MSHCP Determination of Biologically Equivalent or Superior Preservation (DBESP)

Dauchy Avenue Tentative Tract Map No. 38074 City of Riverside, Western Riverside County, California

FINAL REPORT



Case #: PR-2021-001030

Prepared for:

Signature Realty Capital Corp

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Dauchy Avenue Tentative Tract Map No. 38074 City of Riverside, Western Riverside County (APNs) 276-040-011, 276-040-012, and 276-050-029, offsite portions of 276-050-030, -031, 276-040-007, -008, -009, -010, and Right-of-Ways

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Appendix A – Jurisdictional Delineation for the Dauchy Project Site Located in the City of Riverside, Carlson Strategic Land Solutions (2023)

1. EXECUTIVE SUMMARY

The 24.73-acre project site (Tentative Tract Map No. 38074, Case PR-2021-001030) including 3.43-acre offsite impact area (28.16-acre total) is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Lake Mathews/Woodcrest Plan Area. The project site is not located within an MSHCP criteria area cell, group, or linkage area. The action area possesses 2.38-acre of "MSHCP" Section 6.1.2 Riverine and Riparian resources.

For purposes of assessing existing conditions and impacts, all resources delineated as California Department of Fish and Wildlife (CDFW) regulated features were also characterized as MSHCP Section 6.1.2 Riverine and Riparian resources. Permanent impacts to 0.096-acre of MSHCP Section 6.1.2 Riverine and Riparian resources will occur as a result of project implementation (Carlson Strategic Land Solutions, Inc. 2023) as outlined in Table 1, *MSHCP Section 6.1.2 Riverine Resources Impacts*. No temporary impacts to MSHCP 6.1.2 Riverine or Riparian resources will result from project implementation.

Acres 0.02 0.02 0.02 0.02 0.02 0.02	Acres 0.09 0.00 1.04 0.044
0.02	0.00 1.04
	1.04
 0.006 ²	
0.006 ²	0.044
0.05	0.00
	1.11
	2.284
	0.096

Table 1. MSHCP Section 6.1.2 Resources Impacts

2 - The 0.006 acre of impacts to the southern-most western blue-line drainage Tributary occur due to the construction of Victor Hugo Drive.

Source: Carlson Strategic Land Solutions, Inc. 2023, Cadre Environmental 2022a

As summarized from Carlson Strategic Land Solutions, Inc. 2023, to meet the criteria of a biologically equivalent or superior alternative, the applicant will offset permanent impacts to 0.096-acre of MSHCP Section 6.1.2 Riverine and Riparian resources by:

<u>BIO-1:</u> Permanent impacts to 0.096-acres of jurisdictional features will be mitigated at a 2:1 ratio through the purchase of 0.192 acres of re-establishment credits at the Riverpark Mitigation Bank. An agreement for sale of credits from the Riverpark Mitigation Bank will be submitted to the City of Riverside prior to grading permit issuance.

<u>BIO-2:</u> Prior to grading permit issuance, a conservation easement in favor of a conservation-mission third party (for oversight and compliance verification) shall be placed over all onsite "avoidance areas," including riparian/riverine resources within the western blue-line drainage, unnamed drainage A, and adjacent upland habitats.

<u>BIO-3:</u> Prior to the initiation of construction, the construction contractor shall install temporary erosion control measures around avoided drainages and conservation areas to reduce impacts to onsite drainages and open space habitat from the excess sedimentation, siltation and erosion. These measures shall consist of the installation of silt fencing, coirs, berms, or dikes to protect storm drain inlets and drainages.

<u>BIO-4:</u> During construction of the Project, the construction contractor shall implement the following measures during construction to avoid impacts to Unnamed Drainage A and its single tributary, and western blue-line drainage and its associated tributaries:

- No changing of oil or other fluids, or discarding of any trash or other construction waste materials shall occur on the Project Site.
- Any equipment or vehicles driven and/or operated within or adjacent to onsite drains shall be checked and maintained daily, to prevent leaks of materials into onsite drainages. No equipment maintenance shall be conducted near onsite drains.

