County of San Mateo
Planning and Building Department

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

1. **Project Title:** Masten Land Clearing

2. **County File Number:** PLN 2019-00393

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:** Summer Burlison, Project Planner; 650/363-1815 or sburlison@smcgov.org

5. **Project Location:** East of terminus of Springwood Way, Unincorporated Pacifica

6. **Assessor's Parcel Number and Size of Parcel:**

Assessor's Parcel Number	Parcel Size
023-392-020	2.32
023-391-030	1.24
023-395-020	2.64

7. **Project Sponsor's Name and Address:** James O'Connell, 901 Sneath Lane, Suite 117, San Bruno, CA 94066

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

9. **General Plan Designation:** Open Space

10. **Zoning:** Resource Management (RM)

11. **Description of the Project:** A Land Clearing Permit is being sought to clear a 10-feet wide path through approximately 6.2 acres of commonly-owned rural, undeveloped and densely vegetated land to allow for temporary access to the upper portions of the project parcels for purposes of archaeological study, geotechnical investigation, and land surveying. The clearing operation will consist of approximately 3 to 4 workers using primarily hand tools to remove shrubs, thick grasses and non-heritage trees down to approximately foot-level, no soil will be exposed, within a 1,725-foot long meandering path. Tree removal is expected to be minimal, see the Biological Section for further discussion.

12. **Surrounding Land Uses and Setting:** The project site is located at the northern foot of Montara Mountain in the unincorporated County of San Mateo, on downsloping southeast to northwest terrain. The eastern terminus of Springwood Way (City of Pacifica) abuts the project parcels and provides an opportunity for (informal) access to the project parcels. North to

northwest of the project site is a single-family residential neighborhood in the City of Pacifica. Northeast to east, south, and southwest to west is rural undeveloped land in the unincorporated County of San Mateo, similar in characteristic to the project site.

The project site consists of densely vegetated sloped terrain that is predominantly covered with hazelnut scrub/golden chinquapin thickets. Brooks Creek, a perennial tributary of San Pedro Creek, runs through the southwestern corner of the project area between Springwood Way and the project parcels. Red alder forest occurs adjacent to Brooks Creek and red osier thicket occurs along an intermittent/ephemeral drainage in the opposite southeastern portion of the project parcels. Additionally, manzanita chaparral/golden chinquapin thicket occurs in several patches in the elevated southeastern portion of the project parcels. In general, there are few trees in the project area. Blue gum eucalyptus were identified in the northwest portion of the project parcels; however, there are also expected to be some species of madrone, golden chinquapin and Monterey pine trees present throughout the project parcels, although trees are not observed to be dominant in the area.

13. **Other Public Agencies Whose Approval is Required:** City of Pacifica

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.?:** No, there has been no California Native American tribes affiliated with the project site that have requested consultation pursuant to Public Resources Code Section 21080.3.1.

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.

	Aesthetics		Energy		Public Services
	Agricultural and Forest Resources	X	Hazards and Hazardous Materials		Recreation
X	Air Quality		Hydrology/Water Quality		Transportation
X	Biological Resources		Land Use/Planning	X	Tribal Cultural Resources
	Climate Change		Mineral Resources		Utilities/Service Systems
X	Cultural Resources		Noise	X	Wildfire
	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: The project entails clearing a 10-foot wide by 1,725-foot long meandering path through approximately 6.2 acres of heavily vegetated rural hillside for temporary access to the upper portions of the land. While there may be some visual change that would be seen from nearby existing residential areas and public land trails that face portions of the project parcels, the magnitude of visual change from these areas would be minimal. Therefore, the project would not have a substantial adverse impact on a scenic vista, views from existing residential areas, public lands, water bodies, or roads. **Source:** Project Location; Project Plans.					
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 site is located over 1/4-mile east of the outer limit of the Cabrillo Highway county scenic corridor, thus, the project would not damage or destroy any scenic resources within a state scenic highway. **Source:** Project Location; Project Plans.					
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 clearing activity would consist of approximately 3 to 4 workers using primarily hand tools to remove shrubs, thick grasses and non-heritage trees down to approximately foot-level to create a 10-foot wide meandering path through the project parcels; no soil will be exposed. Also, see Section 1.a. above. Therefore, the project would not substantially degrade the existing visual character or quality of public views of the site or its surroundings. No changes in topography, or ground surface relief features are proposed, and no development is proposed with the project. **Source:** Project Location; Project Plans.					
1.d.	Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?				X
Discussion: Any temporary lighting necessary to perform the clearing activity under densely vegetative canopy would be insignificant given its immediate rural surrounding and that work would occur during daytime hours. **Source:** Project Location.					
1.e.	Be adjacent to a designated Scenic Highway or within a State or County Scenic Corridor?				X
Discussion: The project site is located over 1/2-mile east of the outer limit of the Cabrillo Highway county scenic corridor. Therefore, the project is not within or adjacent to a designated Scenic Highway or State or County Scenic Corridor. **Source:** Project Location; San Mateo County Scenic Corridors Map.					
1.f.	If within a Design Review District, conflict with applicable General Plan or Zoning Ordinance provisions?				X
Discussion: The project site is not located within a Design Review District. **Source:** Project Location; San Mateo County Zoning Map.					
1.g.	Visually intrude into an area having natural scenic qualities?			X	
Discussion: See Section 1.a. through 1.c. above. **Source:** Project Location; Project Plans.					

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: According to the California Department of Conservation Farmland Mapping and Monitoring Program, the project site is designated "Other Land" and therefore is not Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. **Source:** California Department of Conservation, Farmland Mapping and Monitoring Program, San Mateo County Important Farmland 2014 (map), published February 2016.					
2.b.	Conflict with existing zoning for agricultural use, an existing Open Space Easement, or a Williamson Act contract?				X
Discussion: The project site is zoned Resource Management (RM), which permits agricultural uses. However, the project is only intended to allow limited and temporary access through the project area and to the upper portions of the project parcels for the purpose of professional technical study and investigation of the land. Furthermore, the project site is not protected by an existing Open Space Easement or Williamson Act contract. **Source:** San Mateo County Zoning Regulations; San Mateo County Agricultural Preserves Map; Project Plans.					
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 is limited to clearing dense coastal scrub and chaparral habitats down to foot-level within a 10-foot wide by 1,725-foot long path through approximately 6.2 acres of land for					

temporary and limited access through the land for professional technical surveying and study (i.e., archaeological study, geotechnical investigation, and land surveying). Therefore, the project would not involve changes that would result in conversion of forestland to non-forest use. Furthermore, the project site is not located in an area identified as Farmland.

Source: California Department of Conservation, Farmland Mapping and Monitoring Program, San Mateo County Important Farmland 2014 (map), published February 2016; Draft Biological Resources Assessment prepared by BioMaAS, December 7, 2018; Project Location.

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 project site is not located within the Coastal Zone.

Source: San Mateo County Coastal Zone Boundary Map.

2.e.	Result in damage to soil capability or loss of agricultural land?				X

Discussion: The project site is not located in an area with productive soil resources with timber or agricultural capabilities, based on the San Mateo County General Plan Productive Soil Resources Map.

Source: San Mateo County General Plan, Productive Soil Resources 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.*				X

Discussion: The project does not conflict with existing zoning for or involve the rezoning of forestland, timberland, or forestland zoned Timber Production; the project parcels are zoned Resource Management (RM).

Source: San Mateo County Zoning Map.

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 current regulating air quality plan for San Mateo County. The CAP was created to improve Bay Area air quality and to protect public health and the climate.

The project will not conflict with or obstruct the implementation of the BAAQMD's 2017 CAP. The project would consist of limited and low-intensity land clearing involving approximately 3 to 4 workers using primarily hand tools over the duration of approximately one week. During project implementation, air emissions would be generated from limited equipment, including work vehicles; however, any such work-related emissions would be temporary and localized. Once the clearing work is completed, routine maintenance, as necessary, for the duration of a 6-month period would be expected to maintain access for technical consultants to complete surveying and investigation work (i.e., land surveying, geotechnical investigation, and archaeological study).

Source: BAAQMD 2017 Clean Air Plan; 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 Bay Area Air Basin is designated non-attainment for Ozone, Particulate Matter (PM10), and Particulate Matter – Fine (PM2.5) according to the BAAQMD. Therefore, any increase in these criteria pollutants would be significant. During project implementation, air emissions in the form of fugitive dust and exhaust will be generated from limited equipment, including construction vehicles. However, any such construction-related emissions will be temporary and localized.

The BAAQMD provides preliminary screening criteria in their 2017 BAAQMD CEQA Guidelines to indicate whether a project would result in the generation of construction-related criteria air-pollutants and/or precursors that exceed defined thresholds of significance. The proposed project, with the basic construction mitigation control measures below, meets the screening criteria indicating a less than significant impact for construction-related activities. Furthermore, Section 2-1-113 (Exemption, Sources and Operations) of the BAAQMD General Requirements exempts sources of air pollution associated with road construction from obtaining an Authority to Construct or Permit to Operate. While the proposed project is limited to creating temporary access through the land, and not a road, the project is intended to serve the similar basic function of access. Therefore, sources of air pollution associated with the project would be an exempt activity.

Mitigation Measure 1: The applicant shall submit a plan to the Planning and Building Department prior to the commencement of work that at a minimum includes applicable "Basic Construction Mitigation Measures" as listed in Table 8-2 of the BAAQMD CEQA Guidelines (May 2017). These

measures shall be implemented prior to beginning any project related work and shall be maintained for the duration of the project activities:

a. All paved areas (i.e., roadways) used for construction staging and/or parking shall be cleared of visible dirt and debris at the end of each work day in a manner that minimizes the generation of dust and avoids pollutants entering any waterway.

b. All haul trucks transporting loose material shall be covered.

c. Idling times shall be minimized either by shutting equipment or vehicles 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 California Code of Regulations [CCR]).

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

e. Minimize the idling time of diesel-powered construction equipment, including work vehicles, to two minutes.

f. Workers shall commute to the job site when feasible to reduce the increase of construction vehicles to the area.

g. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Bay Area Air Quality Management District's phone number shall also be visible to ensure compliance with applicable regulations.

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

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 where people live, play, convalesce or spend significant amounts of time, such as schools, hospitals, or residential areas. Sensitive individuals, such as children and the elderly, are those most susceptible to poor air quality.

Although the project site is located adjacent to a single-family residential neighborhood, the site's immediate surrounding rural, densely vegetated setting will help to insulate project activities from the nearby residential neighborhood. Nonetheless, due to limited site access, work staging, and parking would occur within this residential neighborhood. Mitigation Measure 1 will minimize any potential significant exposure of nearby sensitive receptors to a less than significant level.

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

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

Discussion: The project is not expected to result in other emissions, such as odors, that would adversely affect a substantial number of people.

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 or National Marine Fisheries Service?		X		

Discussion: According to a biological resources assessment by BioMaAS, the project parcels have the potential to support habitat for numerous plant and wildlife species considered sensitive and/or special-status by the California Department of Fish and Wildlife. Due to limited accessibility of the project parcels for biological reconnaissance surveying, as the project area was predominantly inaccessible to BioMaAS professionals due to the highly dense brush, which the project seeks to temporarily resolve, limited distance observation and reliance on desktop resources such as the San Francisco State University's *San Pedro Watershed Vegetation* map (2002) was used to provide general assessment of the biological conditions of the project parcels. The following discussion is based on the Draft Biological Resources Assessment prepared by BioMaAS:

Sensitive Plant Species

Most of the project parcels support hazelnut (*Corylus cornuta* var. *californica*) scrub/golden chinquapin (*Chrysolepis chrysophylla* var. *minor*) thickets forming tall dense shrub layers that includes ocean spray (*Holodiscus discolor*) in the upper shrub layer and California blackberry (*Rubus ursinius*) in the lower shrub layer. The dominant species observed was hazelnut and ocean spray; no golden chinquapin thickets were observed. Other species in this habitat include sword fern (*Polystichum munitum*), California bee plant (*Scrophularia californica*), rigid hedge nettle (*Stachys rigida*), bracken fern (*Pteridium aquilinum* var. *pubescens*), horsetail (*Equisteum sp.*), thimbleberry (*Rubus parviflora*) and poison oak (*Toxicodendron diversiloba*).

Red alder (*Alnus rubra*) riparian forest occurs adjacent to Brooks Creek with red alder dominating the upper canopy and forming a somewhat dense to open upper canopy layer. Arroyo willow and red osier occur in the lower canopy and California blackberry is dominant in the lower layer. Native species including horsetail, rigid hedge nettle, and California bee plant were observed in the understory along with invasive periwinkle.

Mapping of red osier (*Cornus sericea*) thickets along an intermittent/ephemeral drainage in the upper southeastern portion of the project parcels and several patches of manzanita chaparral/golden chinquapin thickets in the upper southeastern portion of the project area are limited to the mapping unit of the San Francisco State University's *San Pedro Creek Watershed* map (2002), as these areas are inaccessible for further study.

All of the above species are considered sensitive natural communities by the California Department of Fish and Wildlife.

