



Date: August 19, 2025

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Re: 1815 Cordilleras Road (APN: 057-070-090, 057-063-010) Housing  
Development Project – Biological Resources Assessment (MIG  
Project No. 16292)

Dear Eric Zweig:

Per your request, MIG has conducted a biological assessment of 1815 Cordilleras Road in the unincorporated Emerald Lake Hills neighborhood of San Mateo County. The applicant, Edenbridge Homes, proposes to subdivide and develop the parcel. This report describes the existing biological resources present on the site, as well as the potential impacts of the proposed development on those resources and measures necessary to reduce impacts to less-than-significant levels under the California Environmental Quality Act (CEQA). This report was prepared to facilitate CEQA review of the project by the County of San Mateo.

## Project Area Location and Description

The approximately 1.87-acre (ac) site (APN: 057-070-090, 057-063-010) (project area) is located in a residential neighborhood at 1815 Cordilleras Road in the Emerald Lake Hills neighborhood of Redwood City, California (Appendix A. Figures 1 and 2). Edenbridge Homes plans on subdividing the parcel into six parcels, demolishing three existing homes, removing several existing trees and vegetation, and building six single-family homes on each new parcel.

## Methods

**Background Review.** Available background information pertaining to the biological resources on and near the project area was reviewed prior to conducting field surveys. Information was compiled and subsequently compared against site conditions during the field survey. The following sources were consulted:

- California Natural Diversity Database (CNDDDB) (CNDDDB 2024)
- California Native Plant Society (CNPS) Online Inventory of Rare Plants (CNPS 2024)
- USFWS Information for Planning and Consultation (IPaC) tool (USFWS 2024)
- USFWS National Wetland Inventory (NWI) (NWI 2022)
- eBird Database – Information on Distribution of Birds (Cornell Lab of Ornithology 2024)
- Bumble Bee Watch (The Xerces Society et al. 2024)
- Western Monarch Milkweed Mapper (Western Monarch and Milkweed Occurrence Database 2024)
- Other relevant scientific literature, technical reports, technical databases, resource agency reports, and Federal Register notices and other information published by USFWS to assess the current distribution of special-status plants and animals in the parcel vicinity

- United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2025),
- U.S. Geological Survey (USGS) Ultramafic rocks, chiefly Mesozoic, unit 3 (Coast Ranges and Western Klamath Mountains (USGS 2025)
- California Department of Fish and Wildlife (CDFW) California Essential Habitat Connectivity (CDFW 2025)
- CDFW VegCAMP Natural Communities Lists (CDFW 2025)

A search of CNDDDB Rarefind published accounts was conducted for special-status plant and wildlife species occurring in the *Woodside, California* U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle within which the site is located, as well as the eight surrounding quadrangles (*Montara Mountain, San Mateo, Redwood Point, Half Moon Bay, San Gregorio, La Honda, Mindego Hill, and Palo Alto*) (CNDDDB 2024). In addition, we reviewed the Online Inventory of Rare Plants for information regarding the distribution and habitats of plants designated as California Rare Plant Rank (CRPR) 1A, 1B, 2A, 2B, 3, or 4 that occur in any of the nine USGS quadrangles listed above (CNPS 2024). Where applicable, vegetation communities were mapped using CDFW's Vegetation Classification and Mapping Program's (VegCAMP) currently accepted list of vegetation alliances and associations (CDFW 2024).

**Field Survey.** Following the background review, a field survey of the project area was conducted by MIG Senior Biologist Kim Briones, M.S. and MIG Biologist Ray Lehrman, B.S. on December 13, 2024. The survey was conducted to (1) assess and map existing biotic habitats on the site, (2) assess the site for its potential to support special-status species and their habitats, and (3) identify and map potential jurisdictional habitats (e.g., waters of the U.S./state), and other sensitive biological resources. During the survey, the site was also inspected for evidence of previous raptor nesting activity (i.e., large stick nests), bat roosting habitat, monarch butterfly (*Danaus plexippus plexippus pop. 1*) roost habitat and host plants, and stick nests of the San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*).

### Special-Status Species

For the purposes of this assessment, special-status species include those plants and animals listed, proposed for listing or candidates for listing as threatened or endangered by the USFWS or National Oceanic and Atmospheric Administration (NOAA) Fisheries under the Federal Endangered Species Act (FESA), those listed or proposed for listing as rare, threatened or endangered by CDFW under the California Endangered Species Act (CESA), animals designated as California Fully Protected (CFP) or California Species of Special Concern by CDFW, birds protected by USFWS under the Migratory Bird Treaty Act (MBTA) and/or by CDFW under Fish and Game Code Sections 3503 and 3513, bats protected by Fish and Game Code Sections 4150-4155, and plants listed as Rank 1A, 1B, 2, 3 and 4 in the CNPS Inventory.

### Sensitive Habitat and Regulated Habitats

All plant communities observed in the project area were evaluated to determine if they are considered sensitive. Sensitive natural communities are communities that are especially diverse; regionally uncommon; or of special concern to local, state, and federal agencies.