<u>BIO-5:</u> Prior to grading permit issuance no impacts shall occur to onsite drainages until appropriate permits have been obtained from the US Army Corps of Engineers (Corps) Section 404 Nation Wide Permit, Regional Water Quality Control Board (RWQCB) Section 401 Water Quality Certificate, and/or California Department of Fish and Wildlife (CDFW) Section 1602 Streambed Alteration Agreement. Specifically, the following permits or certifications will be required:

- USACE Section 404 Nation Wide Permit
- RWQCB 401 Water Quality Certificate
- CDFW Section 1602 Streambed Alteration Agreement

The River Park Mitigation Bank proposes to re-establish (recreate former but no longer existing) alkali plain wetland system habitat and rehabilitate (repair existing but degraded) alkali plain wetland system habitat for a grand total of 583 acres of restoration of various types of alkali plain wetland system plant communities. As stated by the United States Army Corps of Engineers (USACE):

"The Riverpark Mitigation Bank is a proposed 619-acre mitigation bank located along the San Jacinto River (SJR) in western Riverside County (Figures 1 and 2). The Bank property is specifically located just downstream of the Ramona Expressway and immediately upstream of Nuevo Road. The site is depicted on the U.S. Geological Survey (USGS) Perris and Romoland Quadrangle Rancho San Jacinto Nuevo y Potrero Land Grant (Figure 3) in unincorporated Riverside County, California (33° 49' 8.4"N, -117° 9' 18"W)." (USACE 2015) "The primary objective of the proposed mitigation bank would be to replace functions and services of aquatic resources and associated habitats that have been degraded or destroyed as a result of activities conducted in compliance or in violation of Section 404 of the CWA. The proposed mitigation bank would provide mitigation for both permanent and temporary impacts to waters of the U.S. In addition, the proposed mitigation bank may be used to offset environmental losses resulting from unavoidable impacts related to regulated activities by the California Department of Fish and Wildlife and the San Diego and Santa Ana Regional Water Quality Control Boards. Specific objectives include: • Restoration of fluvial processes on site within the San Jacinto River floodplain. • Restoration of alkali playa and vernal pool habitat. • Expansion of existing sensitive plant populations across the site. • Removal of ongoing agricultural activities on the site. • Removal of existing berms and the low flow channel. • Permanent protection of the site through transfer of fee title to the Western Riverside Regional Conservation Authority (RCA). • Permanent management of the site through funding of a non-wasting endowment." (USACE 2015)

"Due to its location along the San Jacinto River and its high potential for successful restoration upon elimination of the artificial low flow channel and berms created by historic agricultural activities, the proposed mitigation bank location has been identified by several state and Federal agencies as a highpriority restoration site." (USACE 2015)

