Western Riverside County
Multiple Species Habitat Conservation Plan
Consistency Analysis

Murrieta Whitewood at Lee Lane Multi-Family Residential Project

Assessor's Parcel Number 392-320-014

Permittee & Applicant:

Murrieta Whitewood Multi-Family LLC

Consultant:

Wood Environment & Infrastructure Solutions, Inc.
1845 Chicago Avenue, Suite D, Riverside, CA 92507

Contact: John F. Green, Senior Biologist, john.green@woodplc.com

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1 EXECUTIVE SUMMARY

The purpose of this Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis is to summarize the biological data for the proposed Whitewood Road Development project and to document the project's consistency with the goals and objectives of the MSHCP. The proposed 18.08-acre project site (Assessor's Parcel Number 392-320-014) is east of Whitewood Road, south of Lee Lane, north of Greenberg Place, and west of Epple Street. It is in the City of Murrieta, Riverside County, California and consists of a 324 unit multi-family development.

No off-site staging areas or off-site improvements are planned. A weed abatement plan and/or fuel modification zones have not yet been prepared.

The proposed project does not entail the construction of, or improvements to, any MSHCP covered roads or any MSHCP covered public access activities. No part of the project site lies within or adjacent to any MSHCP Criteria Cells therefore the project will have no effect on assembly of the MSHCP reserve. No part of the project site lies within or adjacent to any Public Quasi-Public Lands (PQP), therefore the project will have no effect on PQP. No vernal pools or fairy shrimp habitat are present. The proposed project is outside of the range and habitat of the Delhi Sands flower loving fly (*Rhaphiomidas terminatus abdominalis*).

Project vegetation is a complex of non-native grassland, coastal sage scrub, and chaparral. Drainages contain riparian scrub / woodland / forest.

The project site contains riparian / riverine habitat. No riverine / riparian resources are expected to be impacted; they will be set aside along with some upland habitat as a "natural open space mitigation area." Installation of two detention basins will minimize sedimentation and pollutants entering the riparian / riverine habitat. Guidelines pertaining to the urban/wildlands interface should be followed to benefit the conserved land. The project will also utilize MSHCP best management practices.

To meet MSHCP requirements, focused surveys will be required for the MSHCP designated narrow endemic plant species (survey best done in May), burrowing owl (*Athene cunicularia*), least Bell's vireo (*Vireo bellii pusillus*); and southwestern willow flycatcher (*Empidonax traillii extimus*). The survey season has already begun for the three bird species.

Indirect impacts to nesting birds are possible and will require preconstruction surveys and/or monitoring pursuant to the federal Migratory Bird Treaty Act and state Fish and Game Code. The MSHCP does not ever provide take for impacts to nesting birds.

Contents

2 INTRODUCTION

The purpose of this MSHCP Consistency Analysis is to summarize the biological data for the proposed Whitewood Road Development project ("project," Figure 1) and to document the project's consistency with the goals and objectives of the MSHCP. The proposed project parcel is approximately 18.08-acres.

2.1 Project Area

The 18.08-acre project is Assessor's Parcel Number (APN) 392-320-014. Exact impact acreages are still to be determined, but most of the upland site will be developed. No riverine/riparian resources are to be impacted, they will be set aside along with some uplands as a "natural open space mitigation area" (Figure 2). No off-site staging areas or off-site improvements are planned. It is likely that a weed abatement plan and/or fuel modification zones will be required, but these have not yet been prepared.

2.2 Project Description

The project consists of a 324 unit multi-family development to include one, two, and three story residential buildings. Additionally, there will be an associated recreation and leasing building, pool area, and miscellaneous amenities. Two detention basins are planned (Figure 2).

The proposed project schedule is as follows:

1. Entitlements 3/12/2021 - 9/23/2021
2. Construction Documents 9/20/2021 - 3/4/2022
3. Grading 3/6/2022 - 4/29/2022
4. Site Utilities 4/30/2022 - 6/24/2022
5. Vertical Construction 6/25/2022 - 5/13/2023

5.1 Phase 1 (South Side) 6/25/2022 - 3/3/2023

5.2 Phase 2 (North Side) 9/4/2022 - 5/13/2023

2.3 Covered Roads

The proposed project does not entail the construction of, or improvements to, any MSHCP covered roads.

2.4 Covered Public Access Activities

The proposed project does not entail the construction of, or improvements to, any MSHCP covered public access activities.

2.5 General Setting

The proposed project site is generally located immediately east of Whitewood Road, south of Lee Lane, north of Greenberg Place, and approximately 650 feet west of Epple Street. The project site is in the City of Murrieta, Riverside County, California. It is mapped on the U.S. Geological Survey 7.5-minute Murrieta, California quadrangle, within Township 6 South, Range 3 West, Section 35 (Figure 3).

Project elevations range from approximately 1,465 to 1,510 feet (445-460 meters). Surrounding land uses include residential subdivisions, rural residences, and undeveloped open space. The project site is undeveloped but all accessible upland areas appear to have been mowed at some point in the past year. An unnamed, riparian-vegetated drainage and a tributary to it are present within the proposed project site.

3 RESERVE ASSEMBLY ANALYSIS

3.1 Criteria Cells

No part of the project site lies within or adjacent to any MSHCP Criteria Cells (Figure 4), therefore the project will have no effect on assembly of the MSHCP reserve.

3.2 Public Quasi-Public Lands

No part of the project site lies within or adjacent to any PQP (Figure 4), therefore the project will have no effect on PQP.

4 VEGETATION MAPPING

A review of aerial photography dating back to 1996 and reports from 2004 shows that the project site originally had chaparral cover similar to the extant undeveloped property to the immediate north. Since then site vegetation has been cleared periodically through bulldozing, discing, and mowing. On at least one occasion some 20 years ago, even the riparian areas were cleared of all but the largest trees. After each clearing, chaparral and riparian vegetation has regrown significantly. Riparian vegetation cover is now similar to what it was originally, but chaparral has never recovered to its' original stature, and it was mowed again sometime in the past year. Each successive clearing event has pushed the upland vegetation more towards becoming a non-native grassland, but it still contains a large percentage of shrubs. At early stages of recovery/regrowth the shrub cover that is extant or regrowing from seed / rootstock resembles coastal sage scrub more than chaparral (Figure 5). Following 2012 vegetation

terminology from Western Riverside County Regional Conservation Authority ("WRCRCA" 2021a) we have designated the vegetation onsite as follows:

Non-native Grassland / Coastal Sage Scrub/ Chaparral

Chaparral is a shrub-dominated habitat composed largely of evergreen species that range from one to four meters in height. Chamise *(Adenostoma fasciculatum)* dominated chaparral was the original cover onsite, but large chamise shrubs are now very scarce with scattered individuals regrowing from mowing. Other chamise chaparral associates remaining onsite include spiny redberry (*Rhamnus crocea*), black sage (*Salvia mellifera*), California buckwheat (*Eriogonum fasciculatum*), and California sagebrush (*Artemisia californica*).

Coastal sage scrub is dominated by a characteristic suite of low-statured, aromatic, drought-deciduous shrubs and subshrub species. Most coastal sage scrub in Riverside County is designated as the subcategory: Riversidean sage scrub. California sagebrush and California buckwheat are dominants in this community. Other characteristic sage scrub species present onsite include brittlebush (*Encelia farinosa*), blue elderberry (*Sambucus nigra* ssp. *caerulea*), and cholla (*Opuntia* sp.). Recovering chaparral resembles coastal sage scrub in stature.

Non-native grasslands primarily are composed of annual grass species introduced from Mediterranean-climate regions with variable presence of non-native and native herbaceous species. Non-native grasslands are generally dominated by several species of grasses and an array of annual forbs from the Mediterranean-climate regions. Many annual species were at the seedling stage during our site visit but species such as Mediterranean grass (*Schismus* sp.), red-stem filaree (*Erodium cicutarium*), shortpod mustard (*Hirschfeldia incana*), Tocalote (*Centaurea melitensis*), blue dicks (*Dipterostemon capitatus*); and tarplant (*Deinandra* sp.) were identifiable in the patchy areas where shrub growth has been eliminated.

Riparian Scrub, Woodland, Forest

Riparian communities typically consist of one or more deciduous tree species with an assorted understory of shrubs and herbs. Onsite riparian vegetation includes several old trees such as coast live oak (*Quercus agrifolia*), Fremont cottonwood (*Populus fremontii* ssp. *fremontii*), and Goodding's black willow (*Salix gooddingii*). Younger willows, blue elderberry, western poison oak (*Toxicodendron diversilobum*) and mule fat (*Baccharis salicifolia*) occur in the regrown portions of the drainages. One large non-native saltcedar (*Tamarix ramosissima*) tree is present at the east end of the drainage.

5 PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE AREAS AND VERNAL POOLS (SECTION 6.1.2)

According to Section 6.1.2 of the MSHCP:

"**Riparian/Riverine Areas** are lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year." and

"**Vernal pools** are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season.

"With the exception of wetlands created for the purpose of providing wetlands habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions."