The project area was also inspected for the presence of regulated habitats (wetlands, drainages, streams, coastal waterways, and other aquatic features), including those that support stream-dependent (i.e., riparian) plant species that could be subject to jurisdiction by the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and/or CDFW. Wetlands are defined for regulatory purposes in the 33 CFR 328.3 and 40 CFR 230.3 as "areas inundated or saturated by surface

or ground water at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”

## Existing Conditions

### General Site Conditions

The project area is surrounded by residential development to the north, northwest, and east, undeveloped open space to the south and southwest, and an undeveloped City and County of San Francisco right of way directly to the east. The adjacent undeveloped open space to the south/southwest supports grassland, oak woodland and California bay (*Umbellularia californica*) habitat. Additionally, Cordilleras Creek is located on the north side of Cordilleras Road approximately 100 feet to the north of the project area. With exception of the southwestern corner of the site, the site is relatedly flat, with elevations ranging from approximately 92 to 125 feet (NAVD88) above sea level (Macleod and Associates 2024).

### Landcover and Habitat Types

The project area is located within the San Francisco Bay Area Subregion of the Central Western Californian Region, both of which are within the larger California Floristic Province (Baldwin et al. 2012). The reconnaissance-level field survey identified Developed landcover and California bay forest habitat within the site. Existing land cover and habitat types in the project area, as well as the wildlife expected in these areas, are summarized below.

#### Developed

This landcover type consists of ornamental lawn, native and ornamental trees and vegetation; paved pathways and driveways; a swimming pool; three houses; and perimeter fence (Photos 1-4). The site is regularly maintained with the lawn kept trim. Native species include coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), coast redwood (*Sequoia sempervirens*) and California bay. Ornamental species include deodar cedar (*Cedrus deodara*), Japanese privet (*Ligustrum japonicum*), blue gum (*Eucalyptus globulus*), English yew (*Taxus baccata*), sweet gum (*Liquidambar* sp.), oleander (*Nerium* sp.), cape ivy (*Delairea odorata*), Mexican bush sage (*Salvia leucantha*), juniper (*Juniperus* sp.), golden bush daisy (*Euryops pectinatus*), and heavenly bamboo (*Nandina domestica*).

No wildlife activity was observed during the site visit, but developed landcover in the project area provides habitat for several wildlife species. Buildings, trees, and understory cover/woody debris provide habitat for wildlife species, such as roosting bats and nesting birds. Roof soffits may support nesting birds such as black phoebe (*Sayornis nigricans*) and mud from an old phoebe nest was observed under the eaves of one of the houses. Mature trees throughout the project area could provide suitable raptor nesting habitat for species such as red-tailed hawk (*Buteo jamaicensis*) and Cooper's hawk (*Accipiter cooperii*). Common avian species that may inhabit and nest on the site include acorn woodpecker (*Melanerpes formicivorus*), Anna's hummingbird (*Calypte anna*), bushtit (*Psaltriparus minimus*), California towhee (*Melospiza crissalis*), chestnut-backed chickadee (*Poecile rufescens*), dark-eyed junco (*Junco hyemalis*), and oak titmouse (*Baeolophus inornatus*). Common bat species such as the Mexican free-tailed bat (*Tadarida brasiliensis*) and California myotis (*Myotis yumanensis*) may day roost in tree crevices in several of the mature oak trees and two such crevices were observed during the site visit. There was little understory cover of woody debris to attract amphibians, reptiles, and small mammals but California slender salamander (*Batrachoseps attenuatus*), western fence lizard (*Sceloporus occidentalis*), and non-native eastern grey squirrel (*Sciurus carolinensis*) may occasionally inhabit the site.



**Photo 1.** Ornamental lawn, existing house, and oak trees in project area.



**Photo 2.** Existing house, swimming pool, and paved pathway in the project area.



**Photo 3.** Mature eucalyptus trees in the southeast corner of the project area.

### **California Bay Forest (*California Bay Forest and Woodland Alliance*)**

On the southwestern corner of the site, the flat terrain transitions to a north-facing hillside and wooded area (Photo 4). This hillside is dominated by native California bay trees, and a single toyon (*Heteromeles arbutifolia*). Several non-native shrubs, Butcher's broom (*Ruscus aculeatus*) and firethorn (*Pyracantha* sp.), are also present in this area. A cobble retaining wall is located along the base of the slope. A paved stairway is located on the south side of the slope and terminates at a paved platform on the top of the hill. Although there are some developed elements within this area, it is best described as California Bay Forest due to the dominance of this species in the area and its connectivity to a woodland dominated by California bay to the south and southwest. This habitat is a sensitive vegetation alliance, discussed in more detail below. Wildlife species that may occur on the developed portion of the site may also inhabit the California Bay forest habitat, due to their proximity to each other.



**Photo 4.** California bay forest on the southwestern corner of the project area.

## Special-Status Species

As described in the Methods above, information regarding threatened, endangered, or other special-status species that could occur in the project area was compiled from several sources and reviewed by MIG biologists. The specific habitat requirements and the locations of known occurrences of each special-status species, generally a 5-mile radius, were the main criteria used for inclusion in the list of species potentially occurring on the site.