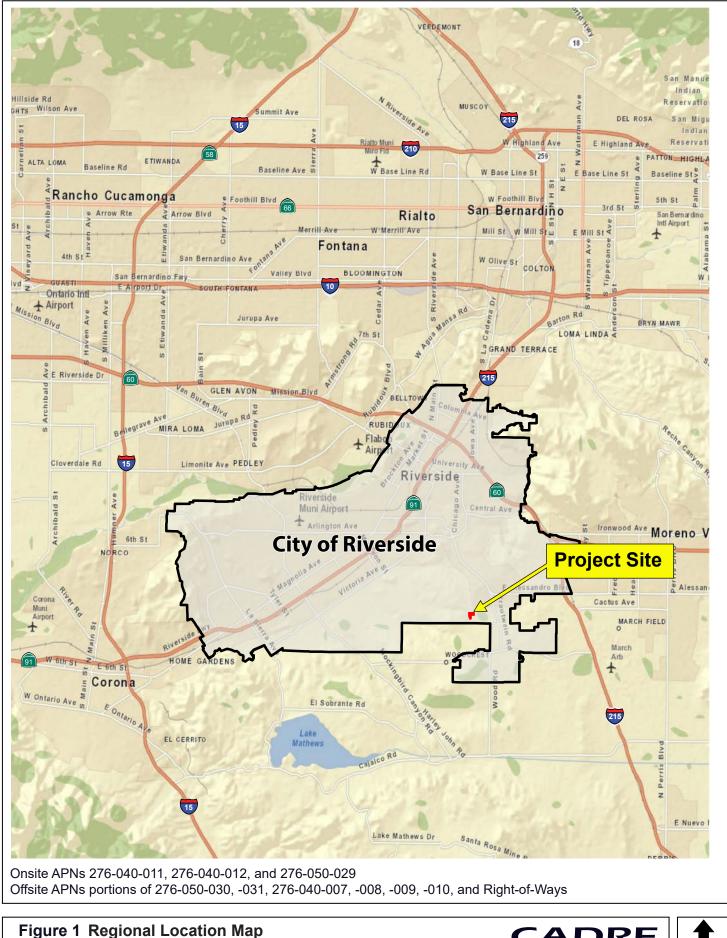
2. INTRODUCTION

This document presents the results of a Determination of Biologically Equivalent or Superior Preservation (DBESP) analysis conducted by Cadre Environmental for the Dauchy Avenue residential development project as required under Section 6.1.2, *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools*, of the Western Riverside County MSHCP (MSHCP 2004).

2.1 Project Site

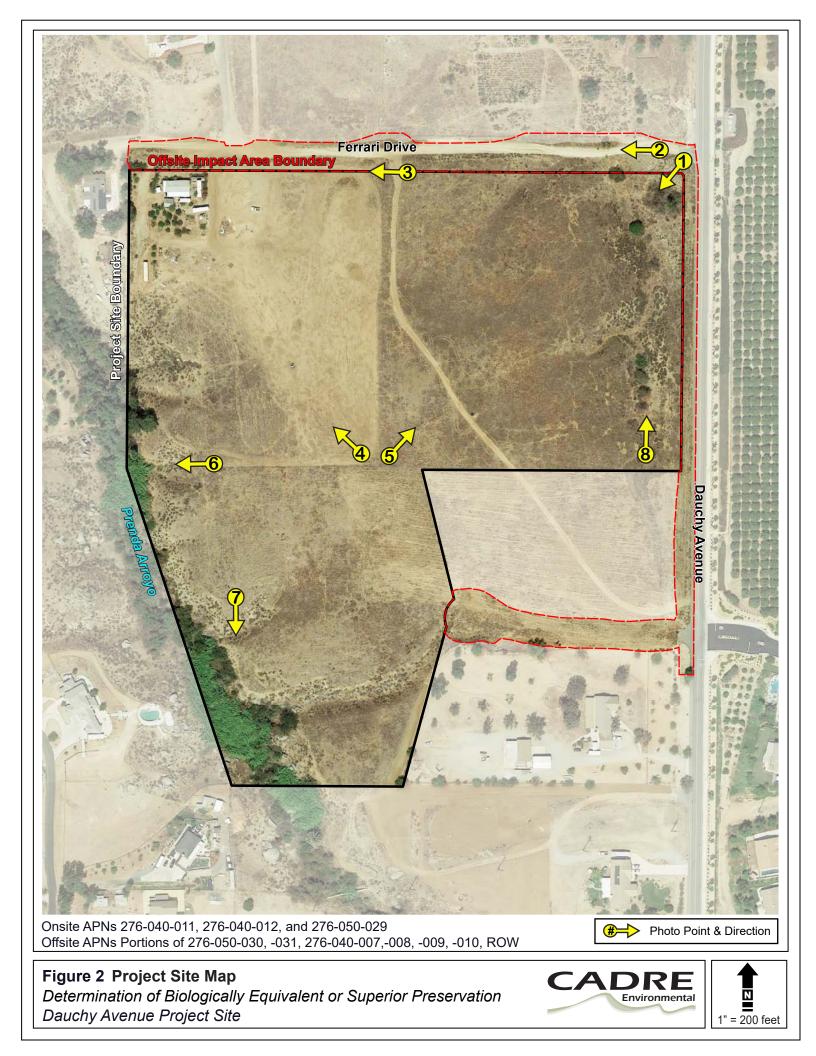
The 24.73-acre project site including adjacent 3.43-acre offsite impact area (28.16-acre total) within which the impacts will occur is comprised of Assessor's Parcel Numbers (APNs) 276-040-011, 276-040-012, and 276-050-029, offsite portions of 276-050-030, -031, 276-040-007, -008, -009, -010, and Right-of-Ways (Project Site). The Project Site is located within United States Geological Survey (USGS) 7.5' Series Riverside East Quadrangle, Riverside County, Township 3 South, Range 4 West, Section 18, extending southwest of the Dauchy Avenue and Ferrari Drive intersection, as shown in Figure 1, *Regional Location Map* and Figure 2, *Vicinity Map*. The Project Site is located within the MSHCP Lake Mathews/Woodcrest Plan Area and is not located within an MSHCP criteria area cell, group, or linkage area.