5.1 Riparian/Riverine

5.1.1 Methods

A jurisdictional delineation was prepared (Wood 2021) and it is attached to this analysis as Appendix B. Drainages were evaluated for wetland associated vegetation, bed and bank, and ordinary high water mark.

5.1.2 Existing Conditions and Results

The project area contains an unnamed drainage and its' unnamed tributary that appear to contain federal and state jurisdictional waters and MSHCP riparian (riparian scrub woodland) / riverine (non-vegetated streambed) areas (Figure 6). During the site assessment only intermittent areas of the drainage contained water. All on-site drainages are tributaries to Warm Springs Creek. Flow from the on-site drainages enter unconserved land of Cell 5576 approximately 2,750 feet southeast of the project site; conserved land of Cell 5569 approximately 4,900 feet east-southeast of the project site; and continue across conserved land to Warm Springs Creek approximately 5,650 feet east-southeast of the project site.

The functions and values of the on-site drainages and the surrounding upland loams (Figure 7) include absorption and the gradual release of water into the downstream Conservation Area. The topography and vegetation in the on-site drainages also provides cover and corridors for

the shelter and movement of wildlife. The proposed project intends to install detention basins and to preserve most of the on-site drainages in their current state, so most functions and values will be retained.

Other species listed in Section 6.1.2 of the MSHCP that are expected to benefit from the conservation of riparian/riverine areas and vernal pools include:

Plants

- California muhly (*Muhlenbergia californica*): Western Riverside County Regional Conservation Authority ("WRCRCA" 2021a) reports that this species does not occur in the MSHCP area.
- California Orcutt grass (*Orcuttia californica*): Narrow Endemic Plant Species Survey Area (NEPSSA) species for which habitat assessment is required on this site. Habitat is vernal pools and none are present.
- Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*): Criteria Area Species Survey Area (CASSA) species for which surveys are not required on this site.
- Davidson's saltscale (*Atriplex serenana* var. *davidsonii*): CASSA species for which surveys are not required on this site.
- little mousetail (*Myosurus minimus* ssp. *apus*): CASSA species for which surveys are not required on this site this site.
- Orcutt's brodiaea (*Brodiaea orcuttii*): NEPSSA species for which surveys are not required on this site.
- Parish's brittlescale (*Atriplex parishii*): CASSA species for which surveys are not required on this site.
- Parish's meadowfoam (*Limnanthes gracilis* var. *parishii*): Parish's meadowfoam is limited to ephemeral wetlands in the mountains of southern California between 600 and 1,700 meters. Within the Plan Area, it is known only from ephemeral wetlands on the Santa Rosa Plateau. The project site is outside the known geographical range of the species.
- San Diego button-celery (*Eryngium aristulatum* var. *parishii*): This species occurs only in vernal pools with clay soils. Within the MSHCP area, it is known only from the Santa Rosa Plateau. The project site lacks suitable habitat and is outside the known range of the species.

- San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*): CASSA species for which surveys are not required on this site.

- spreading navarretia (*Navarretia fossalis*): NEPSSA species for which habitat assessment is required on this site. Habitat is chenopod scrub, shallow freshwater marshes and swamps, playas, and vernal pools. The project site lacks any suitable habitat.

- thread-leaved brodiaea (*Brodiaea filifolia*): CASSA species for which surveys are not required on this site.

- vernal barley (*Hordeum intercedens*): Suitable habitat for this species includes alkali annual grasslands and vernal pools and, to a lesser extent, alkali scrub and alkali playa in association with Domino, Willows, and Traver soils. The project site lacks any suitable habitat.

- Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*): NEPSSA species for which habitat assessment is required on this site. Habitat is alkaline areas in meadows and seeps, marshes and swamps, riparian forest, and vernal pools. Very low chance of occurrence in onsite riparian areas. No known records in project area.

Fish, Amphibians, Reptile

All of these species require aquatic habitat that is not present on-site. The site is also not in any MSHCP-designated amphibian survey area:

- arroyo chub (*Gila orcutti*)

- Santa Ana sucker (*Catastomus santaanae*)

- arroyo toad (*Anaxyrus [Bufo*] *californicus*)

- coast range newt (*Taricha tarosa tarosa*)

- mountain (Southern) yellow-legged frog (*Rana muscosa*)

- western pond turtle (*Clemmys marmorata pallida*)

Birds

- American bittern (*Botaurus lentiginosus*): American bitterns in California are found almost exclusively in emergent habitat of freshwater marshes and vegetated borders of ponds and lakes. There is no habitat on-site.

- bald eagle (*Haliaeetus leucocephalus*): Considered a bird of aquatic ecosystems, it occurs primarily at or near seacoasts, rivers, swamps, and large lakes. No habitat on-site.

- black-crowned night heron (*Nycticorax nycticorax*): Habitat requirements are varied, including all types of wetland areas including swamps, streams, rivers, margins of pools, ponds, lakes, lagoons, tidal mudflats, fresh, brackish, and salt water ecosytems and even using man-made ditches, canals, reservoirs, and wet agricultural fields. In inland areas, most colonies are associated with large wetlands. No suitable habitat on-site.

- black swift (*Cypseloides niger*): It nests in moist crevices or caves on sea cliffs above the surf, or on cliffs behind, or adjacent to, waterfalls in deep canyons. It forages widely over many habitats. Unlikely to occur on-site, even as a foraging bird and there is no nesting habitat.

- Cooper's hawk (*Accipiter cooperii*): This species is usually found in areas with dense tree stands or patchy woodland habitat. Likely to occur on-site and there are trees suitable for nesting.

- double-crested cormorant (*Phalacrocorax auritus*): Require lakes, rivers, reservoirs, estuaries, or the ocean. Possible only as a flyover species.

- downy woodpecker (*Picoides pubescens*): Within southern California, the species generally nests in deciduous (often willow) woodlands, deciduous growth/oak woodlands, orchards, suburban plantings, and occasionally in conifers. Lowland stream-bottoms constitute the main theaters of activity for this woodpecker. Available water may be a factor for presence of the species. On-site habitat is at least marginally suitable.

- Lincoln's sparrow (*Melospiza lincolnii*): Breeding in southern California occurs in wet montane meadows of corn lily, sedges, and low willows. During the winter and spring and fall migration, the species requires thickets of shrubs or tall forbs interspersed with grassy areas, usually on damp ground or near water. It uses lowlands that are avoided during the breeding season. It likely occurs on-site at that time, but there is no breeding habitat.

- MacGillivray's warbler (*Geothlypis* [*Oporornis*] *tolmiei*): Breeding pairs of MacGillivray's warbler typically are found in moist brushy areas within coniferous forests between

2,000-2,800 meters but may also be found in clear-cuts or mixed deciduous forests up to 3,000 meters. In migration MacGillivray's warblers are elusive, mostly seen passing through thick shrubbery, but avoiding trees. It may occur on-site during migration, but there is no breeding habitat.

- Nashville warbler (*Leiothlypis* [*Vermivora*] *ruficapilla*): This species most commonly breeds in montane chaparral habitats in southern California. During migration, migrates through lowland woodland and riparian habitats. It may occur on-site during migration, but there is no breeding habitat.

- osprey (*Pandion haliaetus*): Uses rivers, lakes, and reservoirs for foraging and rocky pinnacles, and large trees and snags in open forest for cover and nesting. No habitat on-site.

- peregrine falcon (*Falco peregrinus*): Within southern California, peregrine falcons are primarily found at coastal estuaries and inland oases. Nests on cliffs, generally 200 to 300 feet in height that tend to dominate the surrounding landscape. May forage on-site, but there is no breeding habitat.

- purple martin (*Progne subis*): The species nests in cavities constructed by other bird species in tall, old trees near a body of water. It forages over riparian areas, forest, and woodland. They may be found virtually anywhere in aerial habitat during migration, but are quite rare. It may occur on-site during migration, but breeding is not expected.

- tree swallow (*Tachycineta bicolor*): The species forages primarily over and around ponds, marshes, rivers, lakes, and estuaries. Tree swallows nest almost exclusively in cavity-containing trees or snags with cavities that are near, or preferably in, water. May be found virtually anywhere in aerial habitat during migration and winter. It may occur while foraging or during migration, but breeding is not expected.

- tricolored blackbird (*Agelaius tricolor*): Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat composed of grassland, woodland, or agricultural cropland. In winter, they often form single-species, and sometimes single-sex, flocks, but they also flock with other blackbird species. Unlikely to forage on-site, and there is no breeding habitat.

- white-faced ibis (*Plegadis chihi*): In southern California, extensive marshes are required for nesting. The species prefers shallow, grassy marshes and nests in dense, fresh emergent wetland. Migrant and wintering birds forage in shallow lacustrine waters, muddy ground of wet meadows, marshes, ponds, lakes, rivers, flooded fields, and estuaries. No on-site habitat.

- white-tailed kite (*Elanus leucurus*): This species inhabits low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Riparian areas adjacent to open areas are used for nesting. The site could be used for foraging and nesting.