**Special-Status Plants.** A list of special-status plants with some potential for occurrence in the project area vicinity was compiled using CNPS lists (CNPS 2024) and CNDDDB records (CNDDDB 2024) and reviewed for their potential to occur in the project area. These resources identify 71 special-status plant species as potentially occurring in the nine 7.5-minute quadrangles containing and/or surrounding the project area for CRPR 1 and 2 plants, and in San Mateo County for CRPR 3 and 4 plants. Based on an assessment of habitat requirements, records of historical occurrence within 5 miles of the project area, and known ranges of the species, all 71 special-status plant species identified during the background review are not expected to occur in the project area due to one or more of the following reasons: (1) a lack of specific habitat (e.g., coastal salt marsh, coniferous forest, chaparral, seep) and/or edaphic requirements (e.g., serpentine or alkaline soils) for the species in question, (2) the elevation range of the species is outside of the range on the project area, and (3) the species is known to be extirpated from the site vicinity, and (4) the habitats within the project area are too degraded to reasonably expect any special-status species to occur there.

**Special-Status Animals.** Based on our review of the current CNDDDB (2024) and other data sources, as well as our extensive experience with other projects in the Redwood City area, 64 special-status animal species are known to occur in the project area region. However, the majority of these species were determined to have no potential to occur in the project area because it lacks suitable habitat (e.g., brackish and freshwater marsh, tidal salt marsh, riparian forest, chaparral, grassland, aquatic) or larval host plants (e.g., dwarf plantain [*Plantago erecta*]), is outside the range of the species, or is isolated from

the nearest known extant populations by unsuitable habitat. Even though most of the species in the 5-mile search of the CNDDDB are not expected to occur on site, expanded discussions for several species that do not have potential occur in the project area but are of particular concern by CDFW and USFWS are discussed below.

- Bay checkerspot butterfly (*Euphydryas editha bayensis*). The Bay checkerspot butterfly is a federally threatened species. This species requires serpentine grasslands with sufficient populations of its larval host plant, the dwarf plantain. Serpentine soils are known to occur in proximity (within approximately 0.5 mile) to the project area. However, neither serpentine soils nor habitat that supports dwarf plantain (e.g., grassy slopes, open woodland) are present within the project area. Thus, there is no potential for this species to occur in the project area.
- Special-Status Reptiles and Amphibians. Special-status reptiles and amphibians with historical CNDDDB records of occurrence within 5 miles of the project area included the San Francisco garter snake (SFGS) (*Thamnophis sirtalis tetrataenia*, state and federally endangered), California tiger salamander (CTS) (*Ambystoma californiense* Central California DPS Population 1, state and federally threatened), California red-legged frog (CRLF) (*Rana draytonii*, federally threatened and California species of special concern), northwestern pond turtle (NWPT) (*Actinemys marmorata*, federal candidate for listing under the FESA and a California species of special concern), and California giant salamander (CGS) (*Dicamptodon ensatus*) and Santa Cruz black salamander (SCBS) (*Aneides niger*), both California species of special concern. The closest occurrences for these species are between 3 and 3.5 miles to the south and between 4.5 and 5 miles to the north for the CRLF; 2 miles to the west and 4.5 miles to the south for the SFGS; 4.6 miles to the north and 4.8 miles to the south for CTS; 4 miles to the northwest and between 4 and 5 miles to the south for the NWPT; and 4 miles to the south for the SCBS (CNDDDB 2024). While the project area is within the CGS's range, there are no occurrences of the species within 5 miles of the project area.

While special-status reptiles and amphibians are known to occur within 5 miles of the project area, it does not support suitable habitat (e.g., creeks, ponds, wetlands, moist habitat, riparian areas, open habitat with burrows) for these species. Cordilleras Creek, located approximately 100 feet to the north may provide suitable aquatic habitat for these species, but there are no occurrences of these species in the creek or nearby (CNDDDB 2024). The grassland habitat immediately south of the site may provide suitable upland habitat for SFGS, CTS, CRLF, and NWPT. But it is unlikely that these species would migrate across Cordilleras Road, especially given that no suitable habitat is present in the project area. Thus, these species have no potential to occur in the project area.

- Special-Status Species of the San Francisco Bay. The project area and vicinity lack brackish and freshwater marsh, tidal salt marsh, riparian, and salt flat habitats that support special-status species of the San Francisco Bay. These species include the federal and/or state listed California Ridgway's rail (*Rallus obsoletus obsoletus*), California black rail (*Laterallus jamaicensis coturniculus*), California least tern (*Sterna antillarum browni*), and western snowy plover (*Charadrius alexandrinus nivosus*), as well as the San Francisco common yellowthroat (*Geothlypis trichas sinuosa*) and Alameda song sparrow (*Melospiza melodia pusillula*), both California species of special concern. Therefore, these species have no potential to occur in the project area.