The Project Site is not located within or adjacent to Public/Quasi-Public (PQP) or Regional Conservation Authority (RCA) conserved land.



Determination of Biologically Equivalent or Superior Preservation Dauchy Avenue Project Site





The Project Site is not located within a predetermined survey area for MSHCP narrow endemic or criteria area plant species (RCA GIS Data Downloads 2022).

The Project Site is not located within a predetermined survey area for criteria area, mammal or amphibian species (RCA GIS Data Downloads 2022).

2.2 **Project Description**

Tentative Tract Map No. 38074 proposes a gated subdivision of 24.73 acres into 53 dwelling units. There are currently three contiguous parcels that make up the subject property that make up approximately 24.45 acres, and the remaining 0.28 acres consist of road vacations that will be added to the property. Other lots that will be created are as follows: Lots "B" and ""G" will be utilized as private recreational lots consisting of 97,510 s.f. and 10,807 s.f., respectively; Lots "C", "E", and "F" will be natural open space lots that will contain natural areas that will have 60,626, 227,246, and 79,831 square feet, respectively; Lots "I", "L", "M", "N", and "O" will be common open space that will contain manufactured slopes to be maintained by the Homeowner's Association that will have 12,628, 4,134, 9,385, 16,801, and 24,186 square feet, respectively; Lots D", and "J" are to be water quality basins and will be 9,871, add 19,755square feet, respectively. All streets including Lot K within the subdivision are to be privately owned and maintained by the Homeowner's Association.

PR-2021-001030 includes the following entitlements for a Planned Residential Development: 1) Tentative Tract Map 38074 to subdivide 24.73-acres into 53 single-family residential lots and lettered lots for common open space, private street, and a detention basin; 2) Planned Residential Development to facilitate the establishment of 54 residential lots; and 3) Design Review of project plans. As such, the lots have been plotted with conceptual architecture for two-story homes. Three lots, 40-42, will be single story homes. Lot 53 has a current residence that will be demolished and replaced. Pedestrian trails will traverse Lot B.

2.3 Existing Conditions

The Project Site and offsite impact area are characterized as rolling hilltops at approximately 1,500 feet elevation primarily dominated by disturbed/non-native grassland, Riversidean sage scrub and a blue-line drainage located within and adjacent to the southwestern Project Site boundary as outlined in Table 2, *Project Site Vegetation Community Acreages and Impacts*, and illustrated in Figure 3, *Vegetation Communities Map*, and Figures 4 to 7, *Current Project Site Photographs*.