- Wilson's warbler (*Cardellina* [*Wilsonia*] *pusilla*): Breeding habitats for this species include montane meadows and low, dense willow thickets as well as other shrubs and scrub, often on steep slopes. During migration, these birds can be seen passing through many habitats. It may occur on-site during migration, but there is no breeding habitat.

- yellow-breasted chat (*Icteria virens*): In southern California primarily found in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Nesting areas are associated with streams, swampy ground, and the borders of small ponds. Seldom seen in migration, but may occur on-site at that time. There is marginal breeding habitat, possible but unlikely.

- yellow warbler (*Setophaga petechia*): In southern California, this species breeds in lowland and foothill riparian woodlands dominated by cottonwoods, alders, or willows and other small trees and shrubs. During migration, they occur in many habitats. It may occur on-site at that time, and there is also breeding habitat.

5.1.3 Impacts

The project intends to avoid all riparian / riverine habitat, however city requirements may require minor impacts. More information is provided in the attached jurisdictional delineation. If necessary, these impacts may trigger a requirement for a Determination of Biologically Equivalent or Superior Preservation (DBESP) report. Measures will be incorporated into the project design to ensure the long-term conservation of the riparian / riverine resources which are being avoided, and their associated functions and values, including the use of a deed restriction or conservation easement as necessary. Indirect impacts to nesting birds are possible and will require preconstruction surveys and/or monitoring pursuant to the federal Migratory Bird Treaty Act and state Fish and Game Code. The MSHCP does not ever provide take for impacts to nesting birds.

5.1.4 Mitigation

No additional mitigation needs are anticipated as the project intends to avoid any direct impacts to riparian / riverine habitat and install two detention basins to minimize sedimentation and pollutants.

5.2 Vernal Pools

Vernal pools are seasonal wetlands that occur in depression areas. They have all three wetlands indicators (soils, vegetation and hydrology) during the wetter portion of the growing season but

normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. The site visit, past reports, and a review of historic aerial photography revealed no potential vernal pool sites. Since no vernal pools are present there will be no impacts and no need for mitigation.

5.3 Fairy Shrimp

Three species of fairy shrimp are of concern to the MSHCP: Riverside fairy shrimp (*Streptocephalus woottoni*), Santa Rosa Plateau fairy shrimp (*Linderiella santarosae*), and vernal pool fairy shrimp (*Branchinecta lynchi*). The MSHCP states that suitable fairy shrimp habitat is "defined as vernal pools, stock ponds, ephemeral ponds, or other human-modified depressions." The site visit, past reports, and a review of historic aerial photography revealed no potential fairy shrimp habitat. No fairy shrimp habitat is present so there will be no impacts and no need for mitigation.

5.4 Riparian Birds

On-site and adjacent riparian vegetation (Figure 5) is moderately suitable habitat for the state and federally listed riparian bird species least Bell's vireo; low quality habitat for the state and federally listed southwestern willow flycatcher; and unsuitable habitat for the state and federally listed western yellow-billed cuckoo (*Coccyzus americanus occidentalis*).

5.4.1 Methods

A pre-construction survey is not sufficient to rule out the presence or absence of least Bell's vireo and southwestern willow flycatcher. Presence/absence can only be concluded by completing the required focused protocol-level surveys. Eight survey visits are required for the vireo and five are required for the flycatcher. These surveys can overlap on the same day but cannot be done at the same time. The survey season began on April 10th.

5.4.2 Existing Conditions and Results

On-site and adjacent vegetation is moderately suitable habitat for the state and federally listed riparian bird species least Bell's vireo and low quality habitat for the state and federally listed southwestern willow flycatcher. Focused protocol-level surveys have not been conducted.

5.4.3 Impacts

There will be no direct impacts to habitat of the least Bell's vireo and southwestern willow flycatcher, but indirect impacts are possible under current project design if these species are present.

5.4.4 Mitigation

If surveys are positive then 90% of the occupied portions of the property that provide for long-term conservation value shall be conserved in a manner consistent with conservation of the least Bell's vireo and southwestern willow flycatcher. This will involve including 100 meters of undeveloped land adjacent to the habitat conserved. The approach of not assessing/surveying adjacent riparian habitat potentially suitable for the least Bell's vireo and southwestern willow flycatcher is not an acceptable basis for not addressing this or concluding that the 100-meter setback is not required.

Indirect impacts such as dust and noise may be addressed by methods such as committing to only constructing outside of nesting season, having a biological monitor, and/or installing sound walls outside of the nesting season. If a sound wall option is being considered, early coordination with WRCRCA and the wildlife agencies should be initiated.

A DBESP report will be required if least Bell's vireo and southwestern willow flycatcher are found to be present.

6 PROTECTION OF NARROW ENDEMIC PLANT SPECIES (SECTION 6.1.3)

The WRCRCA MSHCP Information Tool (WRCRCA 2021a) indicates that virtually the entire project site lies within the NEPSSA for California Orcutt grass, many stemmed dudleya (*Dudleya multicaulis*) Munz's onion (*Allium munzii*), San Diego Ambrosia (*Ambrosia pumila*), spreading navarretia, and Wright's trichocoronis (Figure 8).

6.1 Methods

A habitat assessment was conducted on 9 March 2021. As noted previously, there is no habitat for California Orcutt grass or spreading navarretia and only marginal habitat for Wright's trichocoronis. Many-stemmed dudleya is often associated with clay soils, but not always. It occurs in chaparral, coastal scrub, and valley and foothill grassland. It is not known from the project area, but habitat is present. Munz's onion is associated with mesic, clay areas in chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, and valley and foothill grassland. Soils are unfavorable but there is a low chance of occurrence. San Diego ambrosia occurs on sandy loam or clay soils, sometimes alkaline, often in disturbed areas. It occurs in chaparral, coastal scrub, valley and foothill grassland, and vernal pool communities. On-site habitats are favorable, but the species is not known from the project area so only a low potential for occurrence.

6.2 Existing Conditions and Results

No special-status plant species were detected during the habitat assessment, but it was early in the season and not a focused survey. Focused surveys will be needed for Wright's trichocoronis, many-stemmed dudleya, Munz's onion, and San Diego ambrosia. A survey in May would coincide with the blooming periods of all four species.

6.3 Impacts

Direct impacts are possible to any narrow endemic plants occurring in most upland portions of the site. Indirect impacts are possible to any narrow endemic plants occurring in the riverine/riparian area.

6.4 Mitigation

If narrow endemic plants are detected, 90% avoidance of narrow endemic plant species is one potential means of mitigation. This should be possible for species within the riverine/riparian area. A commitment to place a conservation easement or deed restriction over the area in order to demonstrate that the area will be protected in perpetuity, would be required. If this is not possible, mitigation for direct impacts to narrow endemic plant species will need to be summarized in a DBESP Report.

7 ADDITIONAL SURVEY NEEDS AND PROCEDURES (SECTION 6.3.2)

7.1 Criteria Area Plant Species

The WRCRCA MSHCP Information Tool indicates the project site is not located within a CASSA for plants so no surveys for those species are required.

7.2 Amphibians

The WRCRCA MSHCP Information Tool indicates that the project area is not within a MSHCP designated amphibian survey area so no surveys for those species are required.

7.3 Burrowing Owl

The WRCRCA MSHCP Information Tool indicates that virtually the entire project site is located within the MSHCP designated burrowing owl survey area (Figure 8). Burrowing owl (BUOW) habitat can be found in annual and perennial grasslands, deserts, and scrublands characterized by low-growing vegetation and flat to moderate slopes with less than 30 percent canopy cover of trees and shrubs. In southern California, BUOWs are not only found in undisturbed natural areas, but also fallow agricultural fields, margins of active agricultural areas, livestock farms, airports, and vacant lots. Burrows are the essential component of BUOW habitat. Both natural and artificial burrows provide protection, shelter, and nests for BUOWs. BUOWs typically use burrows made by fossorial mammals, such as ground squirrels or badgers, but also may use manmade structures (also known as 'burrow surrogates'), such as cement culverts; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement. In California, the species often occurs in association with colonies of the California ground squirrel (*Otospermophilus beecheyi*), where it makes use of the squirrel's burrows. The entrance of their burrows is often adorned with animal dung, feathers, debris, and other small objects. The species is active both day and night and may be seen perching conspicuously on fence posts or

standing at the entrance of their burrows. Due to the characteristic fossorial habits of BUOWs, nest burrows are a critical component of their habitat.

7.3.1 Methods

Suitable habitat and California ground squirrels were identified to be present within the project site during a habitat assessment conducted on 9 March 2021 by a Wood senior biologist John F. Green.

7.3.2 Existing Conditions and Results

Because potential burrowing owl habitat is present, a four-visit focused burrowing owl survey will need to be conducted in accordance with Riverside County Transportation and Land Management Agency, Environmental Programs Department ("RCTLMA EPD,"2006a). The survey season for this species began March 1st. In addition, MSHCP guidelines also require pre-construction presence/absence surveys for BUOWs within the survey area where suitable habitat is present. A single preconstruction survey will be conducted within 30 days prior to disturbance.