Townsend's big-eared bat. The Townsend's big-eared bat, a California species of special concern, occupies a variety of habitats from coniferous forests to desert scrub. They roost in caves, lava tubes, mine tunnels, large basal hollows of trees such as redwoods, abandoned

buildings, and bridges with cave-like hollows. This species has been recently detected in the Emerald Lake Hills neighborhood (personal observation by David Gallagher, Senior Biologist, MIG, 2020). Other sightings within the project vicinity are over 70 years old (CNDDDB 2024). While potential bat tree roost habitat is present on the site (discussed below), there is no cave-live habitat on site; thus, there is no potential for this species to roost on the site.

Species considered for occurrence and determined to have some potential to occur in the project area include the monarch butterfly, San Francisco dusky-footed woodrat, and Crotch's bumble bee (*Bombus crotchii*). These species are discussed in detail below.

- The monarch butterfly is a federal candidate for listing under the FESA. From mid-October to late February or March, monarch butterflies overwinter on the California coast and congregate in large numbers in dense groves of trees. Overwintering sites are located near water and nectar sources and are protected from the elements (e.g., wind, rain, hail, and direct sunlight) by topographic landforms or trees. Tree species typically used by the species include blue gum (*Eucalyptus globulus*), Monterey pine (*Pinus radiata*), coast redwood, and cypress (*Cupressus Macrocarpa*) (USFWS 2020). Winter roost sites are often on south, southwest, or west facing slopes which may provide more favorable temperature regimes and wind protection. Monarchs feed and breed primarily on milkweed (*Asclepias* sp.), as well as a few plants in closely related genera (The Xerces Society 2025). Several eucalyptus and coast redwood trees are present on the site. However, these trees do not support microhabitat conditions required by the species. While isolated breeding has been documented in the Bay Area, no larval foodplants were present on the site. Furthermore, they are not known to overwinter in the Bay side portion of the County. During fall and spring migration, monarch butterflies may occur incidentally and use the project area as stopover habitat enroute to their winter or summer grounds, but they are not expected to breed or make substantial or prolonged use of the site.
- The San Francisco dusky-footed woodrat, a California Species of Special Concern occurs in a variety of woodland and scrub habitats, and at the edges of developed habitats where they are adjacent to the foothills or natural, undeveloped areas (Lee and Tietje 2005). They build large, complex stick houses in trees and on the ground, and within human-made structures where they live and nest (Carraway and Verts 1991). Signs of woodrat presence (i.e., fecal pellets) were observed in a hollowed trunk of a California bay in the southwest corner of the project area. However, no obvious stick houses were observed. Thus, this special-status species is active in the project area.
- The Crotch's bumble bee is a state candidate for listing under CESA. This species occurs in grassland and scrub habitats supporting abundant floral resources from spring through fall, and undisturbed nesting and overwintering sites. The species nests underground in abandoned holes created by small mammals or above ground in/under logs, woody debris, brush piles, thatched annual grasses, and old bird nests (Williams et al. 2014, Xerces Society 2018). They may overwinter in loose soil or under woody debris. The closest recent occurrences of Crotch's bumble bee are approximately 8.7 miles east of the site near the Baylands Nature Preserve (Xerces Society et al. 2024). There is no nesting or overwintering habitat present on the site, as the site receives regular landscape maintenance minimizing nesting and overwintering substrates. There are no large flowering fields on the site; thus, the site has limited foraging resources. However, Crotch's bumble bee may occasionally forage on the limited flowering resources on the site but is not expected to make substantial or prolonged use of the site.
- The pallid bat (*Antrozous pallidus*), a California species of special concern, occurs sporadically throughout undeveloped open habitats (e.g., grasslands, open scrub, and oak savannahs) of the

Pacific coastal regions and the Santa Cruz Mountains in San Mateo County. This species roosts in crevices and cavities in trees, rock outcrops, buildings, and bridges. There are three pallid bat occurrences within 5 miles of the project area, but these occurrences are more than 60 years old (CDDDB 2025). Suitable crevice-roosting habitat is present on the site, but there is a low potential that this species occurs in the developed Bay-side portion of the County.

## **Sensitive and Regulated Habitats**

The California Department of Fish and Wildlife (CDFW) ranks certain rare or threatened plant communities, such as wetlands, meadows, and riparian forest and scrub, as ‘threatened’ or ‘very threatened’. These communities are tracked in the CNDDDB. Impacts on CDFW sensitive plant communities, or any such community identified in local or regional plans, policies, and regulations, must be considered and evaluated under the California Environmental Quality Act (CEQA) (California Code of Regulations: Title 14, Div. 6, Chap. 3, Appendix G). Furthermore, aquatic, wetland and riparian habitats are also afforded protection under applicable federal, state, or local regulations, and are generally subject to regulation, protection, or consideration by the U.S. Army Corps of Engineers, Regional Water Quality Control Board, CDFW, and/or the USFWS.