The Soil Survey of Western Riverside Area has the following soils mapped within the boundary of the Project Site as shown on Figure 8, *Soils Association Map*:

- ChF2 Cieneba sandy loam, 15 to 50 percent slopes, eroded
- CkF2 Cieneba rocky sandy loam, 15 to 50 percent slopes, eroded
- FaD2 Fallbrook sandy loam, 8 to 15 percent slopes, eroded

Vegetation Community	Project Site Acres	Offsite Impact Acres	Project Site Impact Acres	Total Impact Acres
Disturbed/Non-Native Grassland	20.38	2.95	12.58	15.53
Riversidean Sage Scrub	2.60	0.21	0.29	0.50
Giant Reed (Arundo donax)	0.58			
Southern Willow Scrub	0.56		0.03	0.03
Developed	0.53	0.26	0.53	0.79
Blue Elderberry Scrub	0.05			
Mule Fat Scrub	0.01	0.01	0.01	0.02
Coyote Brush Scrub	0.01			
Ornamental	0.01			
TOTAL	24.73	3.43	13.44	16.87

Table 2.Project Site Vegetation Community Acreages and Impacts

Source: Cadre Environmental 2022a

Disturbed/Non-Native Grassland

The majority of the Project Site is characterized as disturbed/non-native grassland vegetation. Dominant species documented within this vegetation community include slender wild oat (*Avena barbata*), ripgut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis* ssp. *rubens*), wild oat grass (*Avena fatua*), prickly lettuce (*Lactuca serriola*), black mustard (*Brassica nigra*), stinknet (*Oncosiphon piluliferum*), tumbling pigweed (*Amaranthus albus*), Pomona milk vetch (*Astragalus pomonensis*), rattlesnake sandmat (*Euphorbia albomarginata*), doveweed (*Croton setigerus*), and fascicled tarweed (*Deinandra fasciculata*).

Riversidean Sage Scrub

Several patches of Riversidean sage scrub are concentrated along the western and eastern Project Site boundaries. Dominant plant species documented within this vegetation community include California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), sweetbush (*Bebbia juncea*), bush sunflower (*Encelia californica*), white sage (*Salvia apiana*), deerweed (*Acmispon glaber*), coast cholla (*Cylindropuntia prolifera*), coast goldenbush (*Isocoma menziesii*), and pinebush (*Ericameria pinifolia*).

Giant Reed (Arundo donax)

Several large patches of giant reed (*Arundo donax*) are located within the floodprone area of the drainage located within and adjacent to the southwestern Project Site boundary.



Figure 3 - Vegetation Communities Map Determination of Biologically Equivalent or Superior Preservation Dauchy Avenue Project Site

CADRE Environmental 1" = 200 feet



PHOTOGRAPH 1 - Southwest view of Project Site from Dauchy Avenue and Ferrari Drive intersection.



PHOTOGRAPH 2 - Westward view of Project Site from Dauchy Avenue and Ferrari Drive intersection.

Refer to Figure 2 for Photo Key

Figure 4 - Current Project Site Photographs Determination of Biologically Equivalent or Superior Preservation Dauchy Avenue Project Site





PHOTOGRAPH 3 - Westward view of Project Site from north-central boundary. The Project Site is dominated by disturbed/non-native grassland.



PHOTOGRAPH 4 - Northwest view of Project Site from central region of property. The Project Site is dominated by disturbed/non-native grassland.

Refer to Figure 2 for Photo Key

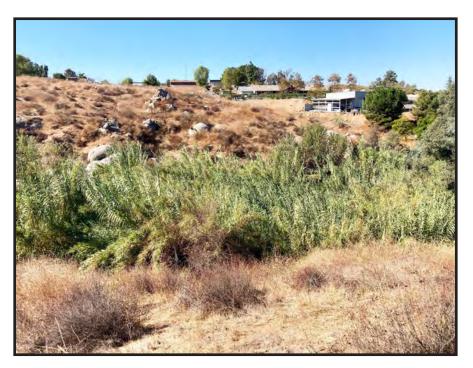
Figure 5 - Current Project Site Photographs

Determination of Biologically Equivalent or Superior Preservation Dauchy Avenue Project Site





PHOTOGRAPH 5 - Northwest view of Project Site from central region of property. The Project Site is dominated by disturbed/non-native grassland.



PHOTOGRAPH 6 - Westward view of blue-line drainage located along the southwestern boundary. Large patches of giant reed (*Arundo donax*) dominate the drainage.