7.3.3 Impacts

Most potential BUOW habitat on-site will be permanently impacted by the proposed project.

7.3.4 Mitigation

RCTLMA EPD (2006b) states: "In the event owls are observed on site, please contact the Environmental Programs Department (EPD) immediately to discuss potential mitigation measures such as passive or active relocation." Further WRCRCA guidelines (2019) include:

- Preparation of a DBESP to ensure that an appropriate mitigation strategy will be implemented.
- Coordinate with WRCRCA and the California Department of Fish and Wildlife (CDFW) on all evictions (passive or active relocation).
- Eviction may be acceptable if suitable conserved habitat and natural or artificial burrows are within 75–100 meters. Note that eviction during the nesting season is generally prohibited.
- If adjacent or nearby suitable habitat is not conserved, eviction may still be acceptable at the discretion of WRCRCA and/or CDFW.
- A *Burrowing Owl Protection and Relocation Plan* will be prepared and must be reviewed, approved, and coordinated with WRCRCA and Wildlife Agencies, including the state banding permit office and federal Migratory Bird Treaty Act office if active relocation is needed.

7.4 Mammals

The WRCRCA MSHCP Information Tool indicates that the project area is not within a MSHCP designated mammal survey area so no surveys for those species are required.

8 INFORMATION ON OTHER SPECIES

8.1 Delhi Sands Flower Loving Fly

The proposed project does not fall within an area with mapped Delhi soils and is outside of the range of the Delhi Sands flower loving fly. Therefore no surveys for this species are required.

8.2 Species Not Adequately Conserved

Table 9-3 of the MSHCP lists twenty-eight (28) species for which certain conservation requirements must be achieved in order for them to be considered adequately conserved. Table 1 below lists those species, their current MSHCP status (adequately conserved or not) and their potential for occurrence onsite if they have not been adequately conserved.

Table 1. Species Not Adequately Conserved under MSHCP Table 9-3 in 2004

Species	Habitat and Distribution	Site & Current MSHCP Status (WRCRCA 2020)
Plants		
Arctostaphylos rainbowensis rainbow manzanita	Perennial evergreen shrub found in chaparral vegetation and known to occur in northwestern San Diego and southwestern Riverside Counties, from 100 to 870 meters elevation.	Table 9-3 requirements for conservation have been met.
Calochortus plummerae Plummer's mariposa lily	Found in sandy or rocky sites of (usually) granitic or alluvial material in valley and foothill grassland, coastal scrub, chaparral, cismontane woodland, and lower montane coniferous forest at 100 to 1,700 meters (300 to 5,600 feet) elevation.	Table 9-3 requirements for conservation have been met.
Chorizanthe leptotheca peninsular spineflower	Annual herb found on coastal and alluvial fans at 300 to 1,900 meters (984 to 6,235 feet elevation) in chaparral, yellow pine forest, coastal sage scrub habitats.	Table 9-3 requirements for conservation have been met.
Chorizanthe parryi var. *parryi* Parry's spineflower	Found in dry sandy soils in chaparral or coastal scrub at 40 to 1,750 meters (100 to 5,700 feet) elevation. Known only from Riverside and San Bernardino Counties and possibly extending into Los Angeles County.	Table 9-3 requirements for conservation have been met.

Species	Habitat and Distribution	Site & Current MSHCP Status (WRCRCA 2020)
Deinandra mohavensis Mojave tarplant	Found in low sand bars in river beds, mostly in riparian areas or in ephemeral grassy areas, in riparian scrub and mesic chaparral at 640 to 1,645 meters elevation.	**ABSENT**. Table 9-3 requirements for conservation have not been met. No records in project area, site outside of known range.
Dudleya viscida sticky (-leaved) dudleya	Perennial herb found in rocky areas in coastal bluff scrub, chaparral, coastal sage scrub; 10-870 meters elevation.	**ABSENT**. Table 9-3 requirements for conservation have not been met, MOU with U.S. Forest Service (USFS) is needed. No records in project area, site outside of known range.
Galium californicum ssp. *primum* Alvin Meadow (California) bedstraw	Perennial herb found in granitic soils in chaparral and lower montane coniferous forest; 1,350 to 1,830 meters elevation.	**ABSENT**. Table 9-3 requirements for conservation have not been met, MOU with USFS is needed. No records in project area, site outside of known range.
Heuchera hirsutissima shaggy-haired alumroot	Found in rocky areas in upper montane and subalpine coniferous forest 1,065 to 3,500 meters elevation.	**ABSENT**. Table 9-3 requirements for conservation have not been met, MOU with USFS is needed. No records in project area, site outside of known range.
Holocarpha virgata ssp. *elongata* graceful (curving) tarplant	Annual herb found in chaparral, valley and foothill grassland, foothill woodland, and coastal sage scrub habitats at 60 to 1,100 meters elevation.	Table 9-3 requirements for conservation have been met.
Hulsea vestita ssp. *callicarpha* beautiful hulsea	Perennial herb found in rocky or gravelly, granitic soils at 915 to 3,050 meters elevation in chaparral or lower montane coniferous forest habitat.	Table 9-3 requirements for conservation have been met.
Lilium humboldtii ssp. *ocellatum* ocellated Humboldt lily	Found in openings within chaparral, cismontane woodland, coastal scrub, yellow pine forest, and riparian woodland at 30-1,800 meters elevation.	**ABSENT**. Table 9-3 requirements for conservation have not been met, MOU with USFS is needed. No records in project area, site outside of known range.

Species	Habitat and Distribution	Site & Current MSHCP Status (WRCRCA 2020)
Lilium parryi lemon lily	Bulbiferous perennial herb of wet areas in meadows and riparian and montane coniferous forests at 625 to 2,930 meters elevation.	**ABSENT**. Table 9-3 requirements for conservation have not been met, MOU with USFS is needed. No records in project area, site outside of known range.
Microseris douglasii ssp. *platycarpha* small-flowered microseris	Found in valley grassland, coastal prairie, cismontane woodland, coastal sage scrub habitats and vernal pools at 15 to 1,070 meters.	Table 9-3 requirements for conservation have been met.
Mimulus (*Diplacus*) *clevelandii* Cleveland's bush monkeyflower	Found in chaparral, lower montane coniferous forest, and yellow pine forest habitats at 450 to 2000 meters elevation.	**ABSENT**. Table 9-3 requirements for conservation have not been met, MOU with USFS is needed. No records in project area, site outside of known range.
Muhlenbergia californica California muhly	Streambanks, canyons, and other moist sites in chaparral, coastal sage scrub, coniferous forest, and meadows; 100 to 2,000 meters elevation; San Gabriel, San Bernardino, and San Jacinto Mountains.	**ABSENT**. WRCRCA reports that Table 9-3 requirements for conservation have not been met because this species is not present in MSHCP area.
Sidotheca (Oxytheca) caryophylloides chickweed oxytheca	Annual herb found in lower montane coniferous forest (sandy) habitats at 1,114 to 2,600 meters.	Table 9-3 requirements for conservation have been met.
Polygala cornuta var. *fishiae* Fish's milkwort	Chaparral, riparian woodland, cismontane woodland, 100 to 1,000 meters elevation.	Table 9-3 requirements for conservation have been met.
Potentilla rimicola cliff cinquefoil	Granitic crevices and rocky slopes in subalpine coniferous forest and upper montane coniferous forest at 2,400 to 3,050 meters elevation.	**ABSENT**. Table 9-3 requirements for conservation have not been met. Site below known elevational range.
Romneya coulteri Coulter's Matilija poppy	Dry washes and canyons 20 to 1,220 meters elevation. Coastal sage scrub and chaparral away from the immediate coast.	Table 9-3 requirements for conservation have been met.

Species	Habitat and Distribution	Site & Current MSHCP Status (WRCRCA 2020)
Reptiles		
Charina umbratica Southern rubber boa	Found in montane coniferous forest; near rock outcrops and woody debris in the San Bernardino and San Jacinto Mountains.	**ABSENT.** Table 9-3 requirements for conservation have been met or partially met, but MOU with the USFS is needed. Site is not in the range of this species.
Lampropeltis multifasciata (zonata parvirubra) coast mountain kingsnake (San Bernardino mountain kingsnake)	"San Bernardino Mountain Kingsnake" is found in southern California in the San Jacinto, Santa Rosa, San Bernardino, Santa Susana, and San Gabriel Mountains, and the Verdugo Hills. It occurs in diverse habitats including coniferous forest, oak-pine woodlands, riparian woodland, chaparral, manzanita, and coastal sage scrub.	**ABSENT.** Table 9-3 requirements for conservation have been met or partially met, but MOU with the USFS is needed. Site is not in the range of this former subspecies.
Lampropeltis multifasciata (zonata pulchra) coast mountain kingsnake (San Diego mountain kingsnake)	"San Diego Mountain Kingsnake" is found in three areas in southern California: in the central San Diego County peninsular ranges - the Laguna, Palomar, Volcan, and Hot Springs Mountains; in the Santa Ana Mountains; and in the Hollywood Hills and the Santa Monica mountains. It is a habitat generalist, found in diverse habitats including coniferous forest, oak-pine woodlands, riparian woodland, chaparral, manzanita, and coastal sage scrub.	**ABSENT.** Table 9-3 requirements for conservation have not been met. Site is not in the range of this former subspecies.
Sceloporus graciosus vandenburgianus southern sagebrush lizard	Lives in shrublands such as chaparral, manzanita and ceanothus, as well as open pine and Douglas Fir forests, mainly in the mountains. This subspecies (or species) is found in the Transverse and Peninsular mountains of southern California, and in the Sierra San Pedro Martir of northern Baja California. Known from elevations above 2,900 meters.	**ABSENT.** Table 9-3 requirements for conservation have not been met. Site is not in the elevational range of this former subspecies.
Birds		
Ammodramus savannarum grasshopper sparrow	Grasslands, agricultural fields, prairie, old fields and open savanna. Uncommon and local summer resident on grassy slopes and mesas west of the deserts. Only rarely in migration and in winter.	**LOW POTENTIAL TO OCCUR.** Table 9-3 requirements for conservation have been partially met. Not reported from project area, but marginally suitable habitat is present.