### **Waters of the U.S./State.**

No habitat observed within the project area possessed the field characteristics used by the federal and state resource/regulatory agencies in defining their jurisdiction (i.e., waters of the U.S., under the Clean Water Act, or waters of the state, under the Porter-Cologne Water Quality Control Act). Therefore, no jurisdictional or regulated waters or aquatic habitats were found in the project area.

### **CDFW Sensitive Habitats and Sensitive Vegetation Alliances**

The CNDDDB identified five sensitive habitats as occurring within this nine-quadrangle area: northern coastal salt marsh, northern maritime chaparral, serpentine bunchgrass, valley needlegrass grassland, and valley oak woodland. Based on the site visit, these five habitats were determined to be absent from the project area.

Additionally, CDFW maintains a list of vegetation alliances and associations within the state of California (CDFW 2024). This list includes global (G) and state (S) rarity ranks for associations and alliances. Alliances and associations currently ranked as S1-S3 are considered highly imperiled. While most of the site is developed, the southwestern portion of the site can best be described as (California Bay Forest and Woodland Alliance) due to the dominance of California bay and the area’s connectivity to the California bay forest in the undeveloped open space to the south and southwest. The California Bay Forest and Woodland Alliance is ranked as S3 defined as between 21 and 100 occurrences or 10,000 to 50,000 acres and is classified as sensitive by CDFW (CDFW 2024).

## **San Mateo County Protected Tree Ordinance (Ordinance No. 4895)**

Under Section 8.400.060 of the San Mateo County Protected Tree Ordinance (Ordinance), a protected tree is any tree that has the following qualifications.

1. Any tree that is 12.1 inches in diameter (38 inches circumference) or larger when measured 4.5 feet (54 inches) above natural grade.

2. The following indigenous species shall be considered protected when they meet or exceed the minimum size as specified in Table 1:

**Table 1 San Mateo County Protected Tree Ordinance; List of Protected Indigenous Trees (Section 8.400.060)**

Botanical name	Common Name	Minimum Trunk Diameter (measured at 4.5 feet above natural ground height)
<i>Acer macrophyllum</i>	Bigleaf Maple	10 inches
<i>Acer negundo</i>	California Box Elder	10 inches
<i>Alnus rhombifolia</i>	White Alder	Six inches or larger within riparian corridors
<i>Alnus rubra</i>	Red Alder	Six inches or larger within riparian corridors
<i>Arbutus menziesii</i>	Pacific madrone	10 inches
<i>Aesculus californica</i>	California Buckeye	10 inches
<i>Chrysolepis chrysophylla</i>	Golden Chinquapin	10 inches
<i>Fraxinus latifolia</i>	Oregon Ash	10 inches
<i>Hesperocyparis abramsiana</i>	Santa Cruz Cypress	10 inches
<i>Platanus racemosa</i>	California Sycamore	10 inches
<i>Populus fremontii</i>	Fremont Cottonwood	Six inches or larger within riparian corridors
<i>Pseudotsuga menziesii</i>	Douglas fir	18 inches
<i>Quercus agrifolia</i>	Coast live oak	10 inches
<i>Quercus chrysolepis</i>	Canyon live oak	10 inches
<i>Quercus douglasii</i>	Blue oak	10 inches
<i>Quercus parvula var. shrevei</i>	Shreve Oak	10 inches
<i>Quercus garryana</i>	Oregon white oak	Any Size
<i>Quercus kelloggii</i>	Black oak	10 inches
<i>Quercus lobata</i>	Valley oak	10 inches
<i>Quercus wislizenii</i>	Interior live oak	10 inches
<i>Salix lasiolepis, Salix laevigata, Salix lasiandra, Salix sitchensis</i>	Willow	Any size in riparian corridors; six inch or larger "trunks" outside riparian corridors
<i>Sequoia sempervirens</i>	Redwood	18 inches
<i>Torreya californica</i>	California nutmeg	10 inches

3. Heritage Trees designated by the Board of Supervisors.
4. Any tree that was required by the County to be planted as a replacement tree, or protected trees retained by the terms and conditions of a development application, building permit, subdivision approval, tree removal, or code enforcement action.
5. A community of trees.
6. Any tree designated for carbon sequestration and storage and/or environmental mitigation purposes as identified in a permit or agreement between the property owner and a responsible

government agency, where the County is a party or a third-party beneficiary, or recorded as a deed restriction.

Under Section 8.400.070 of the Ordinance, in Bayside Design Review Districts, a Protected Tree is any tree that is 6 inches in diameter (19 inches circumference) or larger when measured 4.5 feet (54 inches) above the natural grade. These districts are the (1) Emerald Lake Hills and Oak Knoll Manor (RH/DR Zoning Districts), (2) Palomar Park (R-1/S-91/DR and R-1/S-101/DR Zoning Districts), and (3) Devonshire (R-1/S-71/DR and R-E/S-102/DR Zoning Districts). Protected trees in the Emerald Lake Hills (RH/DR Zoning District) are defined as any indigenous tree that is 6 inches in diameter (19 inches circumference) or larger when measured 4.5 feet (54 inches) above natural grade.