Special-Status Plant Species

The project parcels provide moderately suitable habitat for twenty-six special-status plant species

and one lichen. Additionally, there is a high potential for occurrence of Montara manzanita in the scrub and chaparral habitat on the project parcels. See Attachment C for a complete list of special-status plant species and their potential for occurrence on the project parcels.

Special-Status Wildlife Species

Evidence of one (1) special-status wildlife species, San Francisco dusky-footed woodrat, was observed in the riparian habitat and scrub habitat within and adjacent to the project parcels. Additionally, the project parcels provide potential habitat for dispersal, breeding, and roosting for twelve (12) other special-status species, including obscure bumblebee (*Bombus caliginosus*), western bumblebee (*Bombus occidentalis*), Leech's skyline diving beetle (*Hydroporus leechi*), monarch butterfly (*Danaus plexippus*), steelhead (*Oncorhynchus mykiss*), California giant salamander (*Dicamptodon ensatus*), California red-legged frog (*Rana draytonii*), San Francisco garter snake, yellow warbler (*Dendroica petechial brewsteri*), pallid bat (*Antrozous pallidus*), hoary bat (*Lasiurus cinereus*), Western red bat (*Lasiurus blossevillii*), and ringtail (*Bassariscus astutus*).

The project will consist of clearing, down to foot-level, a narrow 10-foot wide path through predominantly hazelnut scrub/golden chinquapin thickets as this habitat dominants the project area. Access to the site from Springwood Way requires workers to cross Brooks Creek through red alder riparian forest habitat. Except for foot traffic from a limited sized work crew over the course of approximately one week to complete the project, the project will not divert, obstruct, change, remove or add any material to the creek. Additionally, the upper limits of vegetation clearing may impact red osier thickets and/or manzanita chaparral/golden chinquapin thickets. All of these habitats have the potential to provide supportive habitat for various special-status wildlife species. The project does not propose root removal of vegetation or exposure of soil and is limited to that necessary to provide temporary access to professional consultants over a short duration of time (6 months) to perform technical study and surveying of the land. Thus, project impacts to sensitive features and special-status plant and wildlife species is expected to be limited and temporary. Nonetheless, due to the access limitations of the project parcels by the biological consultant, the following mitigation measures are recommended to ensure any potential unknown significant adverse impacts to sensitive biological resources, including special-status plant and wildlife species, are reduced to a less-than-significant level throughout project implementation:

Mitigation Measure 2: A qualified biologist shall be on-site to oversee all clearing operations performed under the project. Should consultation with any state or federal agency be required throughout project implementation due to the discovery or potential adverse impact on a biological resource in the project area, the County of San Mateo Planning and Building Department shall be notified immediately. A letter from the biologist summarizing their oversight of any biological resource impacts encountered during project implementation and identifying the measures taken to minimize those impacts, or recommended measures needed to minimize or mitigate impacts, shall be submitted to the County of San Mateo Planning and Building Department within 10 business days of project completion. Upon review, the County may require the applicant to complete post-project measures as determined necessary by the project biologist.

Mitigation Measure 3: A qualified botanist shall be on-site to oversee all clearing operations performed under the project. A letter from the botanist summarizing their oversight of any vegetative resource impacts encountered during project implementation and identifying the measures taken to minimize those impacts, or recommended measures needed to minimize or mitigate impacts, shall be submitted to the County of San Mateo Planning and Building Department within 10 business days of project completion. Upon review, the County may require the applicant to complete post-project measures as determined necessary by the project botanist. This mitigation measure may be satisfied in combination with Mitigation Measure 2 provided the biologist is qualified as a botanist.

Mitigation Measure 4: To prevent debris material from migrating off-site or entering any

watercourses or riparian habitats, the following measures shall be implemented:

a. Install a silt fence, or equivalent temporary protective device, at the outside edges of the clearing limits and limit all work activities to this area. Check the protective device daily to ensure that the barrier is preventing materials from migrated outside of the immediate work limits.

b. Install rock bags or equivalent protective devices outside of and parallel to any watercourse channels to prevent debris material from entering the creek while allowing wildlife to continue use of the watercourse as a migratory corridor.

c. Use impervious tarps or other impervious material to secure all debris material at the work site prior to transporting over any watercourses and to any on-street staging area for off-haul.

d. All project-related debris and waste shall be picked-up and properly disposed of daily. Debris stockpiled throughout the course of each day that can be blown by wind shall be covered when not in active use.

Mitigation Measure 5: To prevent chemical agents from entering any watercourses, groundwater, and/or land that contain potential habitat for special-status species, the applicant shall not use insecticides or herbicides at the project site during project implementation or for maintenance purposes.

Mitigation Measure 6: The applicant shall adhere to the applicable San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including, but not limited to, the following:

a. Perform clearing activities only during dry weather.

b. Store, handle, and dispose of all potential pollutants, including but not limited to construction materials, wastes and vegetation debris material properly, so as to prevent their contact with stormwater or watercourses.

c. Avoid cleaning, fueling, or maintaining equipment on-site, except in a designated area where wash water is contained and treated.

d. Avoid the use of pesticides, herbicides, or similar chemicals, to prevent polluted runoff or groundwater contamination.

e. Avoid tracking dirt or debris materials onto paved roadways; clean paved construction staging and parking areas using dry sweeping methods.

f. Train and provide instruction to all workers regarding General Construction and Site Supervision Guidelines and Best Management Practices.

Mitigation Measure 7: There shall be no diversion, obstruction, change, removal or deposit to the course of any waterway, including to the bed, channel or banks as a result of the project.

Mitigation Measure 8: Wildlife exclusion fencing shall be erected around the clearing limits prior to commencement of work to prevent wildlife species, including but not limited to California Giant Salamander, California red-legged frog, and San Francisco garter snake, from entering the active work area. Exclusion fencing shall be at least 24 inches high and entrenched three to six inches into the ground. The integrity of the fence shall be maintained for the extent of the clearing operation. Silt fencing may be used to serve this purpose.

Mitigation Measure 9: The use of monofilament netting, commonly used in straw wattle and other erosion devices, is prohibited to avoid possible entrapment of wildlife species.

Mitigation Measure 10: Any wildlife encountered during clearing activities 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 without prior consultation from the qualified on-site biologist.

Mitigation Measure 11: If invasive species such as pampas grass, Himalayan blackberry, poison hemlock, and fennel are removed during clearing operations, the debris shall be hauled offsite to prevent the spread of these species.

Mitigation Measure 12: If any trees are removed between October through February then a qualified biologist shall survey the trees prior to removal for overwintering butterflies. If a monarch roost is observed during surveys, consultation with the California Department of Fish and Wildlife shall occur prior to removal.

Mitigation Measure 13: Tree removal should occur between September 1 and January 31, outside of the avian breeding season. However, if tree removal occurs between February 1 and August 31, the nesting season for raptors and most other birds, then a qualified biologist must survey the trees for the presence of active bird nests prior to removal. If active nests are found a work exclusion zone shall be established around each nest by a qualified biologist that will remain in place until all young in the nest have fledged or the nest otherwise becomes inactive. As exclusion zones vary in size depending on the species, the size will be determined by the qualified biologist.

Mitigation Measure 14: If any trees are removed during bat roosting season, between March through August, a qualified biologist shall survey the project trees for the presence of bat maternity roosts prior to tree removal. Disturbance of maternity roosts shall be avoided until young bats are mature enough to leave on their own. Consultation with the Department of Fish and Wildlife shall occur before relocation of bats. Alternatively, trees may be removed from September 1 through October 31, after the maternity roost season but before winter hibernation (which may begin as early as November).

Mitigation Measure 15: Any encounter with San Francisco dusky-footed woodrat middens shall result in work stoppage in the area and consultation with the qualified project biologist. Middens should be avoided if feasible. Should the avoidance of woodrat middens not be feasible, the middens should be dismantled by hand under the supervision of a qualified biologist. If young are encountered, the material should be replaced, and the biologist should return within approximately 24 hours to see if the young have been relocated. If the young have not been relocated, the biologist should make an age determination and return when it is likely that the young have been weaned to determine occupancy. A no-disturbance buffer should be established around the active midden at the discretion of the biologist and the buffer should remain in place until the young have matured enough to disperse on their own.

Mitigation Measure 16: Silt fencing and an orange temporary Environmentally Sensitive Area (ESA) fence shall be installed around all red alder forest and red osier thickets in the work area to avoid work activity impacts. The fencing shall be installed under the supervision of a qualified biologist to ensure installation is completed correctly and with minimal impact.

Source: Draft Biological Resources Assessment prepared by BioMaAS, December 7, 2018; Project Plans.

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 or National Marine Fisheries Service?		X		

Discussion: See Section 4.a. above.

Source: Draft Biological Resources Assessment prepared by BioMaAS, December 7, 2018; Project Plans.					
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: The project consists of limited clearing of vegetation down to foot-level throughout the project area and is not expected to remove, fill, or hydrologically interrupt any wetland features. Nonetheless, due to limited access of the project area for further detailed biological assessment by BioMaAS, which the proposed project seeks to address by creating temporary and limited access for professional technical study and surveying, mitigation measures in Section 4.a. are recommended to ensure no substantial impacts to any unidentified wetlands occur. **Source:** Draft Biological Resources Assessment prepared by BioMaAS, December 7, 2018; Project Plans.					
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: BioMaAS identified that Brooks Creek is a likely wildlife movement corridor for many terrestrial and aquatic wildlife species. Mitigation measures in Section 4.a. will ensure minimal impediments to the migration or movement of any species throughout the project area. **Source:** Draft Biological Resources Assessment prepared by BioMaAS, December 7, 2018; Project Plans.					
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: Tree removal is expected to be minimal and avoided whenever possible. Except for blue gum Eucalyptus habitat in the northwestern corner portion of the project parcels, BioMaAS estimates there are few trees throughout the majority of the project parcels. The dense vegetative conditions of the project parcels make the project area inaccessible to document the precise location or size and species of trees that may require removal as part of the project. The following mitigation measures are recommended to support the County's objectives for the protection and preservation of trees: **Mitigation Measure 17:** Whenever feasible, the project shall avoid the removal of any trees that are 12-inch dbh (diameter at breast height) or greater; avoidance may require modification to the pathway for clearing when feasible and not in conflict with minimizing impacts to other habitat resources. **Mitigation Measure 18:** All tree removal shall avoid root removal to prevent soil disturbance and					

destabilization in the area.

Mitigation Measure 19: All trees, 12-inch dbh or greater, removed for the project shall be documented as to their location, species and size, and submitted to the County of San Mateo Planning and Building Department within 10 business days of project completion for record. Upon review, the County will determine whether tree replanting is necessary based on the extent of documented removal.

Source: Draft Biological Resources Assessment prepared by BioMaAS, December 7, 2018; Project Plans.

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, Habitat Conservation Planning, California Regional Conservation Plans Map; Project Location.

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

Discussion: The project site is not located inside or within 200 feet of a marine or wildlife reserve.

Source: U.S. Fish and Wildlife Services, National Wildlife Refuge System Locator; Project Location.

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

Discussion: The project area does not support oak woodland. Blue gum eucalyptus habitat encroaches into the northwest corner portion of the project parcels. Additionally, limited quantity of madrone, golden chinquapin and Monterey pine trees may also be present throughout the project area. Tree removal is expected to be minimal and avoided when possible. See Section 4.e. for further discussion and mitigation.

Source: Draft Biological Resources Assessment prepared by BioMaAS, December 7, 2018; 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 area consists of rural, undeveloped land and is not listed on state or local

registers of historical resources. Since the project does not entail ground disturbance there is a low probability that the project would impact any unknown historical resources.

Source: Project Location; Project Plans; California State Parks, Office of Historic Preservation, California Historical Resources List; County General Plan, Background, Historical and Archaeological Resources Appendices.

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

Discussion: The project involves vegetation clearing down to foot-level along a narrow path starting at the eastern terminus of Springwood Way in the City of Pacifica through 6.2 acres of land; no soil disturbance will occur as part of this project. The purpose of the project is to provide temporary and limited access through the project parcels for professional technical study, including archaeological study, as the parcels are inaccessible due to their densely vegetated and rural condition. Nonetheless, the following mitigation measure is recommended as best management practice in the event of the potential discovery of unknown archaeological resources during project implementation:

Mitigation Measure 20: In the event that archaeological resources are inadvertently discovered, work in the immediate vicinity (within 25 feet) of the find must stop until a qualified archaeologist can evaluate the significance of the find. Clearing activities may continue in other areas beyond the 25-foot stop work area. A qualified archaeologist is defined as someone who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology. The County of San Mateo Planning and Building Department's Current Planning Section shall be notified of such findings, and no additional work shall be done in the stop work area until the archaeologist has recommended appropriate measures, and those measures have been approved by the Current Planning Section and implemented.

Source: Project Plans.

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

Discussion: The project is not expected to disturb any human remains as the project consists of clearing dense vegetation down to foot-level with no soil exposure or disturbance.

Source: Project Plans; San Mateo Genealogical Society Cemetery Listings.