Species	Habitat and Distribution	Site & Current MSHCP Status (WRCRCA 2020)
Melospiza lincolnii Lincoln's sparrow	Occurs in bogs, wet meadows, and riparian thickets, mostly in northern and montane areas. Winters in brushy areas, thickets, hedgerows, understory of open woodlands, forest edges, clearings, and scrubby areas.	**POTENTIALLY OCCURS (WINTERING ONLY).** Table 9-3 requirements for conservation have not been met. Breeding habitat is not present, but species may occur in the wintering season.
Sphyrapicus thyroideus Williamson's sapsucker	Occurs primarily in conifer forests (spruce, fir, and lodge pole pine). Winters in mostly pine and pine-oak woodlands in the mountains. Cavity nesters.	**ABSENT.** Table 9-3 requirements for conservation have not been met, MOU with USFS is needed. Suitable habitat is not present on site.
Strix occidentalis California spotted owl	Sparsely distributed in the MSHCP area in oak woodland and forest and montane coniferous forest and within canyons in chaparral covered hillsides where oak woodland is present within the Santa Ana Mountains, San Bernardino Mountains, and San Jacinto Mountains.	**ABSENT.** Table 9-3 requirements for conservation have not been met, MOU with USFS is needed. Suitable habitat is not present on site.
Mammals		
Glaucomys sabrinus californicus San Bernardino flying squirrel	In the MSHCP area, known only from the San Jacinto Mountains in broad-leaved upland forest, mixed evergreen forest, montane riparian forest and coniferous forest mapping units (Jeffrey pine, lodgepole pine, lower montane coniferous forest, southern California white fir and subalpine coniferous).	**ABSENT.** Table 9-3 requirements for conservation have not been met. Suitable habitat is not present on site.

The WRCRCA (2019) also notes that take is very limited or unavailable for the Santa Rosa Plateau fairy shrimp, bald eagle, golden eagle, peregrine falcon, and white-tailed kite. The Santa Rosa Plateau fairy shrimp occurs only on the Santa Rosa Plateau. The four birds listed are all raptors, and any of them could potentially forage on, or fly over the site, but nesting habitat is not present for any, with the possible exception of white-tailed kite. For savannah sparrow, white-tailed kite, and any other bird species protected by the federal MBTA and state FGC, preconstruction surveys and/or monitoring will be required during the nesting season. The MSHCP does not ever provide take for impacts to nesting birds.

9 GUIDELINES PERTAINING TO THE URBAN/WILDLANDS INTERFACE (SECTION 6.1.4)

To preserve the integrity of areas described as existing or future MSHCP Conservation Areas, the guidelines contained in Section 6.1.4 Urban Wildlands Interface Guidelines (UWIG) shall be implemented by the Permittee in their actions relative to the project. The intent is to control the potential adverse effects of development on adjacent existing and future MSHCP conservation areas. Although the site is not currently in or adjacent to a MSHCP designated conservation area, conservation of the riverine/riparian area is proposed so these guidelines should be followed in that area.

- Measures will be incorporated to control the quantity and quality of runoff from the site entering the MSHCP Conservation Area, either directly or indirectly. Best management practices (BMPs) will be included to ensure that siltation and erosion are minimized during construction, and also incorporated into the final design of future development projects in order to ensure that future water quality is not degraded. In particular, measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into existing natural drainage courses and/or MSHCP Conservation Areas. Any water quality or other drainage discharges must be reviewed by WRCRCA prior to conveyance into the MSHCP Conservation Area.
- Land uses in proximity to the proposed conserved areas that use chemicals or generate bio-products, such as manure; that are potentially toxic; or that may adversely affect wildlife species, habitat, or water quality will incorporate measures to ensure that application of such chemicals does not result in discharge to the MSHCP Conservation Area. The greatest risk is from landscaping fertilization overspray and runoff.
- The siting and design of fencing will not impede wildlife movement. Design features may include, but not be limited to, jump-outs, pass-through gates and/or one-way gates. Fencing plans will include a commitment to routine maintenance.
- Proposed land uses adjacent to the conserved areas will incorporate barriers, where appropriate, to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping. Such barriers may include native landscaping, rocks/boulders, fencing, walls, signage, and/or other appropriate mechanisms.
- Night lighting will be directed away from the conserved areas to protect species within the conserved areas from direct night lighting. Shielding shall be incorporated in project designs to ensure ambient lighting in the conserved areas is not increased.

- Proposed noise-generating land uses affecting the conserved areas will incorporate setbacks, berms, or walls to minimize the effects of noise on conserved areas pursuant to applicable rules, regulations, and guidelines related to land use noise standards.
- Invasive species will not be used in development or restoration plan activities, such as landscaping:

Plants That Should Be Avoided Adjacent to the Conservation Area (MSHCP Table 6-2)

Acacia spp. (all species) acacia
Achillea millefolium var. *millefolium* common yarrow
Ailanthus altissima tree of heaven
Aptenia cordifolia red apple
Arctotheca calendula cape weed
Arctotis spp. (all species & hybrids) African daisy
Arundo donax giant reed or arundo grass
Asphodelus fistulosus asphodel
Atriplex glauca white saltbush
Atriplex semibaccata Australian saltbush
Carex spp. (all species*) sedge
Carpobrotus chilensis ice plant
Carpobrotus edulis sea fig
Centranthus ruber red valerian
Chrysanthemum coronarium annual chrysanthemum
Cistus ladanifer (incl. hybrids/varieties) gum rockrose
Cortaderia jubata [*syn.C. Atacamensis*] jubata grass, pampas grass
Cortaderia dioica [syn. *C. sellowana*] pampas grass
Cotoneaster spp. (all species) cotoneaster
Cynodon dactylon (incl. hybrids, varieties) Bermuda grass
Cyperus spp. (all species*) nutsedge, umbrella plant
Cytisus spp. (all species) broom
Delosperma 'Alba' white trailing ice plant
Dimorphotheca spp. (all species) African daisy, Cape marigold
Drosanthemum floribundum rosea ice plant
Drosanthemum hispidum purple ice plant
Eichhornia crassipes water hyacinth
Elaegnus angustifolia Russian olive
Eucalyptus spp. (all species) eucalyptus or gum tree
Eupatorium coelestinum [syn. *Ageratina* sp.] mist flower
Festuca arundinacea tall fescue
Festuca rubra creeping red fescue
Foeniculum vulgare sweet fennel
Fraxinus uhdei (and cultivars) evergreen ash, shamel ash
Gaura (spp.) (all species) gaura
Gazania spp. (all species & hybrids) gazania
Genista spp. (all species) broom
Hedera canariensis Algerian ivy
Hedera helix English ivy

Hypericum spp. (all species) St. John's Wort
Ipomoea acuminata Mexican morning glory
Lampranthus spectabilis trailing ice plant
Lantana camara common garden lantana
Lantana montevidensis [syn. *L. sellowiana*] lantana
Limonium perezii sea lavender
Linaria bipartita toadflax
Lolium multiflorum Italian ryegrass
Lolium perenne perennial ryegrass
Lonicera japonica (incl. 'Halliana') Japanese honeysuckle
Lotus corniculatus birdsfoot trefoil
Lupinus arboreus yellow bush lupine
Lupinus texanus Texas blue bonnets
Malephora crocea ice plant
Malephora luteola ice plant
Mesembryanthemum nodiflorum little ice plant
Myoporum laetum myoporum
Myoporum pacificum shiny myoproum
Myoporum parvifolium (incl. 'Prostratum') ground cover myoporum
Oenothera berlandieri Mexican evening primrose
Olea europea European olive tree
Opuntia ficus-indica Indian fig
Osteospermum spp. (all species) trailing African daisy, African daisy,
Oxalis pes-caprae Bermuda buttercup
Parkinsonia aculeata Mexican palo verde
Pennisetum clandestinum Kikuyu grass
Pennisetum setaceum fountain grass
Phoenix canariensis Canary Island date palm
Phoenix dactylifera date palm
Plumbago auriculata cape plumbago
Polygonum spp. (all species) knotweed
Populus nigra 'italica' Lombardy poplar
Prosopis spp. (all species*) mesquite
Ricinus communis castorbean
Robinia pseudoacacia black locust
Rubus procerus Himalayan blackberry
Sapium sebiferum Chinese tallow tree
Saponaria officinalis bouncing bet, soapwart
Schinus molle Peruvian pepper tree, California pepper
Schinus terebinthifolius Brazilian pepper tree
Spartium junceum Spanish broom
Tamarix spp. (all species) tamarisk, salt cedar
Trifolium tragiferum strawberry clover
Tropaelolum majus garden nasturtium
Ulex europaeus prickly broom
Vinca major periwinkle
Yucca gloriosa Spanish dagger

An asterisk (*) indicates some native species of the genera exist that may be appropriate.