Refer to Figure 2 for Photo Key

Figure 6 - Current Project Site Photographs

Determination of Biologically Equivalent or Superior Preservation Dauchy Avenue Project Site





PHOTOGRAPH 7 - Southward view of blue-line drainage located along the southwestern boundary. Patches of southern willow scrub are located within the drainage.



PHOTOGRAPH 8 - Northward view from southeastern Project Site boundary adjacent to Dauchy Avenue.

Refer to Figure 2 for Photo Key

Figure 7 - Current Project Site Photographs Determination of Biologically Equivalent or Superior Preservation Dauchy Avenue Project Site



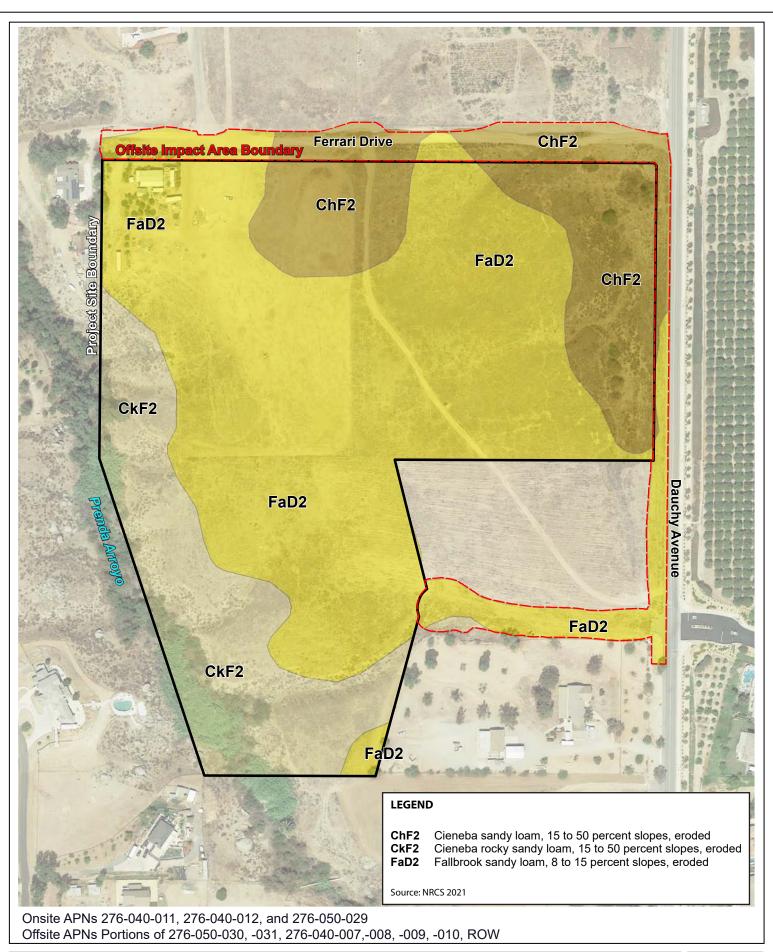


Figure 8 Soils Association Map Determination of Biologically Equivalent or Superior Preservation Dauchy Avenue Project Site



Dominant species documented within this vegetation community include arroyo willow (*Salix lasiolepis*) and mule fat (*Baccharis salicifolia*).

Developed/Ornamental

An existing residence and associated ornamental vegetation, tree of heaven (*Ailanthus altissima*) is located within the northwest region of the Project Site.

Blue Elderberry Scrub

A single patch of blue elderberry scrub (*Sambucus nigra* ssp. *caerulea*) was documented within the swale located in the eastern region of the Project Site adjacent to Dauchy Avenue.

Mule Fat Scrub

A single patch of mule fat scrub was documented within the swale located in the eastern region of the Project Site adjacent to Ferrari Drive.

Coyote Brush Scrub

A single patch of coyote brush scrub (*Baccharis pilularis*) was documented within the swale located in the eastern region of the Project Site adjacent to Dauchy Avenue.