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			X	

	construction or operation?				
Discussion: The project will not use or consume any on-site electricity or energy resources as the project site is considered rural and unimproved with such resources. Energy consumption associated with the project would be limited to minimal construction equipment (i.e., construction vehicles) which would be limited and temporary for the implementation of the project. **Source:** Project Plans.					
6.b.	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.				X
Discussion: The project does not entail any structural development or use that would cause demand for energy resources that would conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **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: The project consists of approximately 3 to 4 workers using primarily hand tools to remove shrubs, thick grasses and non-heritage trees down to approximately foot-level with no soil exposure or disturbance. Additionally, the project area is not within or near an earthquake fault as delineated on the Alquist-Priolo Earthquake Fault Zoning Map. Therefore, the project would not cause rupture of earthquake faults. **Source:** United States Geological Survey (USGS) Alquist-Priolo Fault Zone Maps GIS tool; Project Plans.					

ii. Strong seismic ground shaking?				X
Discussion: The project consists of approximately 3 to 4 workers using primarily hand tools to remove shrubs, thick grasses and non-heritage trees down to approximately foot-level with no soil exposure or disturbance. Therefore, the project would not induce strong seismic ground shaking. **Source:** Project Plans.				
iii. Seismic-related ground failure, including liquefaction and differential settling?				X
Discussion: The project consists of approximately 3 to 4 workers using primarily hand tools to remove shrubs, thick grasses and non-heritage trees down to approximately foot-level with no soil exposure or disturbance. Therefore, the project would not create a reason for inducing strong seismic-related ground failure. **Source:** Project Plans.				
iv. Landslides?				X
Discussion: The project site is located in an area designated as low to moderate landslide susceptibility. The project consists of limited and low-intensity land clearing of dense vegetation down to foot-level with no soil disturbance. Therefore, the project would not cause the occurrence of landslides. **Source:** USGS Landslide Susceptibility Map; Project Plans.				
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 is not located on or near a coastal cliff or bluff. **Source:** Project Location.				
7.b. Result in substantial soil erosion or the loss of topsoil?				X
Discussion: The project does not involve any soil exposure or disturbance as vegetation clearing will consist of reducing vegetative material down to foot-level. Therefore the project would not result in soil erosion or the loss of topsoil. **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 project is not expected to generate on- or off-site geotechnical hazards as the project consists of limited and low-intensity land clearing of dense vegetation down to foot-level with no soil disturbance or exposure. **Source:** Project Plans.					
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: The County's Geotechnical Hazards Synthesis Map characterizes the project area's geological material to be hard to firm with minimal expansiveness. Furthermore, the extent of clearing would lower vegetation within a 10-foot wide pathway down to foot-level so ground soils will not be disturbed. **Source:** Project Plans.					
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 does not involve the use of a septic tank or alternative wastewater disposal systems. **Source:** Project Plans.					
7.f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
Discussion: The project consists of limited vegetation clearing to reduce vegetation to foot-level along a moderately sloped undeveloped hillside; no ground disturbance or exposure is involved. Thus, there is a low probability that the project would destroy or cause impact to a unique paleontological resource or unique geologic feature. **Source:** Project Plans; Project Location.					

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: Implementation of the project would temporarily generate GHG emissions from the limited use of construction equipment, including vehicles; however, the increase would be minimal and limited to a short duration of time (approximately one week) to complete the clearing work. **Source:** Project Plans.					
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 project would not conflict with the applicable San Mateo County Energy Efficiency Climate Action Plan (EECAP) pursuant to the applicable criteria of the EECAP Development Checklist for individual projects, specifically, criteria 15.1 for construction idling. Mitigation Measure 1 would ensure that the project complies with the EECAP for construction idling. **Source:** 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 significant amounts of GHG emissions, or significantly reduce GHG sequestering?				X
Discussion: The project area is primarily covered with coastal scrub and chaparral habitat and therefore does not involve the loss of forestland or the conversion of forestland to non-forest use. **Source:** Project Plans; Draft Biological Resources Assessment prepared by BioMaAS, December 7, 2018.					
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 near a coastal cliff or bluff where accelerated erosion due to sea level rise would pose a risk. **Source:** Project Location.					

8.e. Expose people or structures to a significant risk of loss, injury or death involving sea level rise?				X
Discussion: The project is not located in an area where sea level rise is a concern. **Source:** Project Location.				
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 does not propose any structures within a 100-year flood hazard area. **Source:** Project Location; Project Plans; Federal Emergency Management Agency, Flood Insurance Rate Map, Community Panel 06081C0128E, effective October 16, 2012.				
8.g. Place within an anticipated 100-year flood hazard area structures that would impede or redirect flood flows?				X
Discussion: The project does not propose any structures within an anticipated 100-year flood hazard area. **Source:** Project Location; Project Plans; Federal Emergency Management Agency, Flood Insurance Rate Map, Community Panel 06081C0128E, effective October 16, 2012.				

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 does not involve the transport, use, or disposal of hazardous materials. **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 staff's discussion in Section 9.a. above. Furthermore, the project site is not a known hazardous material site, per the California Department of Toxic Substances Control's Hazardous Waste and Substances Site list. **Source:** Project Plans; California Department of Toxic Substances Control, Hazardous Waste and Substances Site List (Cortese List), accessed online January 2020.					
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 does not involve the emittance of hazardous emissions or the handling of hazardous materials. **Source:** Project Plans.					
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 project site is not listed on a hazardous materials site list. **Source:** Project Location; California Department of Toxic Substances Control, Hazardous Waste and Substances Site List (Cortese List), accessed online January 2020.					
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 is not located within an airport land use plan or within 2 miles of a public airport. **Source:** Project Location.					

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

Discussion: Access to the project site is limited to the paved roadway system within the City of Pacifica, as the project site is adjacent to the City of Pacifica's jurisdictional boundary. The eastern terminus of Springwood Way, a paved City road, ends at the City's border to the project site and provides the only reasonable access to the project site. Therefore, construction staging, and vehicles would be required to locate within the City. In order to ensure the project does not impair or physically interfere with any emergency response plan or evacuation plan, the City requires review and approval of a traffic control plan and encroachment permit for the project prior to the commencement of any work related to the project. Conditions of approval for any entitlement permit issued by the County for the project will reflect these City requirements. Thus, further mitigation is not necessary.

Source: Project Location; Project Plans; City of Pacifica review comments, October 28, 2019.

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

Discussion: Although the project entails low-intensity work to complete, including 3-4 workers who will be performing clearing activity primarily using hand tools, the project site is located in a Very High Fire Hazard Severity Zone, State Responsibility Area. According to the County's Grading and Land Clearing regulations, Section 9296.5 (Fire Safety), any equipment shall meet spark arrester and firefighting tool requirements as specified in the California Public Resources Code. Conditions of approval for any entitlement permit issued by the County for the project will reflect this County regulation requirement. Furthermore, the San Mateo County Fire Department has reviewed and approved this project. Additionally, Mitigation Measure 21 is recommended to further minimize the risk for wildland fire as a result of the project.

Mitigation Measure 21: All vegetation debris shall be cleared from the project area daily. Debris burning in conjunction with the project shall be strictly prohibited.

Source: Project Plans; San Mateo County Building Regulations for Grading and Land Clearing; San Mateo County Fire Department review, November 15, 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: The project site is not located within a 100-year flood hazard area, nor does the project propose any development.

Source: Federal Emergency Management Agency, Flood Insurance Rate Map, Community Panel 06081C0128E, effective October 16, 2012.

9.i.	Place within an existing 100-year flood hazard area structures that would impede or redirect flood flows?				X
Discussion: The project site is not located within a 100-year flood hazard area, nor does the project propose any development. **Source:** Federal Emergency Management Agency, Flood Insurance Rate Map, Community Panel 06081C0128E, effective October 16, 2012.					
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: The project site is not located in an area that would be impacted by the failure of a dam or levee. Furthermore, the project site is not within a dam failure inundation area per the San Mateo County General Plan Hazards Map. **Source:** Project Location; San Mateo County General Plan, Hazards Map.					
9.k.	Inundation by seiche, tsunami, or mudflow?				X
Discussion: According to the San Mateo County General Plan Hazards Map, the project site is not located in a tsunami or seiche inundation area. Furthermore, the project site is not located in an area of high landslide susceptibility. **Source:** San Mateo County General Plan, Hazards Map; USGS Landslide Susceptibility Map.					

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 does not involve any grading or soil disturbance; however, clearing-related material and vegetation debris may have the potential to migrate during heavy rain events or windy conditions. The mitigation measures recommended in Sections 3.b and 4.a will help ensure that					

project-related material and debris are contained to immediate work areas and prevented from migrating to locations that could substantially degrade surface or ground water quality in the area. **Source:** Project Plans.				
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 would not decrease groundwater supplies or interfere with groundwater recharge as the project entails limited land clearing of dense vegetation down to foot-level with no soil disturbance and no development proposed. **Source:** Project Plans.				
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 consists of limited land clearing of dense vegetation down to foot-level to create a narrow meandering pathway through densely vegetated land with no soil exposure or disturbance. The outside limits of the narrow path will remain densely vegetated and act as a natural erosion and siltation barrier for any cut vegetation debris. Nonetheless, clearing-related material and vegetation debris may have the potential to migrate during heavy rain events or windy conditions. Therefore, mitigation measures recommended in Sections 3.b and 4.a. will help ensure that project-related material and debris are contained to immediate work areas and prevented from migrating to off-site locations. **Source:** Project Plans.				
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;				X
Discussion: The project consists of limited land clearing of dense vegetation down to foot-level to create a meandering 10-feet wide pathway through the project area with no soil disturbance. Therefore, the project would not affect natural drainage patterns in the area or substantially increase the rate or amount of surface runoff within the project area as the project will not leave any cleared areas denuded. **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: The project consists of limited land clearing of dense vegetation down to foot-level with no soil disturbance and no development proposed. Furthermore, there are no existing or planned stormwater drainage systems that are affected by the project, nor would the project provide substantial additional sources of polluted runoff. **Source:** Project Plans.				
iv. Impede or redirect flood flows?				X
Discussion: The project consists of limited land clearing of dense vegetation down to foot-level to create a 10-foot wide meandering pathway through the project area with no soil disturbance. Therefore, the project would not impede or redirect any flood flows. **Source:** Project Plans.				
10.d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
Discussion: The project area is not located in a flood hazard, tsunami, or seiche zone. **Source:** Federal Emergency Management Agency, Flood Insurance Rate Map, Community Panel 06081C0128E, effective October 16, 2012; San Mateo County Natural Hazards Map.				
10.e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X
Discussion: The project consists of limited land clearing of dense vegetation down to foot-level to create a 10-foot wide meandering pathway through the project parcels with no soil disturbance and no development proposed. Therefore, the project would not affect the implementation of a water quality control plan or sustainable groundwater management plan. **Source:** Project Plans.				
10.f. Significantly degrade surface or ground-water water quality?				X
Discussion: The project consists of limited land clearing of dense vegetation down to foot-level with no soil disturbance. Therefore, the project would not cause any changes to water quality in the area, including surface or groundwater water quality. **Source:** Project Plans.				

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

Discussion: The project consists of limited land clearing of dense vegetation down to foot-level with no soil disturbance and no development proposed. Therefore, the project would not introduce any impervious surfaces to the area.

Source: Project Plans.

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 project does not involve a land division or 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: The project would not conflict with any applicable land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental impact.

Source: Project Plans.

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 consists of limited land clearing of dense vegetation down to foot-level to create a 10-foot wide meandering pathway through the parcels for access to the upper areas of the parcel for surveying and study of the land for the purpose of pursuing future development. Any future development would be subject to annexation into the City of Pacifica (sphere of influence) and entitlement permits, including separate environmental review pursuant to the California Environmental Quality Act (CEQA). Otherwise, no soil disturbance or development is proposed as part of this project.

Source: Project Plans; San Mateo County Sphere of Influence Map.

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 project site does not contain any known mineral resources, according to the San Mateo County Mineral Resources Map of the County's General Plan. **Source:** San Mateo County General Plan, Mineral Resources Map.				
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: See staff's discussion in Section 12.a. above. **Source:** 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 project consists of 3 to 4 workers using primarily hand tools to remove shrubs, thick grasses and non-heritage trees down to approximately foot-level. The duration of work is expected to be one week. This work is expected to generate minimal and short-term increases in ambient noise associated with the clearing work. Such temporary increases in noise are regulated by Section 4.88.360 (*Exemptions*) of the County Ordinance Code for Noise Control. Otherwise, the project will not generate any long-term noise impacts to the area. **Source:** Project Plans; County Ordinance Code, Section 4.88.360 (Noise Control).				

13.b. Generation of excessive ground-borne vibration or ground-borne noise levels?			X	
Discussion: The project consists of 3 to 4 workers using primarily hand tools to remove shrubs, thick grasses and non-heritage trees down to approximately foot-level over a short period of time (i.e., one week). Therefore, the project is not expected to generate excessive vibration or ground-borne noise. **Source:** Project Plans.				
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 is not located within an airport land use plan or within 2 miles of a public airport. **Source:** Project Location.				