A Protected Tree Removal permit shall be required to remove or effectively remove, one or more protected trees on public or private property or within a public or private right-of-way.

A Protected Tree Pruning Permit is required for

- a. the pruning of Protected Indigenous Trees, where the cut would result in the removal of a branch or cutting of the trunk which is 6 inches in diameter (19 inches in circumference) or greater at the point of the cut.
- b. Tree pruning of any oak tree (*Quercus* spp.) that is 30 inches in diameter (94 inches circumference) or greater in urban areas outside the Coastal Zone.
- c. Tree pruning of any Heritage Tree.

Per Section 8.400.160 of the Ordinance, trees shall be replaced according to the Ordinance’s tree replacement standard in Table 2 as follows:

**Table 2. San Mateo County Protected Tree Ordinance: Tree Replacement Standards (Section 8.400.160)**

Canopy Size of Removed Tree <sup>1</sup>	Replacement Requirement	Replacement Requirement with Development
Up to 25 feet	One 15-gallon tree (1.5-inch caliper)	One 24-inch box tree (2-inch caliper)
25 feet to 40 feet	Two 15-gallon trees (1.5-inch caliper)	Two 24-inch box trees (2-inch caliper)
More than 40 feet	Three 24-inch box trees (2-inch caliper); or Two 36-inch box trees (2.5-inch caliper)	Three 24-inch box trees (2-inch caliper); or Two 36-inch box trees (2.5-inch caliper)

Notes:

<sup>1</sup> For an asymmetrical tree canopy, the widest measurement shall be used to determine canopy size.

## Biological Impacts and Mitigation Measures

The CEQA Guidelines define which impacts are considered significant. The Act defines “significant effect on the environment” as “a substantial adverse change in the physical conditions which exist in the area

affected by the proposed project.” Potential impacts to biological resources were determined in accordance with Appendix G of the CEQA Guidelines. Impacts would be considered potentially significant if the proposed project will:

- 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 Game or U.S. Fish and Wildlife Service"
- B. "have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service"
- 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"
- D. "interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites"
- E. "conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance"
- F. "conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan"

Although a final site plan has not been developed, this report assumes that the main project components would involve subdividing the existing parcel, demolishing the existing buildings, removing several trees, and the construction of 5 new single residence homes and associated infrastructure. For the purposes of this report, a brief summary of potential project impacts on biological resources and typical measures that would be necessary to avoid such impacts with respect to CEQA is provided below. Impacts are organized by level of impact: No Impact, Less-than-Significant, and Less-than-Significant with Mitigation.

## **No Impact**

### **Impacts on Special-Status Plants**

As described above, no special-status plant species are expected to occur in the project area. Therefore, building demolition, tree and vegetation removal, and construction would have no impact on special-status plants.

### **Impacts on Special-Status Animals**

#### ***Monarch Butterflies***

Monarch butterflies are not known to form winter roost aggregations along the bay foothills in San Mateo County, and there is no suitable winter roosting habitat on the site; thus, there is no expectation that such roosts will form in the future in or near the project area. Monarch butterflies may occur on the site as occasional visitors, migrants, or transients, but they are not expected to make substantial use of the site

or form large aggregations. Thus, any tree removal that may occur is not expected to result in injury or mortality of large colonies. Any visitor, migrant, or transient individuals that occasionally visit the site would be able to flush from the work area if present. Additionally, the project would not result in the loss of any important foraging habitat (e.g., abundant flowering resources) for visiting individuals. Therefore, the project would have no impact on these species.

### ***Crotch's Bumble Bee***

No suitable nesting habitat for Crotch's bumble bee is present on site. This species may occasionally commute or forage across the site. If this species is present on the site during ground-disturbing activities such as building demolition or tree removal, individual bumble bees will be able to fly away unharmed. Thus, the project would have no impacts on this species.

### **Impacts due to Conflicts with Adopted Habitat Conservation Plan or Natural Community Conservation Plan**

There are no adopted HCPs or NCCP within 5 miles of the project area. Thus, none will be impacted by the project.

### **Less-than-Significant Impacts**

#### **Impacts on Riparian Habitat or Other Sensitive Natural Communities or State and Federally Regulated Habitats**

No riparian habitat, or regulated habitats (e.g., stream, wetlands, ponds) are present within the project area. One sensitive vegetation alliance, California Bay Forest and Woodland Alliance, is present in the southwestern corner of the project area. The development plan for the project area has not been finalized, but this habitat patch is not currently proposed for development. Thus, there will be no impact on the California Bay Forest and Woodland Alliance. However, one mature bay tree in this habitat is a hazardous tree and is recommended for removal (Mayne Tree Expert Company, Inc. 2024). This tree is protected under the County's Protected Tree Ordinance. Measures to reduce impacts of removal of this tree are prescribed under Impacts of Protected Trees below. Thus, the impact of the removal of a single tree in the California bay alliance will be less-than-significant.

