (i.e., grubbing and grading) within the fenced area shall be postponed or halted until young have left the nest. A biological monitor shall be onsite during periods when disturbance activities occur near the active nest to ensure no inadvertent impacts will occur to the nests.

Mitigation Measure 10: Saltmarsh Common Yellowthroat – If construction activities are proposed during the nesting season (February 15 – August 31), a qualified biologist shall inspect the property, including large trees within 250 feet of the property for nesting raptors, and any vegetation within 50 feet of the property for other nesting birds. If any nests or nesting activity is observed, the contractor shall consult with a CDFW biologist to determine appropriate protection measures.

Mitigation Measure 11: To prevent potential erosion concerns within the bed and banks of Dean Creek, removal of invasive and non-native species will be limited to the areas outside the banks of Dean Creek. No vegetation removal shall occur within the bed or banks of the creek. Vegetation and debris resulting from vegetation removal shall be placed outside the creek channel and in a located where they cannot roll, wash, or move back into the creek channel.

Mitigation Measure 12: Vegetation removal shall occur during the dry season to minimize the potential for soil erosion and reduce the risk of bank destabilization.

Mitigation Measure 13: Native vegetation shall be planted in disturbed soil areas to further reduce potential erosion.

Mitigation Measure 14: Per the project plans, native species that shall be planted within the 30-foot riparian buffer include but are not limited to *Deschampsia cepitosa* ssp. *Holciformis, Festuca rubra, Sisyrinchium bellum, Achillea millefolium, Allium* sp., *Epilobium densiflorum, Limonium californicum,* and *Monardella* sp.

Mitigation Measure 15: New vegetation within the 30-foot buffer area shall be planted to achieve approximately 70% cover. Mulch shall be spread over exposed soil areas between plantings to prevent soil erosion within the buffer area.

Mitigation Measure 16: A qualified biologist shall be on-site to oversee the removal of invasive

and non-native species and the replanting of native vegetation. A letter from the biologist verifying vegetation removal and replanting activities has occurred per these mitigation measures and shall be submitted to the Planning and Building Department within 10 business days of said activities.

Mitigation Measure 17: No construction parking or storage of construction materials shall be allowed within the 30-foot riparian corridor buffer area.

Mitigation Measure 18: In the event that cultural, paleontological, or archaeological resources are encountered during site grading or other site work, such work shall immediately be halted in the area of discovery and the project sponsor shall immediately notify the Community Development Director of the discovery. The applicant shall be required to retain the services of a qualified archaeologist who meets the Secretary of the Interiors' Professional Qualification Standards for the purpose of recording, protecting, or curating the discovery as appropriate. The cost of the qualified archaeologist and of any recording, protecting, or curating shall be borne solely by the project sponsor. The archaeologist shall be required to submit to the Community Development Director for review and approval a report of the findings and methods of curation or protection of the resources. In addition, an archaeological report meeting the Secretary of the Interior's Standards detailing the findings of the monitoring will be submitted to the Northwest Information Center after monitoring has ceased. No further grading or site work within 50 feet of the area of discovery shall be allowed until the preceding has occurred.

Mitigation Measure 19: If a newly discovered resource is, or is suspected to be, Native American in origin, the resource shall be treated as a significant Tribal Cultural Resource, pursuant to Public Resources Code 21074, until the County has determined otherwise with the consultation of a qualified archaeologist and local tribal representative.

Mitigation Measure 20: In the event of discovery or recognition of any human remains during project construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains and State of California Health and Safety Code Section 7050.5 shall be followed. The applicant shall then immediately notify the County Coroner's Office, the County Planning and Building Department, and possibly the State Native American Heritage Commission to seek recommendations from a Most Likely Descendant (Tribal Contact) before any further action at the location of the find can proceed. All contractors and sub-contractors shall be made aware of these requirements and shall adhere to all applicable laws including State Cultural Preservation laws. Disposition of Native American remains shall comply with CEQA Guidelines Section 15064.5(e).

Mitigation Measure 21: The project shall be designed and constructed to follow the recommendations outlined in the Sigma Prime Geosciences, Inc., Geotechnical Study, geotechnical report dated August 2018 and the Wayne Ting & Associates, Inc., Geotechnical Study Update, dated May 2019.

Mitigation Measure 22: At building permit submittal, the foundation system shall be able to address both the lateral spreading and liquefaction potential of the site to the satisfaction of the County's Geotechnical Section and Building Inspection Section.

Mitigation Measure 23: If any constraints are encountered that would confine traffic to one lane along Sunshine Valley Road, the applicant shall be required to submit a traffic control plan, consult with, and obtain an encroachment permit from the Department of Public Works (if required) prior to any such road closures. If any such road closure is required, the Department of Public Works shall notify the Coastside Fire Protection District and Sheriff's Department to ensure that any such road closure does not impede emergency access.

Mitigation Measure 24: All bridges used for fire department access shall meet Cal-Trans HS-20-44 loading standards and have a minimum rated capacity of 25 tones (live load). Upon building permit submittal, a registered civil or structural engineer shall certify rated capacity of the bridge. Upon construction and prior to a building final, the bridge shall have the rated capacity posted on

both entries.

Mitigation Measure 25: Should any traditionally or culturally affiliated Native American Tribe respond to the County's issued notification for consultation, such process shall be completed and any resulting agreed upon measures for avoidance and preservation of identified resources be taken prior to implementation.

Mitigation Measure 26: In the event that tribal cultural resources are inadvertently discovered during project implementation, all work shall cease until a qualified professional can evaluate the find and recommend appropriate measures to avoid and preserve the resources in place, or minimize adverse impacts to the resource. Those measures shall be approved by the County Planning Department prior to implementation and prior to continuing any work associated with the project.

Mitigation Measure 27: Any inadvertently discovered tribal cultural resources shall be treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

DETERMINATION (to be completed by the Lead Agency).

On the basis of this initial evaluation:

	I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared by the Planning Department.
X	I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because of the mitigation measures in the discussion have been included as part of the proposed project. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

(Signature)

Date

(Title)

ATTACHMENTS:

A. Project Location Map
B. Project Plans
C. California Historical Resources Information System Letter, dated July 25, 2019
D. Native American Heritage Commission Sacred Lands File Search Letter, dated July 17, 2019
E. Biological Impact Report, prepared by Coast Ridge Ecology, dated August 2018
F. Biological Impact Report Memorandum, prepared by SWCA Environmental Consultants dated January 2019
G. Tree Inventory, prepared by Trees 360°, dated February 2019
H. Arborist Report, prepared by Kielty Arborist Services LLC, dated November 2018
I. Geotechnical Study, prepared by Sigma Prime Geosciences Inc., dated August 2018
J. Updated Geotechnical Investigation, prepared by Wayne Ting & Associates Inc., dated May 2019.
K. Drainage Report, prepared by Sigma Prime Geosciences Inc., dated February 13, 2019

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