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 project would not induce substantial unplanned population growth as the project is limited to clearing a relatively narrow path through undeveloped land to gain temporary access to the upper portions of the project parcels for the purposes of professional technical study and investigation of the land. **Source:** Project Plans.				
14.b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X
Discussion: The project would not displace existing people or housing, as the project is limited to clearing a relatively narrow path through undeveloped land for temporary access to study and investigation of the land.				

Source: Project Plans.

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: The project would not result in substantial adverse physical impacts requiring new or physical altered government facilities, or public services as the project is limited to clearing a 10-foot wide temporary access path through dense vegetation for professional study and investigation of the land.

Source: Project Plans.

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 would not increase the use of existing neighborhood or regional parks or other recreational facilities.

Source: Project Plans.

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 recreational facilities 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: The project would not conflict with any transportation plans, ordinances or policies as the project will generate a minimal temporary increase in traffic levels to the area from construction vehicles for a short duration of time (approximately one week) to complete the project. Furthermore, the project would require a Traffic Control Plan and encroachment permit from the City of Pacifica prior to the commencement of work to ensure any temporary components of project implementation do not impede or adversely impact any City circulation systems. Conditions of approval for any entitlement permit issued by the County for the project will reflect these City requirements. Thus, further mitigation is not necessary. **Source:** Project Plans; City of Pacifica review comments, October 28, 2019.					
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. 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. The project does not introduce any permanent development or land uses that would have a substantial effect on the operation of local or regional roadways, nor does the project propose any					

modifications to the existing circulation system in the project vicinity that would result in a traffic safety hazard. Any increased traffic to the area would be limited to a short period of time, approximately one week, for a limited size work crew to complete the clearing operation. Furthermore, any traffic related to professional consultants visiting the site for surveying and study purposes would be limited and temporary. Therefore, the project would not have any substantial or long-term impact on the area. **Source:** Project Plans.				
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 does not involve the construction or change of any roadway design features or incompatible uses. **Source:** Project Plans.				
17.d. Result in inadequate emergency access?				X
Discussion: The project consists of providing temporary access through 6.2 acres of rural densely vegetated land for purposes of limited use by technical professionals to study and survey the land. No development or permanent uses are proposed. Furthermore, the San Mateo County Fire Department has reviewed and approved the project. **Source:** Project Plans.				

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 parcels are undeveloped rural land and are not listed in the California Register of Historical Resources. Furthermore, the project parcels are 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; Project Plans; California State Parks, Office of Historic Preservation, California Historical Resources List; County General Plan, Background, Historical and Archaeological Resources Appendices.

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: The 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. The project consists of temporary and limited vegetative impacts to the project parcels for clearing of a 10-foot wide pathway through the project parcels. No soil disturbance or exposure is involved and no change in topography ground relief features or development is proposed. Nonetheless, given the rural setting of the project parcels and in following the Native American Heritage Commission's (NAHC) best management practices, the County has sent tribal consultation requests to six (6) tribes within San Mateo County that the NAHC identifies has traditional or cultural affiliation within the boundaries of the County of San Mateo. As of the date of this publication, the County has not received any communication from the tribes. Nonetheless, the following mitigation measures are recommended to minimize any potential significant impacts to unknown tribal cultural resources:

Mitigation Measure 22: 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 of the project.

Mitigation Measure 23: In the event that tribal cultural resources are inadvertently discovered during project implementation, all work shall stop until a qualified professional can evaluate the find and recommend appropriate measures to avoid and preserve the resource in place, or minimize adverse impacts to the resource, and those measures shall be approved by the Current Planning Section prior to implementation and continuing any work associated with the project.

Mitigation Measure 24: 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: Project Plans; Native American Heritage Commission, Tribal Consultation List, dated January 16, 2020; Assembly Bill 52.

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 project does not involve the installation or use of any wet or dry utilities in the area. **Source:** Project Plans.				
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: See staff's discussion in Section 19.a. above. **Source:** Project Plans.				
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 staff's discussion in Section 19.a. above. **Source:** Project Plans.				
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: The project is limited to vegetation clearing and thus will not generate any solid waste that would impair local infrastructure or conflict with waste reduction goals. Waste resulting from the project is limited to vegetation cuttings and debris that will be removed from the site on a daily basis. Though waste generation from the project is not expected to result in inadequate landfill capacity the County's local landfill facility (Ox Mountain Landfill) has 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 landfill cited in Section 19.d is licensed and operates pursuant to all Federal, State, and local statues and regulations overseen by the San Mateo County Health System's Environmental Health Services and the San Mateo County Office of Sustainability. As a result, impacts to Federal, State, and local management statues governing solid waste are not anticipated for the project. **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 Very High Fire Hazard Severity Zone, State Responsibility Area. The project area is southeast of the City of Pacifica, in the adjacent rural undeveloped hills. The nearest public service is the Pacifica Fire Department Station No. 72, located approximately 1.5 miles northwest of the project site, at 1100 Linda Mar Boulevard in Pacifica. Station No. 72's primary response area includes the southern end of Pacifica, which includes the residential neighborhood abutting the project site. Emergency response from the Pacifica Fire Department or emergency evacuation routes for residents along Springwood Way would not be impacted by the project as access along all City roadways would be maintained through the duration of the project. Furthermore, the City requires a Traffic Control Plan and encroachment permit prior to the commencement of work in order to ensure that construction staging and parking within any City street does not adversely impede traffic flow. **Source:** Project Location.				
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: Despite the sloped terrain and wind conditions of the area that can influence wildfire risks, the project is limited to low-intensity clearing activity consisting of 3 to 4 workers primarily using hand tools to reduce dense vegetation down to foot-level within a limited work area over a short duration of time lasting approximately one week. The project is limited to creating temporary access to a limited number of professionals that would access the site for short periods of time to conduct technical surveying and study of the land. Additionally, the San Mateo County Fire Department has reviewed and approved the project. Nonetheless, the project site is located near a residential neighborhood in the City of Pacifica and is designated a Very High Fire Hazard Severity Zone, State Responsibility Area. See Section 9.g. for additional fire risk discussion and mitigation to minimize the risk for wildland fire.

Source: Project Plans; Project Location; San Mateo County Building Regulations for Grading and Land Clearing; San Mateo County Fire Department review, November 15, 2019.

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 require or propose the installation or maintenance of infrastructure that could exacerbate fire risk or that would result in 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 project will not result in soil disturbance as the proposed clearing consists of reducing vegetation down to foot-level. Drainage changes and soil stability in the project area are expected to be minimal to none since vegetation roots will remain undisturbed.

Source: Project Plans.

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		X		

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?				

Discussion: As discussed throughout this document, particularly Section 3 (Air Quality), Section 4 (Biological Resources), Section 5 (Cultural Resources), Section 9 (Hazards and Hazardous Materials), Section 18 (Tribal Cultural Resources), and Section 20 (Wildfire), the project has the potential to significantly degrade the quality of the environment and/or significantly impact the habitat of plant and wildlife species. However, mitigation measures have been include throughout this document to reduce these potential impacts to a less-than-significant level.

Source: All applicable sources cited within 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: Although the project parcels are next to a residential neighborhood within the City of Pacifica, the parcels are relatively large in size totaling approximately 6.2 acres. The project scope is limited and isolated within the 6.2 acres of project land area. Due to the "stand-alone" nature and limited scope of this project in conjunction with the recommended mitigation measures contained throughout this document, the 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 cited within 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 throughout this document, particularly Section 3 (Air Quality), Section 9 (Hazards and Hazardous Material), and Section 20 (Wildfire), the project has the potential to result in environmental impacts that could both directly and indirectly cause impacts on human beings, including through the temporary generation of construction-related emissions that exceed air quality standards and temporary increase in wildfire risk. However, the implementation of the recommended mitigation measures included in this document would reduce any potential impacts to a less-than-significant level.

Source: All applicable sources cited within 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 of Pacifica	X		Encroachment Permit; Traffic Control Plan approval.
California Coastal Commission		X	
County Airport Land Use Commission (ALUC)		X	
Other: _____		X	
National Marine Fisheries Service		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	
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: The applicant shall submit a plan to the Planning and Building Department prior to the commencement of work that at a minimum includes applicable "Basic Construction Mitigation Measures" as listed in Table 8-2 of the BAAQMD CEQA Guidelines (May 2017). These measures shall be implemented prior to beginning any project related work and shall be maintained for the duration of the project activities:

a. All paved areas (i.e., roadways) used for construction staging and/or parking shall be cleared of visible dirt and debris at the end of each work day in a manner that minimizes the generation of dust and avoids pollutants entering any waterway.

b. All haul trucks transporting loose material shall be covered.

c. Idling times shall be minimized either by shutting equipment or vehicles 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 California Code of Regulations [CCR]).

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

e. Minimize the idling time of diesel-powered construction equipment, including work vehicles, to two minutes.

f. Workers shall commute to the job site when feasible to reduce the increase of construction vehicles to the area.

g. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Bay Area Air Quality Management District's phone number shall also be visible to ensure compliance with applicable regulations.

Mitigation Measure 2: A qualified biologist shall be on-site to oversee all clearing operations performed under the project. Should consultation with any state or federal agency be required throughout project implementation due to the discovery or potential adverse impact on a biological resource in the project area, the County of San Mateo Planning and Building Department shall be notified immediately. A letter from the biologist summarizing their oversight of any biological resource impacts encountered during project implementation and identifying the measures taken to minimize those impacts, or recommended measures needed to minimize or mitigate impacts, shall be submitted to the County of San Mateo Planning and Building Department within 10 business days of project completion. Upon review, the County may require the applicant to complete post-project measures as determined necessary by the project biologist.

Mitigation Measure 3: A qualified botanist shall be on-site to oversee all clearing operations performed under the project. A letter from the botanist summarizing their oversight of any vegetative resource impacts encountered during project implementation and identifying the measures taken to minimize those impacts, or recommended measures needed to minimize or mitigate impacts, shall be submitted to the County of San Mateo Planning and Building Department within 10 business days of project completion. Upon review, the County may require the applicant to complete post-project measures as determined necessary by the project botanist. This mitigation measure may be satisfied in combination with Mitigation Measure 2 provided the biologist is qualified as a botanist.

Mitigation Measure 4: To prevent debris material from migrating off-site or entering any watercourses or riparian habitats, the following measures shall be implemented:

a. Install a silt fence, or equivalent temporary protective device, at the outside edges of the clearing limits and limit all work activities to this area. Check the protective device daily to ensure that the barrier is preventing materials from migrated outside of the immediate work limits.

b. Install rock bags or equivalent protective devices outside of and parallel to any watercourse channels to prevent debris material from entering the creek while allowing wildlife to continue use of the watercourse as a migratory corridor.

c. Use impervious tarps or other impervious material to secure all debris material at the work site prior to transporting over any watercourses and to any on-street staging area for off-haul.

d. All project-related debris and waste shall be picked-up and properly disposed of daily. Debris stockpiled throughout the course of each day that can be blown by wind shall be covered when not in active use.

Mitigation Measure 5: To prevent chemical agents from entering any watercourses, groundwater, and/or land that contain potential habitat for special-status species, the applicant shall not use insecticides or herbicides at the project site during project implementation or for maintenance purposes.

Mitigation Measure 6: The applicant shall adhere to the applicable San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including, but not limited to, the following:

a. Perform clearing activities only during dry weather.

b. Store, handle, and dispose of all potential pollutants, including but not limited to construction materials, wastes and vegetation debris material properly, so as to prevent their contact with stormwater or watercourses.

c. Avoid cleaning, fueling, or maintaining equipment on-site, except in a designated area where wash water is contained and treated.

d. Avoid the use of pesticides, herbicides, or similar chemicals, to prevent polluted runoff or groundwater contamination.

e. Avoid tracking dirt or debris materials onto paved roadways; clean paved construction staging and parking areas using dry sweeping methods.

f. Train and provide instruction to all workers regarding General Construction and Site Supervision Guidelines and Best Management Practices.

Mitigation Measure 7: There shall be no diversion, obstruction, change, removal or deposit to the course of any waterway, including to the bed, channel or banks as a result of the project.

Mitigation Measure 8: Wildlife exclusion fencing shall be erected around the clearing limits prior to commencement of work to prevent wildlife species, including but not limited to California Giant Salamander, California red-legged frog, and San Francisco garter snake, from entering the active work area. Exclusion fencing shall be at least 24 inches high and entrenched three to six inches into the ground. The integrity of the fence shall be maintained for the extent of the clearing operation. Silt fencing may be used to serve this purpose.

Mitigation Measure 9: The use of monofilament netting, commonly used in straw wattle and other erosion devices, is prohibited to avoid possible entrapment of wildlife species.

Mitigation Measure 10: Any wildlife encountered during clearing activities 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 without prior consultation from the qualified on-site biologist.

Mitigation Measure 11: If invasive species such as pampas grass, Himalayan blackberry, poison hemlock, and fennel are removed during clearing operations, the debris shall be hauled offsite to prevent the spread of these species.