General Wildlife

General wildlife species documented onsite or within the vicinity during the site visit include turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), rock dove (*Columba livia*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), Cassin's kingbird (*Tyrannus vociferans*), Say's phoebe (*Sayornis saya*), bushtit (*Psaltriparus minimus*), western meadowlark (*Sturnella neglecta*), ash-throated flycatcher (*Myiarchus cinerascens*), lark sparrow (*Chondestes grammacus*), European starling (*Sturnus vulgaris*), brown-headed cowbird (*Molothrus ater*), red-winged blackbird (*Agelaius phoeniceus*), northern mockingbird (*Mimus polyglottos*), lesser goldfinch (*Spinus psaltria*), house finch (*Carpodacus mexicanus*), and California ground squirrel (*Otospermophilus beecheyi*).

3. RIPARIAN, RIVERINE, VERNAL POOL MITIGATION (SECTION 6.1.2)

3.1 Methods

A formal jurisdictional delineation was conducted by Carlson Strategic Land Solutions, Inc. 2023 (Carlson Strategic Land Solutions, Inc. 2023). The delineation determined the boundaries or absence of potential wetland and non-wetland waters of the United States subject to the regulatory jurisdiction of the U.S. Army Corps of Engineers pursuant to Clean Water Act (CWA) Section 404; wetland and non-wetland waters of the State subject to the regulatory jurisdiction of the Regional Water Quality Control Board pursuant to CWA Section 401 and State Porter-Cologne Water Quality Control Act (Porter-Cologne); streambed and riparian habitat subject to the regulatory jurisdiction of the CDFW pursuant Sections 1600 *et seq*. of the California Fish and Game Code (CDFG Code).

All resources delineated as CDFW jurisdictional features were also defined as Western Riverside County MSHCP Section 6.1.2 Riverine and Riparian resources.

3.2 Results/Impacts

Regulated activities within inland streams, wetlands and riparian areas in Western Riverside County California fall under the jurisdiction of the MSHCP 6.1.2. The MSHCP requires, among other things, assessments for riparian/riverine and vernal pool resources. As projects are proposed within the MSHCP Plan Area, an assessment of the potentially significant effects of those projects on riparian/riverine areas, and vernal pools are required, as currently mandated by CEQA, using available information augmented by project-specific mapping provided to and reviewed by the permittee's biologist(s). Riparian/riverine areas and vernal pools are defined for this section as follows in accordance with Section 6.1.2, Vol. I, of the Final MSHCP Plan:

"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." (MSHCP 2004)

It is assumed the first part of the definition defines riparian habitat, and the second part defines riverine areas. Vernal pools are defined as:

"...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". (MSHCP 2004)

Vernal Pool Resources

No evidence of vernal pools, seasonal depressions or seasonally inundated road ruts were documented within the Project Site. Vernal pools are depressions in areas where a hard-underground layer prevents rainwater from draining downward into the subsoils. When rain fills the pools in the winter and spring, the water collects and remains in the depressions. In the springtime, the water gradually evaporates away, until the pools became completely dry in the summer and fall. Vernal pools tend to have an impermeable layer that results in ponded water. The soil texture (the amount of sand, silt, and clay particles) typically contains higher amounts of fine silts and clays with lower percolation rates. Pools that retain water for a sufficient length of time will develop hydric cells. Hydric cells form when the soil is saturated from flooding for extended periods of time and anaerobic conditions (lacking oxygen or air) develop.

Consistent with conditions documented onsite and as previously stated, the Project Site is characterized as Cieneba sandy loam, Cieneba rocky sandy loam, and Fallbrook sandy loam, all types possessing well drained substrates (drainage class). No indication of clay substrates or hydric soils were documented within the Project Site.

A review of historic aerials was conducted to determine if inundated features were present during years of high rainfall when features would certainly be documented. Historic aerials taken in 2011 represent an ideal baseline during which know (previously documented) inundated vernal pools, seasonal depressions and road ruts can easily be seen. No sign or indication of inundation was documented within the Project Site during a review of historic aerials.

In summary, none of the conditions (i.e., no inundated depressions including road ruts, historic inundation, etc.) were observed or documented within the Project Site permanent impact area. No features are present that would support fairy shrimp.