#### **Impacts on Wildlife Movement and Migratory Corridors**

Wildlife corridors are segments of land that provide a link between habitat patches while also providing cover for wildlife. Development that fragments natural habitats (i.e., breaks them into smaller, disjunct pieces) can have a two-fold impact on wildlife: first, as habitat patches become smaller, they are unable to support as many individuals as possible (patch size); and second, the area between habitat patches may be unsuitable for wildlife species to traverse (connectivity).

The project area partially overlaps with an Essential Connectivity Area, an area that connects natural landscape blocks, but has limited connectivity opportunities (CEHC 2025). However, this mapping is coarse in scale and does not reflect the existing developed conditions in the majority of the project area. The natural corridor in the undeveloped open space to the south and southwest is also within the Essential Connectivity Area, and likely facilitates movement of resident wildlife species, but this area would not be impacted by the project. Common animals – such as deer, birds, or small mammals likely wander into the project area from this corridor. These common animals would be excluded from the site during construction, but exclusion from this portion of an already fragmented landscape would not impact the movement of these animals between important habitat patches, and these animals would be able to

visit the site after it is developed. Further, exclusion the project would not result in fragmentation of natural habitats. Therefore, the project would not interfere with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors.

### **Impacts on Protected Trees**

Several trees on the site, including, coast live oak, valley oak, California bay, and coast redwood trees, are protected under the San Mateo County Protected Tree Ordinance. Although the development plan for project area has not been finalized, the exact number and species of trees that will be removed for the project have not been determined. Regardless, if any protected trees are removed or pruned, the applicant will comply with the Ordinance and apply for a protected tree removal or pruning permit and comply with the tree replacement standards defined in Section 8.400.160 or pruning requirements as described in the Ordinance. In accordance with Section 8.400.170 of the Ordinance, the applicant will also submit an existing tree plan and tree protection plan that includes tree protective measures for demolition or development that must be implemented during the project. Thus, removal and pruning of protected trees will be less-than-significant.

### **Less-than-Significant Impacts with Mitigation**

#### **Impacts of San Francisco Dusky-footed Woodrat**

The San Francisco dusky-footed woodrat is not currently nesting on the site, but due to the presence of woodrat sign on the site, this species may nest in the California bay forest portion of the project area. This area is not planned for future development, but if the hazardous mature bay tree in this area requires removal, such activities could result in injury to or mortality of dusky-footed woodrats if an active woodrat nest is constructed in the tree. Due to their status as a California species of special concern, any impact to dusky-footed woodrats would be considered significant under CEQA. With the Implementation of Mitigation Measure BIO-1A and BIO-1B, impacts to San Francisco dusky-footed woodrats will be less-than-significant.

#### **Mitigation Measure BIO-1A: Pre-Construction Survey for San Francisco Dusky-Footed Woodrats.**

Within 30 days prior to the start of construction activities, a qualified biologist will conduct a pre-construction survey for San Francisco dusky-footed woodrat nests in the California bay forest habitat. Environmentally sensitive habitat fencing will be placed to protect the stick houses with a minimum 10-foot buffer. If a 10-foot buffer is not feasible, a smaller buffer may be allowable based on advice from the qualified biologist, or Mitigation Measure BIO-1B may be implemented. The qualified biologist shall have a degree in biological sciences, or similar degree; knowledge of San Francisco dusky-footed woodrat ecology, at least two seasons of experience conducting woodrat nest mapping and/or woodrat nest relocations.

#### **Mitigation Measure BIO-1B: Relocation of Woodrat Stick Houses.**

If one or more woodrat houses are determined to be present and physical disturbance or destruction of the houses cannot be avoided, then the woodrats will be evicted from their houses and the nest material relocated outside of the disturbance area, prior to onset of activities that would disturb the house, to avoid injury or mortality of the woodrats. The reproductive season for San Francisco dusky-footed woodrats typically starts in February or March and breeding activity usually continues to July but can extend into September. Thus, relocation efforts should be completed in the fall to minimize the potential for impacts on young woodrats in the house. Additionally, it is recommended that the period between the completion of the relocation efforts and the start of construction activities be minimized to reduce the potential for woodrats to reconstruct houses in the project footprint prior to the start of construction activities.

## Impacts on Nesting Birds

All migratory bird species and their nests are protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code. Project activities must comply with the provisions of the MBTA and California Fish and Game Code (i.e., avoid take of protected nesting birds).

Building demolition or construction, and tree removal during the avian breeding season (February 1 through August 31, for most species) could result in the incidental loss of eggs or nestlings, either directly through the destruction or disturbance of active nests or indirectly by causing the abandonment of nests. In addition, noise and increased construction activity could temporarily alter foraging behavior, potentially resulting in the abandonment of nest sites. Implementation of Measures BIO-2A and 2B would be necessary to avoid impacts on active nests of birds protected by the MBTA and California Fish and Game Code and reduce impacts to a less-than-significant level.

**Mitigation Measure BIO- 2A. Avoidance.** To the extent feasible, construction activities should be scheduled to avoid the nesting season. If construction activities are scheduled to take place outside the nesting season, all impacts to nesting birds protected under the MBTA and California Fish and Game Code would be avoided. The nesting season for most birds in San Mateo County extends from February 1 through August 31.