Mitigation Measure 12: If any trees are removed between October through February then a qualified biologist shall survey the trees prior to removal for overwintering butterflies. If a monarch roost is observed during surveys, consultation with the California Department of Fish and Wildlife shall occur prior to removal.

Mitigation Measure 13: Tree removal should occur between September 1 and January 31, outside of the avian breeding season. However, if tree removal occurs between February 1 and August 31, the nesting season for raptors and most other birds, then a qualified biologist must survey the trees for the presence of active bird nests prior to removal. If active nests are found a work exclusion zone shall be established around each nest by a qualified biologist that will remain in place until all young in the nest have fledged or the nest otherwise becomes inactive. As exclusion zones vary in size depending on the species, the size will be determined by the qualified biologist.

Mitigation Measure 14: If any trees are removed during bat roosting season, between March through August, a qualified biologist shall survey the project trees for the presence of bat maternity roosts prior to tree removal. Disturbance of maternity roosts shall be avoided until young bats are mature enough to leave on their own. Consultation with the Department of Fish and Wildlife shall occur before relocation of bats. Alternatively, trees may be removed from September 1 through October 31, after the maternity roost season but before winter hibernation (which may begin as early as November).

Mitigation Measure 15: Any encounter with San Francisco dusky-footed woodrat middens shall result in work stoppage in the area and consultation with the qualified project biologist. Middens should be avoided if feasible. Should the avoidance of woodrat middens not be feasible, the middens should be dismantled by hand under the supervision of a qualified biologist. If young are encountered, the material should be replaced, and the biologist should return within approximately 24 hours to see if the young have been relocated. If the young have not been relocated, the biologist should make an age determination and return when it is likely that the young have been weaned to determine occupancy. A no-disturbance buffer should be established around the active midden at the discretion of the biologist and the buffer should remain in place until the young have matured enough to disperse on their own.

Mitigation Measure 16: Silt fencing and an orange temporary Environmentally Sensitive Area (ESA) fence shall be installed around all red alder forest and red osier thickets in the work area to avoid work activity impacts. The fencing shall be installed under the supervision of a qualified biologist to ensure installation is completed correctly and with minimal impact.

Mitigation Measure 17: Whenever feasible, the project shall avoid the removal of any trees that are 12-inch dbh (diameter at breast height) or greater; avoidance may require modification to the pathway for clearing when feasible and not in conflict with minimizing impacts to other habitat resources.

Mitigation Measure 18: All tree removal shall avoid root removal to prevent soil disturbance and destabilization in the area.

Mitigation Measure 19: All trees, 12-inch dbh or greater, removed for the project shall be documented as to their location, species and size, and submitted to the County of San Mateo Planning and Building Department within 10 business days of project completion for record. Upon review, the County will determine whether tree replanting is necessary based on the extent of documented removal.

Mitigation Measure 20: In the event that archaeological resources are inadvertently discovered, work in the immediate vicinity (within 25 feet) of the find must stop until a qualified archaeologist can evaluate the significance of the find. Clearing activities may continue in other areas beyond the 25-foot stop work area. A qualified archaeologist is defined as someone who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology. The County of San Mateo Planning and Building Department's Current Planning Section shall be notified of such findings, and no additional work shall be done in the stop work area until the archaeologist has recommended appropriate measures, and those measures have been approved by the Current Planning Section

and implemented.

Mitigation Measure 21: All vegetation debris shall be cleared from the project area daily. Debris burning in conjunction with the project shall be strictly prohibited.

Mitigation Measure 22: 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 of the project.

Mitigation Measure 23: In the event that tribal cultural resources are inadvertently discovered during project implementation, all work shall stop until a qualified professional can evaluate the find and recommend appropriate measures to avoid and preserve the resource in place, or minimize adverse impacts to the resource, and those measures shall be approved by the Current Planning Section prior to implementation and continuing any work associated with the project.

Mitigation Measure 24: 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)

3/10/2020
Date

Senior Planner
(Title)

ATTACHMENTS:

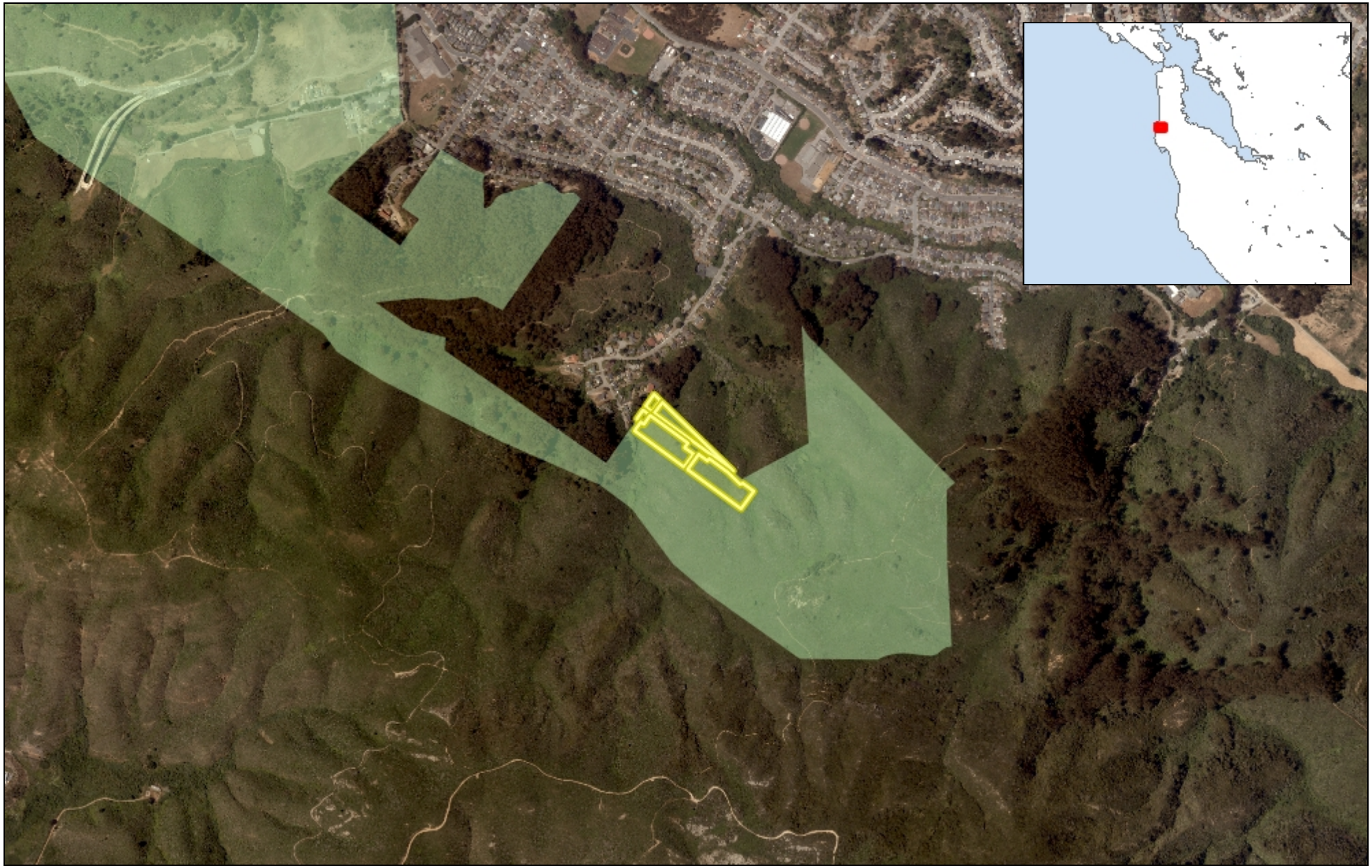
A. Project Vicinity Map
B. Project Plan
C. Special-Status Plant and Lichen Species Table
D. Special-Status Wildlife Species Table

SSB:cmc – SSBEE0124_WCH.DOCX

San Mateo County

County San Mateo, CA

ATTACHMENT A:
Vicinity Map



0.57 0 0.28 0.57 Miles

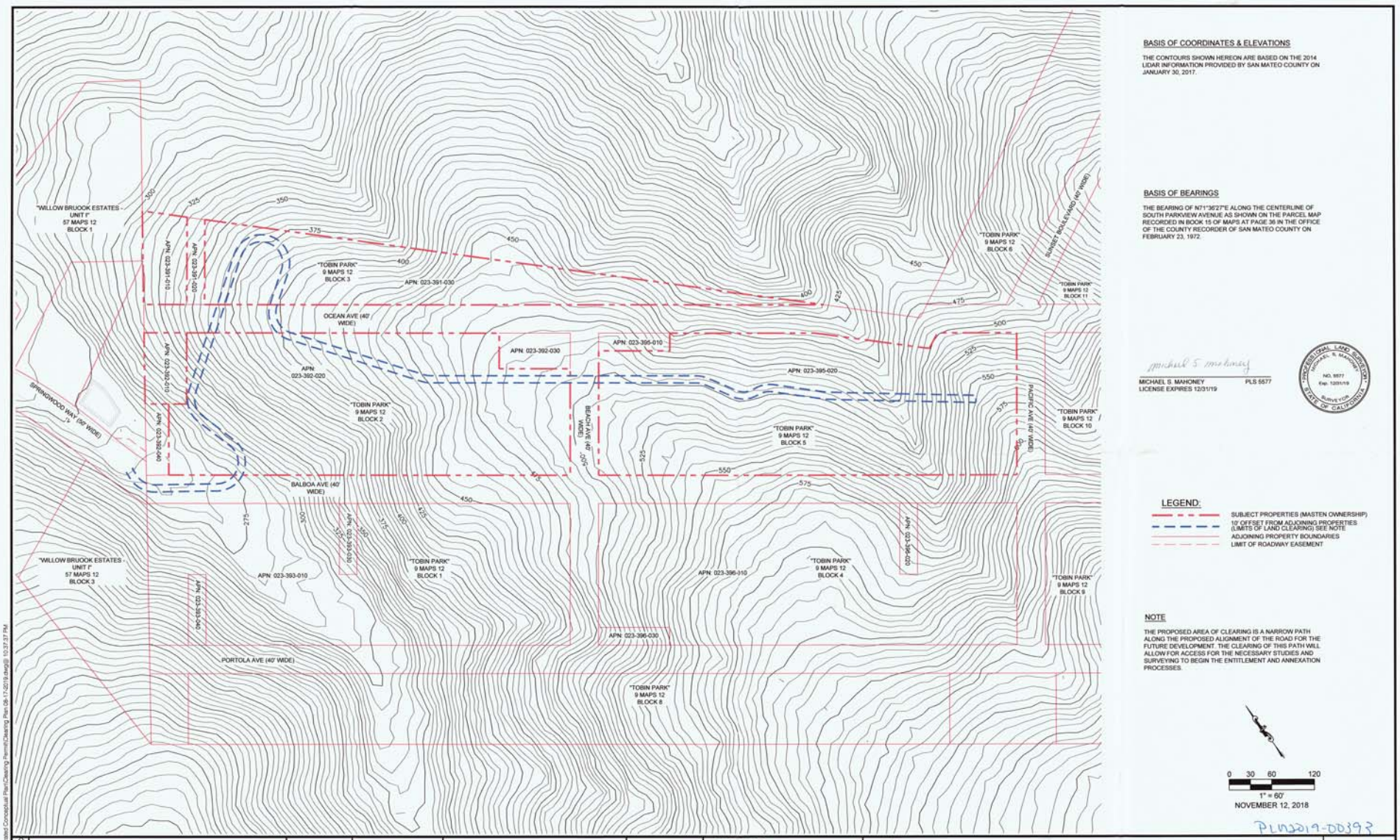
WGS_1984_Web_Mercator_Auxiliary_Sphere

© Latitude Geographics Group Ltd.

1: 18,056

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
THIS MAP IS NOT TO BE USED FOR NAVIGATION

ATTACHMENT B:
Project Plan



BASIS OF COORDINATES & ELEVATIONS

THE CONTOURS SHOWN HEREON ARE BASED ON THE 2014 LIDAR INFORMATION PROVIDED BY SAN MATEO COUNTY ON JANUARY 30, 2017.

BASIS OF BEARINGS

THE BEARING OF N71°36'27"E ALONG THE CENTERLINE OF SOUTH PARKVIEW AVENUE AS SHOWN ON THE PARCEL MAP RECORDED IN BOOK 15 OF MAPS AT PAGE 36 IN THE OFFICE OF THE COUNTY RECORDER OF SAN MATEO COUNTY ON FEBRUARY 23, 1972.

michael s. mahoney

MICHAEL S. MAHONEY PLS 5577
LICENSE EXPIRES 12/31/19

PROFESSIONAL LAND SURVEYOR MICHAEL S. MAHONEY NO. 5577 Exp. 12/31/19 STATE OF CALIFORNIA

LEGEND:

- SUBJECT PROPERTIES (MASTEN OWNERSHIP)
- 10' OFFSET FROM ADJOINING PROPERTIES (LIMITS OF LAND CLEARING) SEE NOTE
- ADJOINING PROPERTY BOUNDARIES
- LIMIT OF ROADWAY EASEMENT

NOTE

THE PROPOSED AREA OF CLEARING IS A NARROW PATH ALONG THE PROPOSED ALIGNMENT OF THE ROAD FOR THE FUTURE DEVELOPMENT. THE CLEARING OF THIS PATH WILL ALLOW FOR ACCESS FOR THE NECESSARY STUDIES AND SURVEYING TO BEGIN THE ENTITLEMENT AND ANNEXATION PROCESSES.