- Manufactured slopes will not extend into existing or planned conserved areas.
- Weed abatement and fuel modification zones may not encroach into existing or planned Conservation Areas or avoidance areas.

10 BEST MANAGEMENT PRACTICES (VOLUME I, APPENDIX C)

The project will implement the following MSHCP Volume I, Appendix C BMPs:

- A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished.
- The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint, particularly during any activity that could directly or indirectly impact MSHCP resources.
- Water pollution and erosion control plans shall be developed and implemented in accordance with Regional Water Quality Control Board (RWQCB) requirements.
- The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.
- The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.
- Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.
- Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian species identified in MSHCP Global Species Objective No. 7.
- When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing or other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.
- Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable

jurisdictional city, US Fish and Wildlife Service, and CDFW, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.

- Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
- The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.
- Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.
- To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).
- Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.
- The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs

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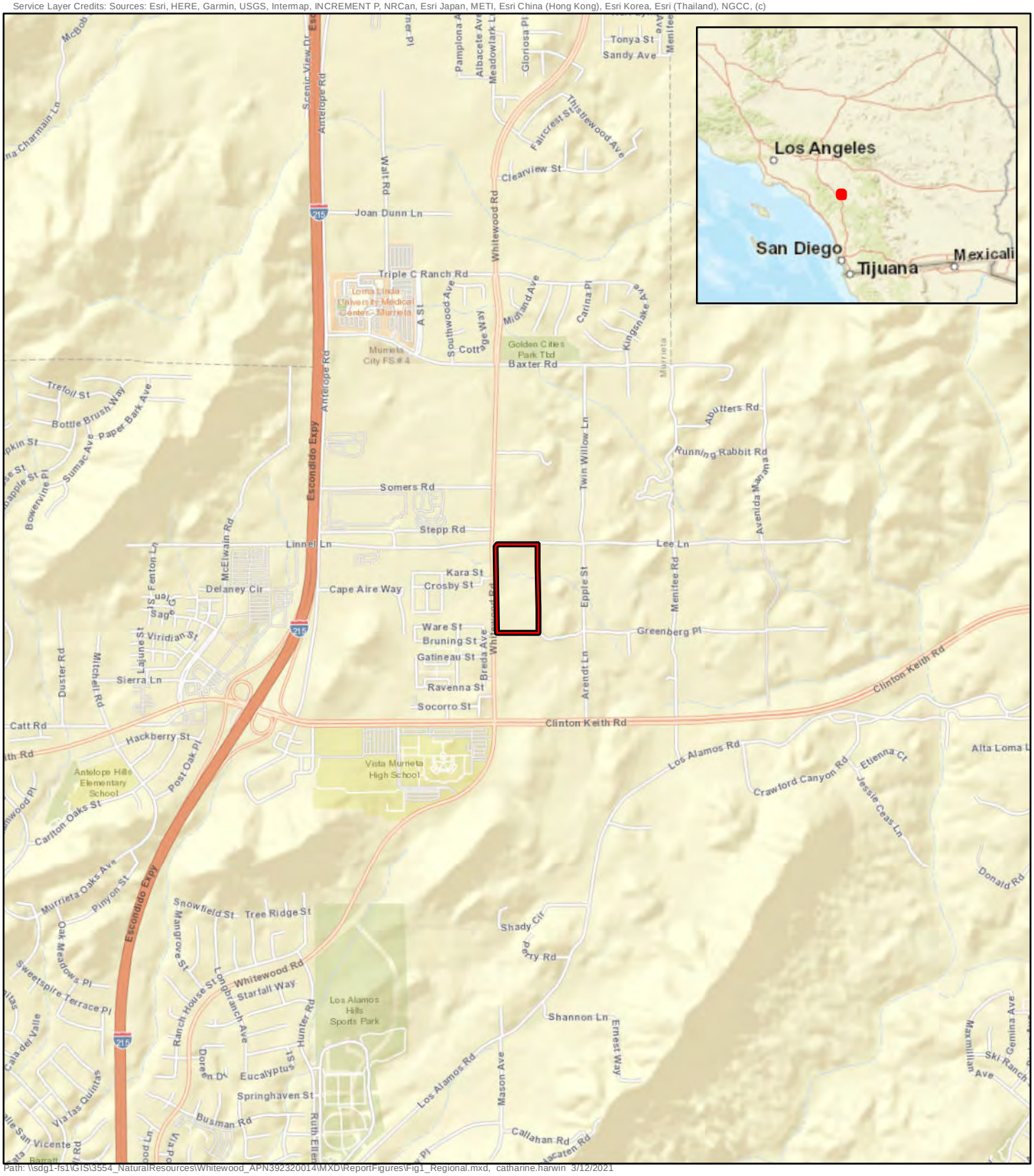
FIGURES



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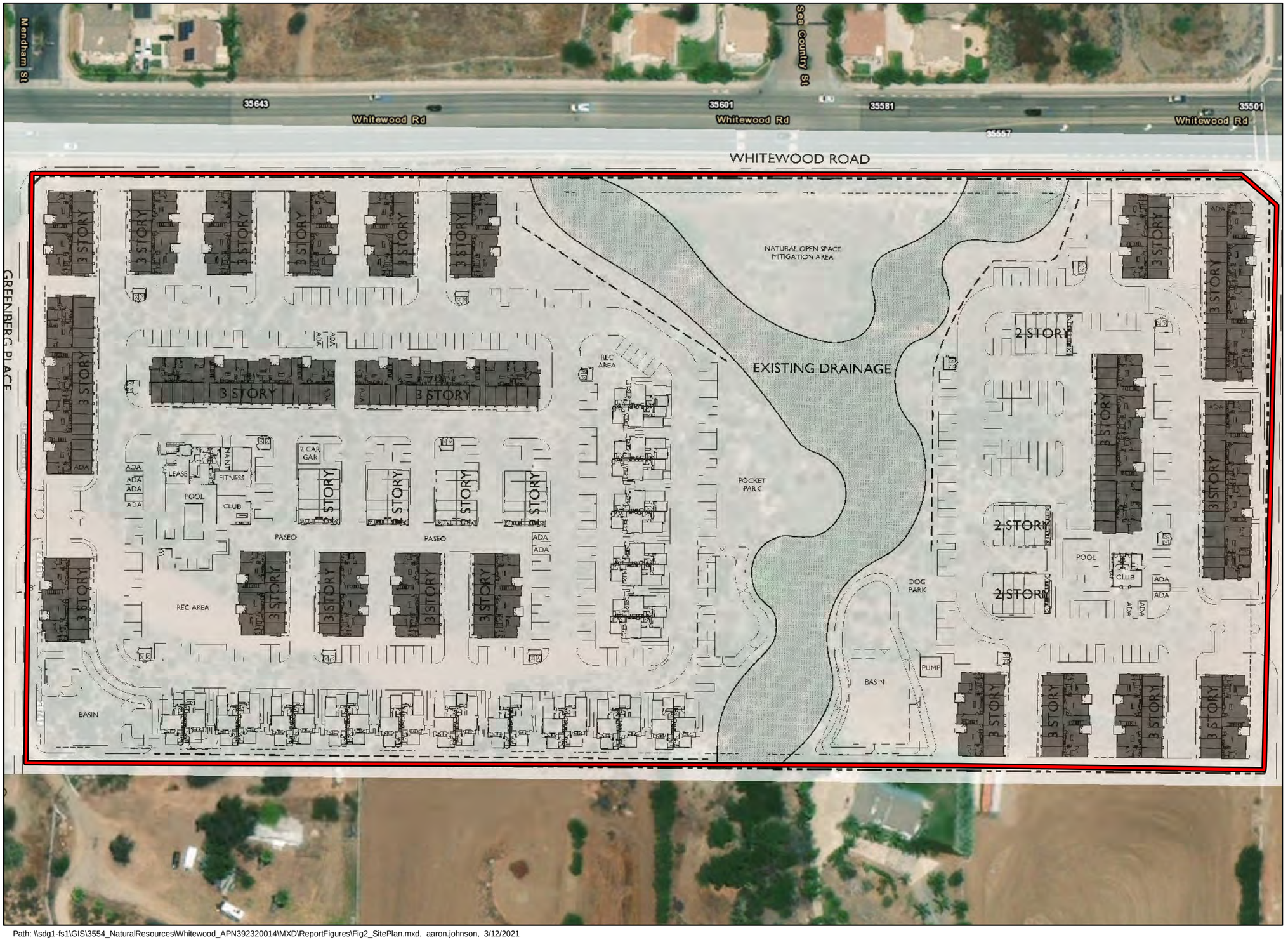
1 inch = 2,000 feet
0 1,000 2,000 Feet

wood.