**Mitigation Measure BIO- 2B. Pre-Construction Surveys.** If it is not possible to schedule construction activities between September 1 and January 31, then pre-construction surveys for nesting birds will be conducted by a qualified biologist to ensure that no nests would be disturbed during project implementation. These surveys will be conducted no more than 5 days prior to the initiation of any site disturbance activities and equipment mobilization, including tree, shrub, or vegetation removal, fence installation, grading, etc. If project activities are delayed by more than 5 days, an additional nesting bird survey will be performed. During this survey, the biologist will inspect all trees and other potential nesting habitats (e.g., trees, shrubs, culverts) in and immediately adjacent to the impact area for nests. Active nesting is present if a bird is building a nest, sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of the surveys will be documented as appropriate and/or required.

If an active nest is found sufficiently close to work areas to be disturbed by these activities, the biologist will determine the extent of a construction-free buffer zone to be established around the nest (may be up to 1,000 feet for raptors and 250 feet for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during project implementation. Within the buffer zone, no site disturbance and mobilization of heavy equipment, including but not limited to equipment staging, clearing, grubbing, vegetation removal, demolition, and grading will be permitted until the chicks have fledged. Monitoring will be required to ensure compliance with MBTA and relevant California Fish and Game Code requirements. Monitoring dates and findings will be documented as appropriate and/or required.

The qualified biologist shall have a degree in biological sciences, or similar degree; knowledge of local bird species, their identification, and breeding behavior; at least two seasons of experience conducting nesting bird surveys with positive findings.

## Impacts on Roosting Bats

There is a low potential for one special-status bat, pallid bat, and non-special-status bats (such as California myotis) to roost in trees on the site. Removal of a tree that supports maternity colonies or

individual pallid bats could result in injury or mortality if they are roosting in the tree when it is removed. Due to the rarity of this species, such impacts would be significant.

Similarly, tree removal may also result in injury or mortality to non-special-status. Bats and other non-game mammals are protected by California Fish and Game Code Section 4150, which states that all non-game mammals or parts thereof may not be taken or possessed except as provided otherwise in the code or in accordance with regulations adopted by the commission. Activities resulting in mortality of non-game mammals (e.g., destruction of an occupied nonbreeding bat roost, resulting in the death of bats), or disturbance that causes the loss of a maternity colony of bats (resulting in the death of young), may be considered “take” by the CDFW. Implementation of Mitigation Measures BIO-3A – 3C would be necessary to avoid impacts on the pallid bat and other non-special-status bats and reduce impacts to a less-than-significant level. Thus, impacts on the pallid bat and non-special-status bats will be less-than-significant.

**Mitigation Measure BIO-3A.** No more than 14 days prior to building demolition (including building abatement, if applicable) and tree removal, a qualified biologist, shall conduct a pre-activity survey for roosting bats. A qualified biologist is defined as a biologist with a degree in biological sciences or related field and at least two seasons of experience performing bat surveys with positive findings, knowledge of bat biology and behavior, and humane bat exclusion methods. During the survey, the qualified biologist shall examine all trees for crevice-roosting habitat during the daytime and conduct an evening visual survey utilizing bat acoustic detectors to determine if roosting bats are present and to identify their specific locations. If roosting bats are not detected, project work can proceed as planned. If project activities are not initiated within 14 days of survey completion, the surveys shall be repeated. The results of the survey(s) shall be documented as appropriate and/or required.

**Mitigation Measure BIO-3B.** If an active pallid bat or non-special-status species maternity colony is located and project work cannot be redesigned to avoid removal or disturbance of the occupied tree, disturbance will be scheduled to take place outside the maternity roost season (March 15–August 31), and a disturbance-free buffer zone (determined by a qualified bat biologist) will be implemented during the maternity roost season.

**Mitigation Measure BIO-3C.** If non-reproductive roosting bats are detected, the qualified biologist shall deter or evict the bats using humane methods prior to tree removal. The individuals will be safely evicted between September 1 and October 15 or between February 15 and March 14 (when bats are expected to be active). The biologist shall perform follow-up surveys to ensure that all roosting bats have vacated the tree(s) prior to tree removal. If deterrence and/or eviction is performed, the results of these activities shall be documented as appropriate and/or required.

If you have any questions regarding this report, please feel free to contact me at [kbriones@migcom.com](mailto:kbriones@migcom.com) or 408-204-6602. Thank you for contacting MIG about this project.

Sincerely,



Kim Briones  
Senior Biologist

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## **Appendix A. Figures**



Source: ESRI 2024, MIG 2024

★ Project Location

**Figure 1 Project Area Vicinity**

1815 Cordilleras Road Housing Development Project



Source: ESRI 2024, MIG 2024, MacLeod & Associates 2024

- ▬ Study Area
- Landcover and Habitat Types
- CA Bay Forest
- Developed

**Figure 2 Project Area**

1815 Cordilleras Road Housing Development Project