0 30 60 120
1" = 60'
NOVEMBER 12, 2018

PLN2019-00393

NO.	REVISIONS	DATE

JOB#: 2016.1023
DATE: 8/17/19
REVIEW SUBMITTAL

(650) 244-9667
jgmahoney@pls-corp.com
901 Sneath Ln, Suite 117
San Bruno, CA 94066
Professional Land Services
LAND DEVELOPMENT SPECIALISTS

DESIGNED: JKO
DRAWN: JKO
APPROVED: JKO/MSM

PREPARED FOR:
GINGER MASTEN
845 STANTON ROAD
BURLINGAME, CA 94010

TITLE:
CLEARING PLAN
FOR MASTEN PROPERTY
0 SPRINGWOOD WAY
PACIFICA, CA 94044

SHEET 1 OF 1

F:\2016-1023 Uncorporated Conceptual Plan\Clearing Permit\Clearing Plan 08-17-2019.dwg@ 10:37:37 PM

Plotted on: 08/17/19 @ 10:37:37 PM

APPENDIX C

Special-status Plant Species Table

(San Mateo County)

APPENDIX C: Special-status Plant and Lichen Species Table					
Scientific Name	**Common Name**	**CRPR**	**Federal/State Status**	**Life form, habitat, and blooming period.**	**Potential for Occurrence in the Study Area**
Agrostis blasdalei	Blasdale's bent grass	1B.2	--	Perennial rhizomatous herb. Coastal bluff scrub, coastal dunes, and coastal prairie. 0-150 m. May-July.	**Low.** Suitable habitat is potentially present if there are grassland openings in the Study Area.
Allium peninsulare var. *franciscanum*	Franciscan onion	1B.2	--	Perennial herb. Cismontane woodland, and valley and foothill grassland. Clay, volcanic soils; often on serpentine. 52-3050 m. (April) May - June.	**Moderate.** Suitable habitat is potentially present in riparian habitats and grassland openings in the Study Area.
Amsinckia lunaris	bent-flowered fiddleneck	1B.2	--	Annual herb. Coastal bluff scrub, cismontane woodland, and valley and foothill grassland. 3-500 m. March - June.	**Moderate.** Suitable habitat is potentially present in riparian habitats and grassland openings in the Study Area.
Arctostaphylos montaraensis	Montara manzanita	1B.2	--	Perennial evergreen shrub. Maritime chaparral and coastal scrub. Slopes and ridges. 80-500 m. January - March.	**High.** Suitable habitat is potentially present in scrub and chaparral habitats in the Study Area. Occurs in San Pedro Valley County Park. There are 18 CNDDB occurrences ranging from 0.3-3.7 miles from the Study Area.
Arctostaphylos regismontana	Kings Mountain manzanita	1B.2	--	Perennial evergreen shrub. Broadleaved upland forest, chaparral, and north coast coniferous forest. Granitic or sandstone outcrops. 305-730 m. December - April.	**Moderate.** Suitable habitat is potentially present in chaparral habitat in the Study Area. Sandstone rock outcrops are potentially present in the Study Area. This species generally occurs at higher elevations than the Study Area.

APPENDIX C: Special-status Plant and Lichen Species Table					
Scientific Name	**Common Name**	**CRPR**	**Federal/State Status**	**Life form, habitat, and blooming period.**	**Potential for Occurrence in the Study Area**
Astragalus pycnostachyus var. *pycnostachyus*	coastal marsh milk-vetch	1B.2	--	Perennial herb. Mesic sites in coastal dunes, along streams, or coastal salt marshes. 0-30 m. (April) June - October.	**Low.** Suitable habitat is potentially present in the Study Area along Brooks Creek. However, this species generally occurs at lower elevations than the Study Area.
Centromadia parryi ssp. *parryi*	pappose tarplant	1B.2	--	Annual herb. Vernally mesic microhabitats in chaparral, coastal prairie, and valley and foothill grassland. Meadows, seeps, and coastal salt marshes. Often in alkaline soils. 0-420 m. May – November.	**Moderate.** Suitable habitat is potentially present in grasslands, chaparral, scrub, and potential wetlands along stream channels in the Study Area.
Chorizanthe cuspidata var. *cuspidata*	San Francisco Bay spineflower	1B.2	--	Annual herb. Sandy soils in coastal bluff scrub, coastal dunes, coastal prairie, and coastal scrub. 3-212 m. April – July (August).	**Low.** Suitable habitat is potentially present in grasslands and scrub in the Study Area.
Cirsium andrewsii	Franciscan thistle	1B.2	--	Perennial herb. Seeps and mesic microhabitats in broadleafed upland forest, coastal bluff scrub, coastal prairie, and coastal scrub. Sometimes serpentinite soils. 0-150 m. March – July.	**Moderate.** Suitable habitat is potentially present in along stream channels in the Study Area
Collinsia multicolor	San Francisco collinsia	1B.2	--	Annual herb. Closed-cone coniferous forest and coastal scrub. On decomposed shale (mudstone) mixed with humus. Sometimes serpentinite soils. 30-250 m. (February) March - May.	**Moderate.** Suitable habitat is potentially present in scrub in the Study Area.

APPENDIX C: Special-status Plant and Lichen Species Table					
Scientific Name	**Common Name**	**CRPR**	**Federal/State Status**	**Life form, habitat, and blooming period.**	**Potential for Occurrence in the Study Area**
Dirca occidentalis	western leatherwood	1B.2	--	Perennial deciduous shrub. Broadleafed upland forest, chaparral, closed-cone coniferous forest, cismontane woodland, North Coast coniferous forest, riparian forest, and riparian woodland. On brushy slopes, mesic sites; mostly in mixed evergreen and foothill woodland communities. 25-425- m. January – March (April).	**Moderate:** Suitable habitat is potentially present in riparian habitats in the Study Area.
Eriophyllum latilobum	San Mateo woolly sunflower	1B.1	FE/SE	Perennial herb. Cismontane woodland (often serpentinite, on road cuts), coastal scrub, and lower montane coniferous forest. 45-330 m. May – June.	**Moderate.** Suitable habitat is potentially present in and riparian woodlands and scrub in the Study Area.
Fritillaria biflora var. *ineziana*	Hillsborough chocolate lily	1B.1	--	Perennial bulbiferous herb. Serpentinite soils in cismontane woodland and valley and foothill grassland. 150 m. March – April.	**Low.** Suitable habitat is potentially present in and riparian woodlands and scrub in the Study Area. However, serpentine soils are not known in the Study Area.
Fritillaria lanceolata var. *tristulis*	Marin checker lily	1B.1	--	Perennial bulbiferous herb. Coastal bluff scrub, coastal prairie, and coastal scrub. 15-150 m. February – May.	**Moderate.** Suitable habitat is potentially present in grasslands and scrub in the Study Area.

APPENDIX C: Special-status Plant and Lichen Species Table					
Scientific Name	**Common Name**	**CRPR**	**Federal/State Status**	**Life form, habitat, and blooming period.**	**Potential for Occurrence in the Study Area**
Fritillaria liliacea	fragrant fritillary	1B.2	--	Perennial bulbiferous herb. Coastal scrub, valley and foothill grassland, and coastal prairie. Often on serpentine; various soils reported though usually clay, in grassland. 3-410 m. February - April.	**Moderate.** Suitable habitat is potentially present in grasslands and scrub in the Study Area.
Hemizonia congesta ssp. *congesta*	congested-headed hayfield tarplant	1B.2	--	Annual herb. Valley and foothill grasslands, sometimes roadsides. 20-560 m. April-November.	**Moderate.** Suitable habitat is potentially present if grassland openings are present in the Study Area.
Hesperevax sparsiflora var. *brevifolia*	short-leaved evax	1B.2	--	Annual herb. Coastal bluff scrub (sandy), coastal dunes, and coastal prairie. 0-215 m. March - June.	**Moderate.** Suitable habitat is potentially present if grassland openings are present in the Study Area.
Horkelia cuneata var. *sericea*	Kellogg's horkelia	1B.1	--	Perennial herb. Sandy or gravelly openings in closed-cone coniferous forest, coastal scrub, coastal dunes, and maritime chaparral. 10-200 m. April - September.	**Moderate.** Suitable habitat is potentially present in chaparral and scrub in the Study Area.
Horkelia marinensis	Point Reyes horkelia	1B.2	--	Perennial herb. Sandy microhabitats in coastal dunes, coastal prairie, and coastal scrub. 5-755 m. May - September.	**Moderate.** Suitable habitat is potentially present in chaparral and scrub in the Study Area. A CNDDB occurrence overlaps the site, but it is broadly mapped on Montara Mountain.
Hypogymnia schizidiata	island rock lichen	1B.3	--	Foliose lichen. On bark and wood of hardwoods and conifers in closed-cone coniferous forest and chaparral. 360-405 m.	**Moderate.** Suitable habitat is potentially present in chaparral in the Study Area.

APPENDIX C: Special-status Plant and Lichen Species Table					
Scientific Name	**Common Name**	**CRPR**	**Federal/State Status**	**Life form, habitat, and blooming period.**	**Potential for Occurrence in the Study Area**
Lasthenia californica ssp. *macrantha*	perennial goldfields	1B.2	--	Perennial herb. Coastal bluff scrub, coastal dunes, and coastal scrub. 5-520 m. January – November.	**Moderate.** Suitable habitat is potentially present in scrub in the Study Area.
Leptosiphon croceus	coast yellow leptosiphon	1B.1	-/CE	Annual herb. Coastal bluff scrub and coastal prairie. 10-150 m. April - June.	**Moderate.** Suitable habitat is potentially present if grassland openings are present in the Study Area.
Leptosiphon rosaceus	rose leptosiphon	1B.1	--	Annual herb. Coastal bluff scrub.0-100 m. April-July.	**None.** No suitable habitat present in the Study Area.
Lessingia arachnoidea	Crystal Springs lessingia	1B.2	--	Annual herb. Cismontane woodland, coastal scrub, and valley and foothill grassland in serpentinite soils, often on roadsides. July - October.	**Low.** Suitable habitat is potentially present in grasslands, riparian woodlands, and scrub in the Study Area. However, serpentine soils are not known to occur in the Study Area.
Limnanthes douglasii ssp. *orndufii*	Orduffi's meadow foam	1B.1	--	Annual herb. Mesic meadows and seasonal wetlands in agricultural fields. 10-20 m. November – May.	**None.** No suitable habitat present in the Study Area.
Malacothamnus aboriginum	Indian Valley bush-mallow	1B.2	--	Perennial deciduous shrub. Chaparral and cismontane woodland in rocky, granitic soils, often in burned areas. 150-1700 m April - October.	**Low.** Suitable habitat is potentially present in chaparral and riparian woodlands in the Study Area. However, granitic soils are not known to occur in the Study Area.
Malacothamnus arcuatus	arcuate bush-mallow	1B.2	--	Perennial evergreen shrub. Chaparral and cismontane woodland. 15-355 m. April - September.	**Moderate.** Suitable habitat is potentially present in chaparral and riparian woodlands in the Study Area.

APPENDIX C: Special-status Plant and Lichen Species Table					
Scientific Name	**Common Name**	**CRPR**	**Federal/State Status**	**Life form, habitat, and blooming period.**	**Potential for Occurrence in the Study Area**
Malacothamnus davidsonii	Davidson's bush-mallow	1B.2	--	Perennial deciduous shrub. Chaparral, cismontane woodland, coastal scrub, and riparian woodland. 185-1140 m. June-January.	**Moderate.** Suitable habitat is potentially present in scrub, chaparral, and riparian woodlands in the Study Area.
Malacothamnus hallii	Hall's bush-mallow	1B.2	--	Perennial evergreen shrub. Chaparral and coastal scrub.10-760 m. (April) May-September (October).	**Moderate.** Suitable habitat is potentially present in scrub in the Study Area.
Monolopia gracilens	woodland woollythreads	1B.2	--	Annual herb. Chaparral, valley and foothill grasslands, cismontane woodland, broadleafed upland forests, and North Coast coniferous forest. Grassy sites, in openings; sandy to rocky soils. Often seen on serpentine after burns but may have only weak affinity to serpentine. 100-1200 m. (February) March - July.	**Moderate.** Suitable habitat is potentially present in scrub, grasslands, and riparian woodland in the Study Area.
Pentachaeta bellidiflora	white-rayed pentachaeta	1B.1	FE/SE	Annual herb. Valley and foothill grassland and cismontane woodland. Open dry rocky slopes and grassy areas, often on soils derived from serpentine bedrock. 35-620 m. March - May.	**Low.** Suitable habitat is potentially present in grasslands and riparian woodland in the Study Area. However, serpentine soils are not known from the Study Area.
Plagiobothrys chorisianus var. *chorisianus*	Choris' popcornflower	1B.2	--	Annual herb. Chaparral, coastal scrub, and coastal prairie. Mesic sites. 3-160 m. March - June.	**Moderate.** Suitable habitat is potentially present in scrub, chaparral, and grasslands in the Study Area.