Project Boundary

FIGURE 1

Regional Location
APN 392-320-014
Whitewood Road at Lee Lane
Murrieta, CA



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Project Boundary

1 inch = 100 feet

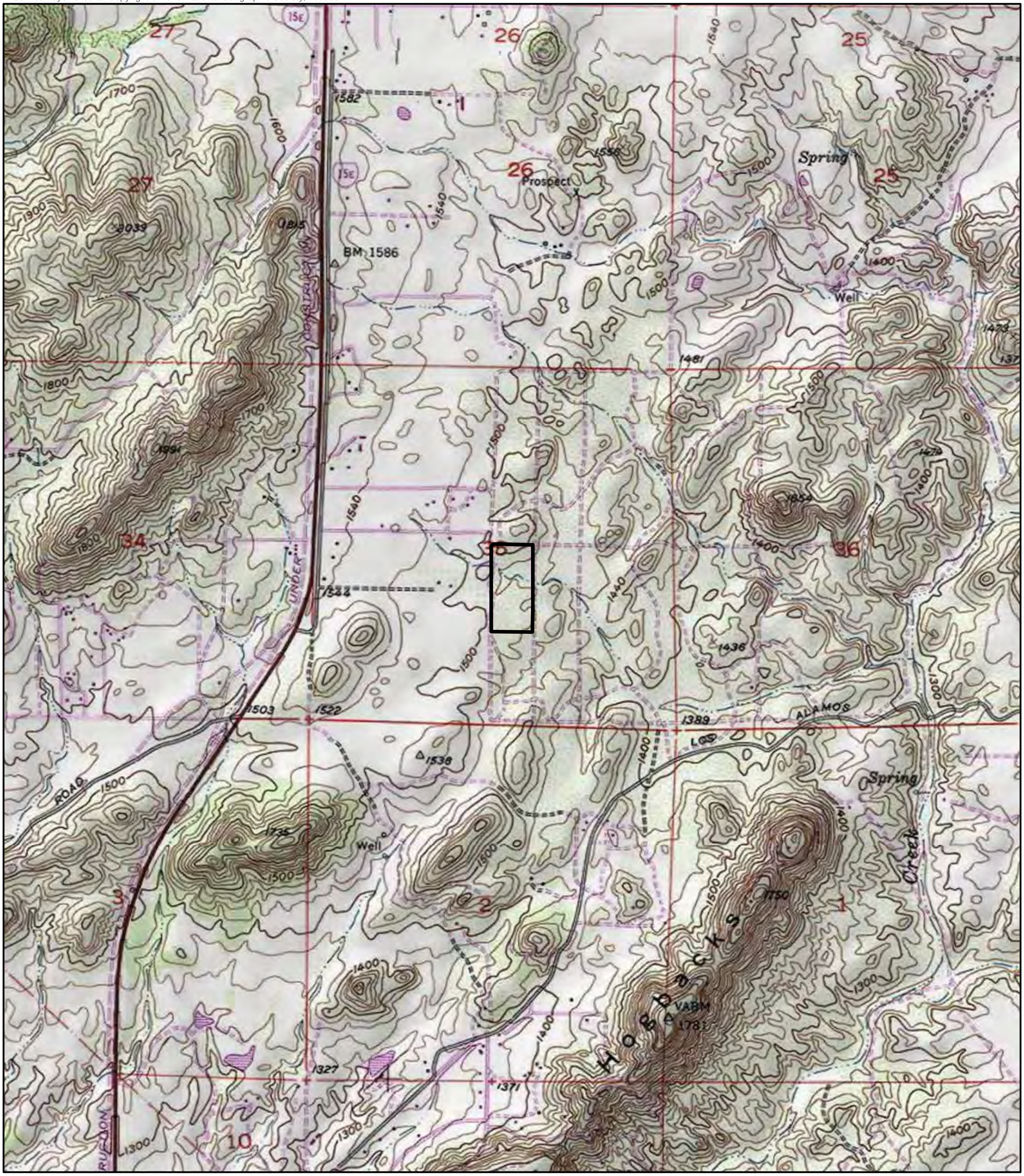
0 100 Feet

FIGURE 2

Site Plan
APN 392-320-014
Whitewood Rd at Lee Lane
Murrieta, CA

wood.

Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed



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1 inch = 2,000 feet

0 1,000 2,000 Feet

wood.

Project Boundary

FIGURE 3

USGS 7.5' Topo: Murrieta
APN 392-320-014
Whitewood Rd at Lee Lane
Murrieta, CA

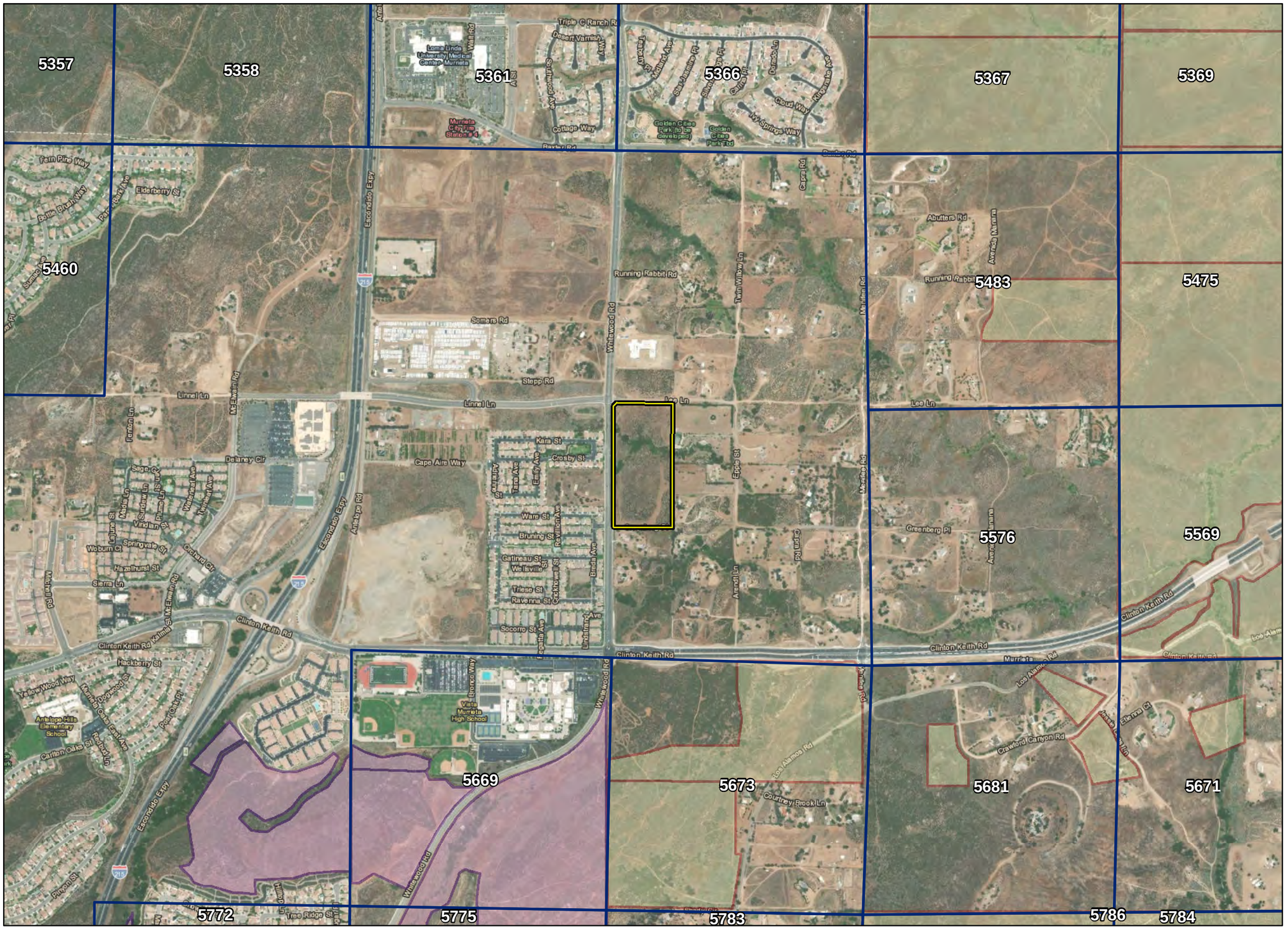

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FIGURE 4
MSHCP Criteria Cells
APN 392-320-014
Whitewood Road at Lee Lane
Murrieta, CA

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors

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- Project Boundary
- Riparian Scrub, Woodland, Forest
- Non-native Grassland/Coastal Sage Scrub/Chaparral

1 inch = 200 feet
0 200 Feet

FIGURE 5

Vegetation Types
APN 392-320-014
Whitewood Road at Lee Lane
Murrieta, CA

wood.