APPENDIX C: Special-status Plant and Lichen Species Table					
Scientific Name	**Common Name**	**CRPR**	**Federal/State Status**	**Life form, habitat, and blooming period.**	**Potential for Occurrence in the Study Area**
Polemonium carneum	Oregon polemonium	2B.2	--	Perennial herb. Coastal prairie, coastal scrub, and lower montane coniferous forest. 0-1830 m. Apr. - Sept.	**Moderate.** Suitable habitat is potentially present in scrub and grasslands in the Study Area.
Potentilla hickmanii	Hickman's cinquefoil	1B.1	FE/SE	Perennial herb. Coastal bluff scrub, closed-cone coniferous forest, meadows and seeps, and marshes. Freshwater marshes, seeps, and small streams in open or forested areas along the coast. 10-149 m. Apr. - Aug.	**Moderate:** Suitable habitat is potentially present in seasonal wetlands or marshes along Brooks Creek and other stream channels in the Study Area.
Silene scouleri ssp. *scouleri*	Scouler's catchfly	2B.2	--	Perennial herb. Coastal bluff scrub, coastal prairie, and valley and foothill grassland. 0-600 m. (March-May) June-August (September).	**Moderate.** Suitable habitat is potentially present in scrub and grasslands in the Study Area.
Silene verecunda ssp. *verecunda*	San Francisco campion	1B.2	--	Annual herb. Coastal scrub, valley and foothill grassland, coastal bluff scrub, chaparral, and coastal prairie. Sandy soils, often on mudstone or shale; one site on serpentine. 30-645 m. (February) March - June. (August)	**Moderate.** Suitable habitat is potentially present in scrub, chaparral, and grasslands in the Study Area.
Triphysaria floribunda	San Francisco owl's-clover	1B.2	--	Annual herb. Coastal prairie and valley and foothill grassland. On serpentine and nonserpentine substrate (such as at Pt. Reyes). 10-160 m. April - June.	**Moderate.** Suitable habitat is potentially present if grasslands are present in the Study Area.
Triquetrella californica	coastal triquetrella	1B.2	--	Moss. Soil in coastal bluff scrub and coastal scrub.10-100 m.	**Moderate.** Suitable habitat is potentially present in scrub in the Study Area.

Status Legend

Federal:

FE	Listed as endangered under the Federal Endangered Species Act
FT	Listed as threatened under the Federal Endangered Species Act

State:

CE	Candidate Endangered
SR	Listed as rare under the California Endangered Species Act
SE	Listed as endangered under the California Endangered Species Act
ST	Listed as threatened under the California Endangered Species Act

California Rare Plant Rank (CRPR):

1A	Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
1B	Plants Rare, Threatened, or Endangered in California and Elsewhere
2A	Plants Presumed Extirpated in California, But Common Elsewhere
2B	Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

Threat Ranks:

0.1	Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2	Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3	Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)
*	Listed in the City of HMB Land Use Plan as a sensitive in relation to the strawberry industry (City of HMB 1993)

APPENDIX E

Special Status Wildlife Species Table

APPENDIX E: Special-status Wildlife Species Table				
Species	**Status**		**Habitat Association**	**Potential for Occurrence in the Project Area**
	Federal	**State**		
Invertebrates				
Euphydryas editha bayensis Bay checkerspot butterfly	FT	--	Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay. *Plantago erecta* is the primary host plant, *Orthocarpus densiflorus* and *O. purpurescens* are the secondary host plants.	**Low.** Grassland was not observed in the Project Area and if present, is very minimal.
Speyeria callippe callippe Callippe silverspot	FE	--	The Callippe silverspot butterfly is a subspecies of the more common callippe fritallary butterfly (*Speyeria callippe*). The silverspot's hostplant is Johnny jump-up (*Viola pedunculata*).	**Low.** Typical habitat was not observed in the Project Area.
Plebejus icarioides missionensis Mission blue butterfly	FE	--	Inhabits grasslands of the San Francisco peninsula. The mission blue butterfly uses three larval host plants: *Lupinus albifrons*, *L. formosus*, and *L. variicolor*.	**Low.** Grassland was not observed in the Project Area and if present, is very minimal.
Callophrys mossii bayensis San Bruno elfin butterfly	FE	--	Occurs in coastal, mountainous areas with grassy ground cover, mainly in the vicinity of San Bruno Mountain. Elfin colonies are located on steep, north-facing slopes within the fog belt. The San Bruno elfin butterfly's larval host plant is *Sedum spathulifolium*.	**Low.** Grassland was not observed in the Project Area and if present, is very minimal.

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Species	**Status**		**Habitat Association**	**Potential for Occurrence in the Project Area**
	Federal	**State**		
Danaus plexippus Monarch butterfly	--	Special Consideration under CEQA	Winter roosts sites located in wind-protected tree groves (eucalyptus, Monterey pine, cypress) with water and nectar sources nearby.	**Moderate.** The eucalyptus trees within the Study Area may provide suitable winter roost habitat.
Ischnura gemina San Franciscoo forktail damselfly	--	--	This insect is called out in the Pacifica EIR and is a resident in the San Francisco Bay area; they are active on sunny, warm days near clean bodies of water and wetlands with emergent vegetation in the San Francisco Bay Area. Status: G2, S2, IUCN:VU.	**Low.** This species is typically found in wetland habitat, not perennial stream (Brooks Creek) habitat.
Lichnanthe ursina Bumblebee scarab beetle	--	--	This beetle is called out in the Pacifica EIR and are patchily distributed along the coast and are restricted to dunes.	**None.** Suitable habitat is not present in the Project Area.
Bombus caliginosus Obscure bumble bee	--	--	This species occurs along the Pacific Coast, from southern California to southern British Columbia, with scattered records from the east side of California's Central Valley. Common plants visited by the workers in a sample included ceanothus, thistles, sweet peas, lupines, rhododendrons, Rubus, willows, and clovers. Status: G4? S1S2, IUCN:VU.	**Moderate.** Suitable foraging habitat is available in the Project Area.

APPENDIX E: Special-status Wildlife Species Table				
Species	**Status**		**Habitat Association**	**Potential for Occurrence in the Project Area**
	Federal	**State**		
Bombus occidentalis Western bumble bee	--	--	Historically broadly distributed in western North America. *Bombus occidentalis* occurs along the Pacific coast and western interior of North America, from Arizona, New Mexico and California, north through the Pacific Northwest and into Alaska. Eastward, the distribution stretches to the northwestern Great Plains and southern Saskatchewan. Status: G2,G3,S1; USFS:S; XERCES:IM	**Moderate.** This species nests underground in cavities or burrows left behind by rodents or other animals. Suitable burrow habitat is present in the Project Area.
Hydroporus leechi Leech's skyline diving beetle	--	--	This insect is called out in the Pacifica EIR and has been found in freshwater ponds, shallow waters of streams, marshes, and lakes. It was originally collected in a pond in Pacifica, but no other information about it is known other than its use of aquatic habitats (City of Pacific EIR).	**Moderate.** Brooks Creek may provide suitable habitat for this species.
Cicindela hirticollis gravida Sandy beach tiger beetle	--	--	This beetle is called out in the Pacifica EIR and is found in moist sand and dunes near the ocean, such as in swales behind dunes or upper beaches beyond normal high tide.	**None.** Suitable habitat is not present in the Project Area.

APPENDIX E: Special-status Wildlife Species Table				
Species	**Status**		**Habitat Association**	**Potential for Occurrence in the Project Area**
	Federal	**State**		
Caecidotea tomalensis Tomales isopod	--	--	This freshwater aquatic crustacean is called out in the Pacifica EIR and grows up to 10mm in length. It has been found in several locations from Sonoma to San Mateo. They prefer still to slow-moving, vegetated water such as spring-fed ponds. Little is known about their life history but they are detritivores like other members of the *Asellid* family of Crustaceans (CDFG 2018d).	**Low.** The section of Brooks Creek observed in the Project Area likely does not provide suitable habitat for this species due to higher flows.
Haliotis cracherodii Black abalone	FE	--	This mollusk is called out in the Pacifica EIR and can be found in rocky intertidal and subtidal habitats, ranging from Point Arena in northern California to Mexico.	**None.** Suitable habitat is not present in the Project Area.
Fish				
Acipenser medirostris Green sturgeon	FE, NMFS SC	SC	This anadromous fish is found in nearshore waters, ranging from Mexico to the Bering Sea. Adult green sturgeons migrate into freshwater beginning in late February with spawning occurring in March through July.	**None.** Suitable habitat is not present in the Project Area.
Eucyclogobius newberryi Tidewater goby	FE	SC	Brackish water habitats along the California Coast from San Diego north to the mouth of the Smith River in Del Norte County.	**None.** Suitable habitat is not present in the Project Area.

APPENDIX E: Special-status Wildlife Species Table				
Species	**Status**		**Habitat Association**	**Potential for Occurrence in the Project Area**
	Federal	**State**		
Oncorhynchus mykiss Steelhead -central CA coastal ESU (DPS)	FT	--	Requires beds of loose, silt-free, well-oxygenated coarse gravel for spawning. After hatching, juveniles spend at least one summer in the freshwater rearing areas, so the stream must have either perennial flow or cool ephemeral pools with subsurface flow, shade, food, and shelter during the dry season.	**Present.** This species is not known to occur in Brooks Creek, however, it is known to occur downstream in San Pedro Creek.
Oncorhynchus kisutch Coho salmon-central CA coast	FE	SE	Central California Coast ESU includes all naturally spawned populations of coho salmon from Punta Gorda in northern California south to and including the San Lorenzo River in central California, as well as populations in tributaries to San Francisco Bay, excluding the Sacramento–San Joaquin River system, as well as four artificial propagation programs.	**Low.** This species is not known to occur in Pacifica.
Amphibians				
Ambystoma californiense California tiger salamander	FT	ST	Need underground refuges, especially ground squirrel burrows and vernal pools or other seasonal water sources for breeding.	**Low.** This species is unlikely to occur in the Project Area because there are no known nearby occurrences.

APPENDIX E: Special-status Wildlife Species Table				
Species	**Status**		**Habitat Association**	**Potential for Occurrence in the Project Area**
	Federal	**State**		
Dicamptodon ensatus California giant salamander	--	SC	They occur up to 2,160 m (6,500 ft.) primarily in humid coastal forests, especially in Douglas fir, redwood, red fir, and montane and valley-foothill riparian habitats (Stebbins 1972). They live in or near streams in damp forests, and California giant salamanders tend to be common where they occur (Stebbins 1985).	**Moderate.** Suitable habitat may be present in Brooks Creek.
Rana boylii Foothill yellow-legged frog	--	SC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg laying.	**Low.** This species is not known to occur in Brooks Creek or San Pedro Creek.
Rana draytonii California red-legged frog	FT	SC	Occurs in a variety of ponds, sloughs, low-gradient streams, and low-salinity lagoons. Adults may forage in, and migrate through, terrestrial grasslands, riparian woodlands, and forests, but require weedy, slow moving or standing water that persists through most of the dry season for successful reproduction. Introduced bullfrogs and predatory fish are implicated in the decline of red-legged frogs throughout their range.	**Moderate.** Brooks Creek may provide dispersal and non-breeding aquatic habitat but high winter flows likely preclude egg laying attempts.
Reptiles				
Emys marmorata Pacific pond turtle	--	SC	Ponds, marshes rivers, streams, and irrigation ditches that have emergent or riparian vegetation and sunny basking sites. Upland nesting habitat consists of friable soil exposed to full sun.	**Low.** This species typically occurs in aquatic habitat with sunny basking sites, which are absent in Brooks creek.

APPENDIX E: Special-status Wildlife Species Table				
Species	**Status**		**Habitat Association**	**Potential for Occurrence in the Project Area**
	Federal	**State**		
Thamnophis sirtalis tetrataenia San Francisco garter snake	FE	SE, FP	Vicinity of freshwater marshes, ponds, and slow moving streams. Prefers dense cover and water depths of at least one foot. Upland areas near water are important.	**Moderate.** Habitat in the Project Area is suboptimal due to the lack of pond habitat, however, there are no barriers to dispersal from the Project Area to the SFGS occurrences that are to the south and east.
Birds				
Pelecanus occidentalis californicus California brown pelican	--	FP	This pelican nests from the Channel Islands of southern California southward along the Baja California coast and in the Gulf of California to coastal southern Mexico.	**None.** There is no suitable breeding or foraging habitat in the Project Area.
Phalacrocorax auritus Double-crested cormorant	--	--	Yearlong resident of coast; nests adjacent to water. Rookeries are protected under section 3503 of the California Fish and Game Code.	**None.** There is no suitable breeding or foraging habitat in the Project Area.
Circus cyaneus Northern harrier	--	SC	Coastal salt and freshwater marsh. Nest built of a large mound of sticks in wet areas.	**Low.** Suitable nesting and foraging habitat is not present in the Project Area.
Elanus leucurus White-tailed kite	--	FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes nest to deciduous woodland. Open grasslands, meadows or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	**Low.** Typical nesting habitat next to open forage areas is not present.

APPENDIX E: Special-status Wildlife Species Table				
Species	**Status**		**Habitat Association**	**Potential for Occurrence in the Project Area**
	Federal	**State**		
Haliaeetus leucocephalus Bald eagle	BCC	SE, FP	This species requires large bodies of water, or free-flowing rivers with abundant fish and adjacent snags or other perches. A pair of bald eagle has nested on the west shore of Calaveras reservoir for at least the past three years.	**Low.** Typical nesting habitat is not present in the Study Area.
Aquila chrysaetos Golden eagle	--	FP	Rolling foothills, mountain areas, sage-juniper flats and deserts. Cliff-walled canyons provide nesting habitat in most parts of range; also large trees in open areas.	**Low.** Typical nesting habitat is not present in the Study Area.
Falco peregrinus anatum Peregrine falcon	--	FP	Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	**Low.** May forage in the area but suitable nesting habitat is not present.
Falco mexicanus Prairie falcon	BCC	--	This species is an uncommon permanent resident that ranges from southeastern deserts northwest throughout the Central Valley and along the inner Coast Ranges and Sierra Nevada. Distributed from annual grasslands to alpine meadows, but associated primarily with perennial grasslands, savannahs, rangeland, some agricultural fields, and desert scrub areas.	**Low.** This species may forage in the area but suitable nesting habitat is not present in the Study Area.
Falco columbarius Merlin	--	--	This falcon winters in California from September through May. Wintering grounds are protected under section 3503 of the California Fish and Game Code.	**Low.** This species may forage in the Study Area but does not breed in the area.

APPENDIX E: Special-status Wildlife Species Table				
Species	**Status**		**Habitat Association**	**Potential for Occurrence in the Project Area**
	Federal	**State**		
Buteo regalis Ferruginous hawk	BCC	--	Uncommon winter resident and migrant at lower elevations and open grasslands in the Modoc Plateau, Central Valley, and Coast Ranges. No breeding records from California.	**Low.** This species does not breed in the area.
Buteo swansoni Swainson's hawk	--	ST	The Swainson's Hawk breeds in the western United States and Canada and winters in South America as far south as Argentina.	**Low.** This species is not known to breed in the area.
Charadrius alexandrinus nivosus Western snowy plover	FT	SC	Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sand, gravelly or friable soils for nesting.	**None.** No suitable habitat present.
Sternula antillarum browni California least tern	FE	SE	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills or paved areas.	**None.** No suitable habitat present.
Brachyramphus marmoratus Marbled murrelet	FT	SE	Requires dense, mature forests of redwood and Douglas-fir for breeding (Cogswell 1977, Remsen 1978). In California, probably prefers to nest in tall trees; nest made of moss and lichen.	**Low.** Typical nest trees not present in Study Area.
Rynchops niger Black skimmer	--	SC	Nests on gravel bars, low islets, and sandy beaches, in unvegetated sites. Nesting colonies usually less than 200 pairs.	**None.** No suitable habitat present.

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Species	**Status**		**Habitat Association**	**Potential for Occurrence in the Project Area**
	Federal	**State**		
Asio otus Long-eared owl	--	SC	Nests in conifer, oak, riparian, pinyon-juniper, and desert woodlands that are either open or are adjacent to grasslands, meadows, or shrublands. Key habitat components are some dense cover for nesting and roosting, suitable nest platforms, and open foraging areas.	**Low.** There are no nearby occurrence for this species.
Asio flammeus Short-eared owl	--	SC	This species nests in swamp lands, lowland meadows and irrigated alfalfa fields. Tule patches or tall grass are needed for nesting and/or daytime seclusion.	**Low.** Typical nesting habitat is not present in the Study Area.
Athene cunicularia hypugea Western burrowing owl	--	SC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	**Low.** Suitable nesting habitat is not present.
Strix occidentalis caurina Northern spotted owl	FT	--	This species typically lives in evergreen forest and woodland.	**Low.** This species typically nests in forests that are not located in the Study Area.
Contopus cooperi Olive-sided flycatcher	--	SC	Breeding habitat for the olive-sided flycatcher is primarily late-successional conifer forests with open canopies (e.g., 0%–39% canopy cover; Verner 1980).	**Low.** This species typically nests in forests that are not located in the Study Area.

APPENDIX E: Special-status Wildlife Species Table				
Species	**Status**		**Habitat Association**	**Potential for Occurrence in the Project Area**
	Federal	**State**		
Lanius ludovicianus Loggerhead shrike	--	SC	In California, Loggerhead Shrikes breed mainly in shrublands or open woodlands with a fair amount of grass cover and areas of bare ground.	**Low.** There is minimal grassland and bare ground in the project area.
Progne subis Purple martin	--	SC	Martins use a wide variety of nest substrates (e.g., tree cavities, bridges, utility poles, lava tubes, and, formerly, buildings), but nonetheless are very selective of habitat conditions nearby.	**Low.** Typical nesting habitat was not observed.
Riparia riparia Bank swallow	--	ST	Colonial nester, nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine textured/sandy soils near streams, rivers, lakes, ocean to dig nesting holes.	**None**. Suitable nesting habitat is not present.
Cypseloides niger Black swift	--	SC	This species typically nests on cliffs behind or adjacent to waterfalls.	**None**. Typical nesting habitat is not present in the Study Area.
Chaetura vauxi Vaux's swift	--	SC	These swifts nest in cavities in a variety of trees and less frequently in artificial structures, particularly chimneys.	**Low.** Typical coniferous nesting habitat is not present in the Study Area.
Dendroica petechia brewsteri Yellow warbler	--	SC	Riparian plant associations. Prefers willows, cottonwoods, aspens, sycamores, and alders for nesting and foraging.	**Moderate.** The species has no known occurrences near the Study Area, however, suitable nesting habitat is present in the riparian trees.

APPENDIX E: Special-status Wildlife Species Table				
Species	**Status**		**Habitat Association**	**Potential for Occurrence in the Project Area**
	Federal	**State**		
Geothlypis trichas sinuosa Saltmarsh common yellowthroat	--	SC	Resident of the San Francisco bay region, in fresh and saltwater marshes.	**Low.** Typical marsh habitat was not observed in the Project Area.
Agelaius tricolor Tricolored blackbird	--	SC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	**Low.** Typical habitat is not present and this species has no known occurrences near the Study Area.
Passerculus sandwichensis alaudinus Bryant's savannah sparrow	--	SC	This sparrow occupies low tidally influenced habitats, adjacent ruderal areas, moist grasslands within and just above the fog belt, and, infrequently, drier grasslands. This sparrow generally avoids drier upland grasslands, especially in the interior Coast Ranges (Shuford 1993).	**Low.** Suitable nesting habitat is not present.
Ammodramus savannarum Grasshoppers sparrow	--	SC	Grasshopper Sparrows in California prefer short to middle-height, moderately open grasslands with scattered shrubs.	**Low.** Suitable nesting habitat is not present.

APPENDIX E: Special-status Wildlife Species Table				
Species	**Status**		**Habitat Association**	**Potential for Occurrence in the Project Area**
	Federal	**State**		
Mammals				
Neotoma fuscipes annectens San Francisco dusky-footed woodrat	--	SC	Prefers forest habitats with moderate canopy, year-round greenery, a brushy understory, and suitable nest building materials. Feeds mainly on woody plants, especially live oak, maple, coffeeberry, alder, and elderberry when available (Linsdale and Tevis 1951).	**Present.** Stick house were observed in the Project Area during the site visit.
Sorex vagrans halicoetes Salt marsh wandering shrew	--	SC	Salt marshes of the south arm of San Francisco Bay.	**None.** Suitable habitat is not present.
Reithrodontomys raviventris Salt marsh harvest mouse	FE	SE, FP	Salt marshes of the San Francisco Bay.	**None.** Suitable habitat is not present.
Antrozous pallidus Pallid bat	--	SC	Roosts in caves, mine tunnels, crevices in rocks, bridges, buildings, and hollowed trees.	**Moderate.** The trees in the Project Area may provide roost habitat.
Myotis thysanodes Fringed myotis	--	SC	Most common in drier woodlands, they may roost in caves, mines, buildings, and crevices.	**Low**. Typical roost habitat is not present in the Project Area.
Nyctinomops macrotis Big free-tailed bat	--	SC	Generally found in rugged, rocky habitats and arid landscapes, in desert shrub, woodlands, and evergreen forests. Roost in crevices of rocks in cliffs and occasionally in buildings, caves, and tree cavities.	**Low.** The big free-tailed bat is rare in California, with one suspect record in Alameda.

APPENDIX E: Special-status Wildlife Species Table				
Species	**Status**		**Habitat Association**	**Potential for Occurrence in the Project Area**
	Federal	**State**		
Lasiurus cinereus Hoary bat	--	WBWG: M	The hoary bat is the most widespread North American bat. Generally roosts in dense foliage of medium to large trees. Solitary species - winters along the coast and in southern California, breeding inland and north of the winter range. WBWG – Medium Priority species.	**Moderate.** The trees in the Project Area may provide roost habitat.
Lasiurus blossevillii Western red bat		SC; WBWG: H	Roosts primarily in trees, less often in shrubs. Roost sites often are in edge habitats adjacent to streams, fields, or urban areas. Preferred roost sites are protected from above, open below, and located above dark ground-cover. Such sites minimize water loss. Roosts may be from 0.6-13 m (2-40 ft) above ground level. Females and young may roost in higher sites than males ((Zeiner et al. 1988-1990).	**Moderate.** The trees in the Project Area may provide roost habitat.
Eumops perotis californicus Western mastiff bat	--	SC	Primarily a cliff dwelling species with maternity roosts under exfoliating rock slabs, and crevices in large boulders and buildings. Foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland and agricultural areas (Siders 2005).	**Low.** Suitable roost habitat is not present in the Project Area.

APPENDIX E: Special-status Wildlife Species Table				
Species	**Status**		**Habitat Association**	**Potential for Occurrence in the Project Area**
	Federal	**State**		
Corynorhinus townsendii Townsend's big-eared bat	--	SC	Requires caves, mines, tunnels, buildings, or other human-made structures for roosting. May use separate sites for night, day, hibernation, or maternity roosts.	**Low.** Typical roost habitat is not present in the Project Area.
Bassariscus astutus Ringtail	--	FP	This species is usually found under 1400m in elevation in a variety of habitats throughout the western US including: riparian areas, semi-arid country, deserts, chaparral, oak woodlands, pinyon pine woodlands, juniper woodlands and montane conifer forests.	**Moderate.** The Project Area and adjacent open space may provide suitable habitat, however, there are no nearby known occurrences.
Taxidea taxus American badger	--	SC	Dry open stages of most shrub, forest and herbaceous habitats with friable soils.	**Low.** The most recent known occurrences is from 1933 and typical open habitat is not present in the Project Area.

Status Legend

Federal:

FE	Listed as endangered under the Federal Endangered Species Act
FT	Listed as threatened under the Federal Endangered Species Act
FRT	Listed as rare/threatened under the Federal Endangered Species Act
FUR	Listed as uncommon/rare under the Federal Endangered Species Act
FSC	Species of Concern - A species under consideration for listing, for which there is insufficient information to support listing at this time

State:

SE	Listed as endangered under the California Endangered Species Act
ST	Listed as threatened under the California Endangered Species Act
SSC	Listed as a species of special concern by California Department of Fish and Wildlife

Other:

WBWG Western Bat Working Group (High or Medium Priority Species)

International Union for Conservation of Nature (IUCN). VU: Vulnerable

Xerces Society – Imperiled (IM)

USFS-S. United States Forest Service - Sensitive

GLOBAL RANKING

The global rank (G-rank) is a reflection of the overall status of an element throughout its global range. Both Global and State ranks represent a letter and number score that reflects a combination of Rarity, Threat, and Trend factors, with weighting being heavier on Rarity than the other two.

SPECIES OR NATURAL COMMUNITY LEVEL

G1 = Critically Imperiled—At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.

G2 = Imperiled—At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.

G3 = Vulnerable—At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.

G4 = Apparently Secure—Uncommon but not rare; some cause for long-term concern due to declines or other factors.

G5 = Secure—Common; widespread and abundant.

STATE RANKING

The state rank (S-rank) is assigned much the same way as the global rank, but state ranks refer to the imperilment status only within California's state boundaries.

S1 = Critically Imperiled—Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.

S2 = Imperiled—Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state.

S3 = Vulnerable—Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the state.

S4 = Apparently Secure—Uncommon but not rare in the state; some cause for long-term concern due to declines or other factors.

S5 = Secure—Common, widespread, and abundant in the state.