Project Boundary

MSHCP Riverine/Riparian

1 inch = 200 feet

0 200 Feet

FIGURE 6

Riparian/Riverine
APN 392-320-014
Whitewood Road at Lee Lane
Murrieta, CA

wood.

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
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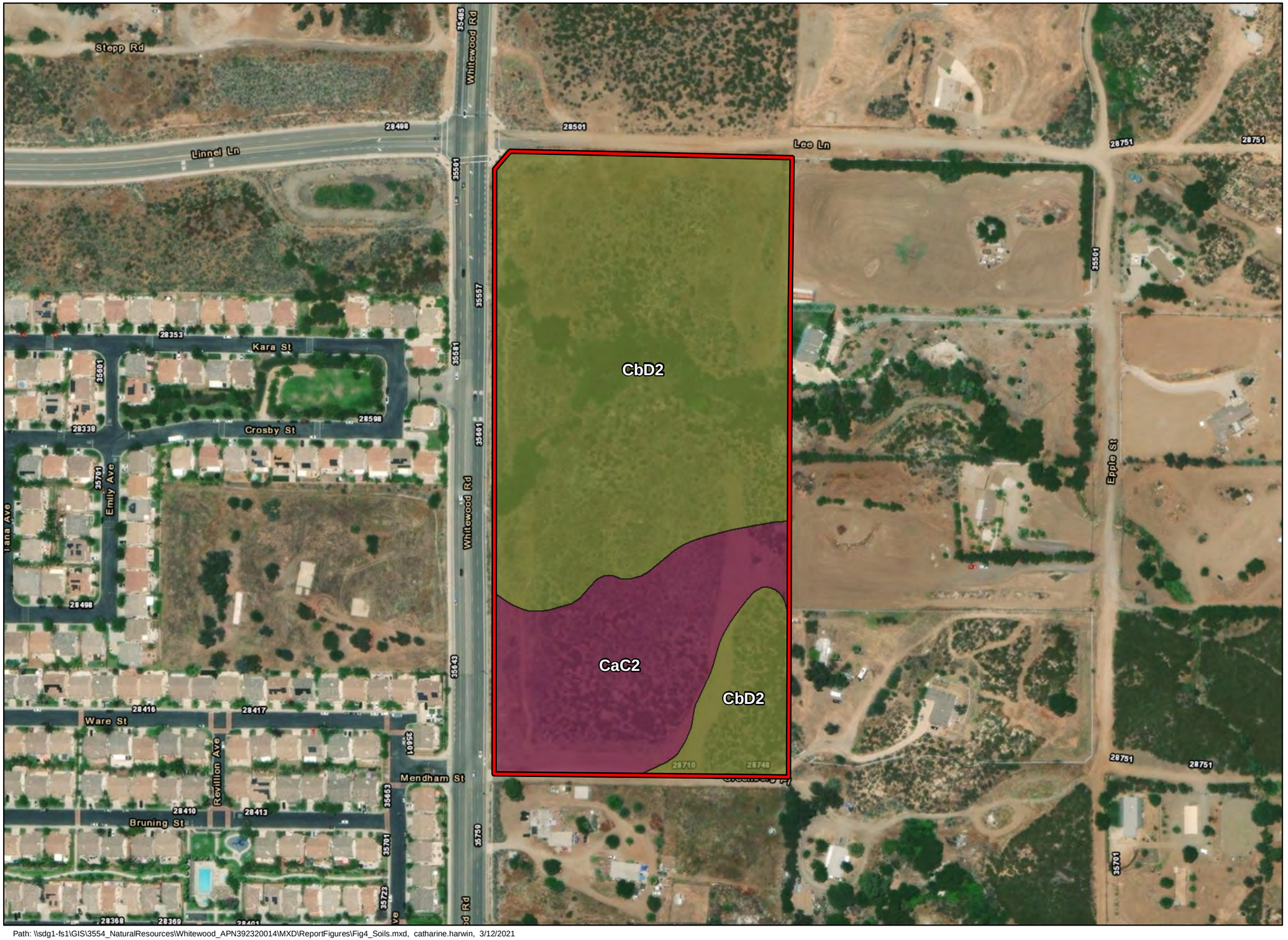
Path: \\sdg1-fs1\GIS\3554_NaturalResources\Whitewood_APN392320014\MXD\ReportFigures\Fig6_Riparian.mxd, catharine.harwin, 3/29/2021



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Project Boundary

Cajalco fine sandy loam, 2 to 8 percent slopes, eroded

Cajalco rocky fine sandy loam, 5 to 15 percent slopes, eroded

1 inch = 200 feet

0 200 Feet

FIGURE 7

Soil Types
APN 392-320-014
Whitewood Road at Lee Lane
Murrieta, CA

wood.

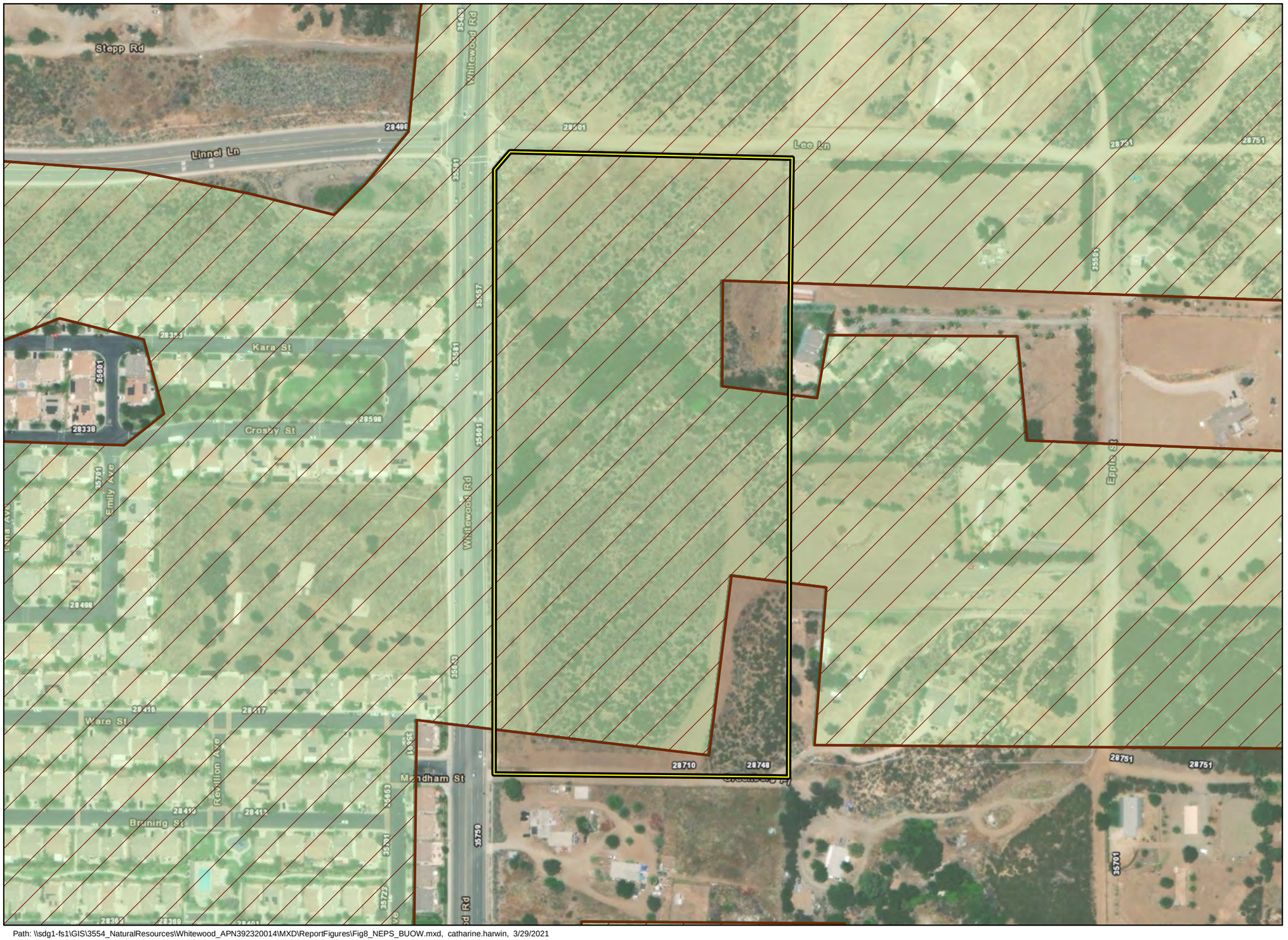

FIGURE 8

Burrowing Owl and
Narrow Endemic Plants Survey Areas
APN 392-320-014
Whitewood Road at Lee Lane
Murrieta, CA

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SUPPORTING APPENDIX