As previously stated, for purposes of assessing existing conditions and impacts, all resources delineated as CDFW regulated features were also characterized as MSHCP Section 6.1.2 Riverine and Riparian resources.

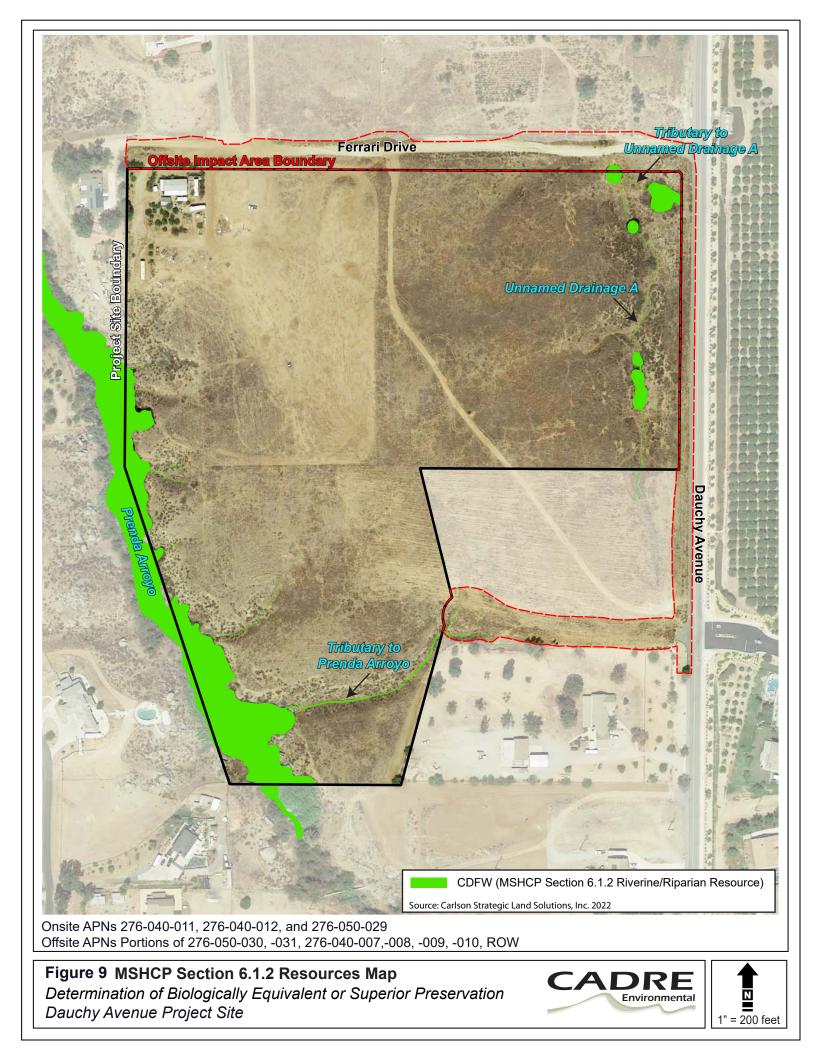
A total of 2.38-acres of MSHCP Section 6.1.2 resources (1.16-acres Riparian, 1.22-acres Riverine) occur within the Project Site as outlined in Table 3, *MSHCP Section 6.1.2 Resources Impacts*, and shown in Figure 9, *MSHCP Section 6.1.2 Resources Map*.

PQP Impacts

The Project Site is not located within or adjacent to PQP or RCA conserved land.

Riverine and Riverine Resources

Permanent impacts to 0.096-acre of MSHCP Section 6.1.2 Riverine and Riparian resources will occur as a result of project implementation (Carlson Strategic Land Solutions, Inc. 2023) as outlined in Table 3, *MSHCP Section 6.1.2 Resources Impacts*, and shown in Figure 10, *MSHCP Section 6.1.2 Resources Impact Map.* No temporary impacts to MSHCP 6.1.2 Riverine or Riparian resources will result from project implementation.



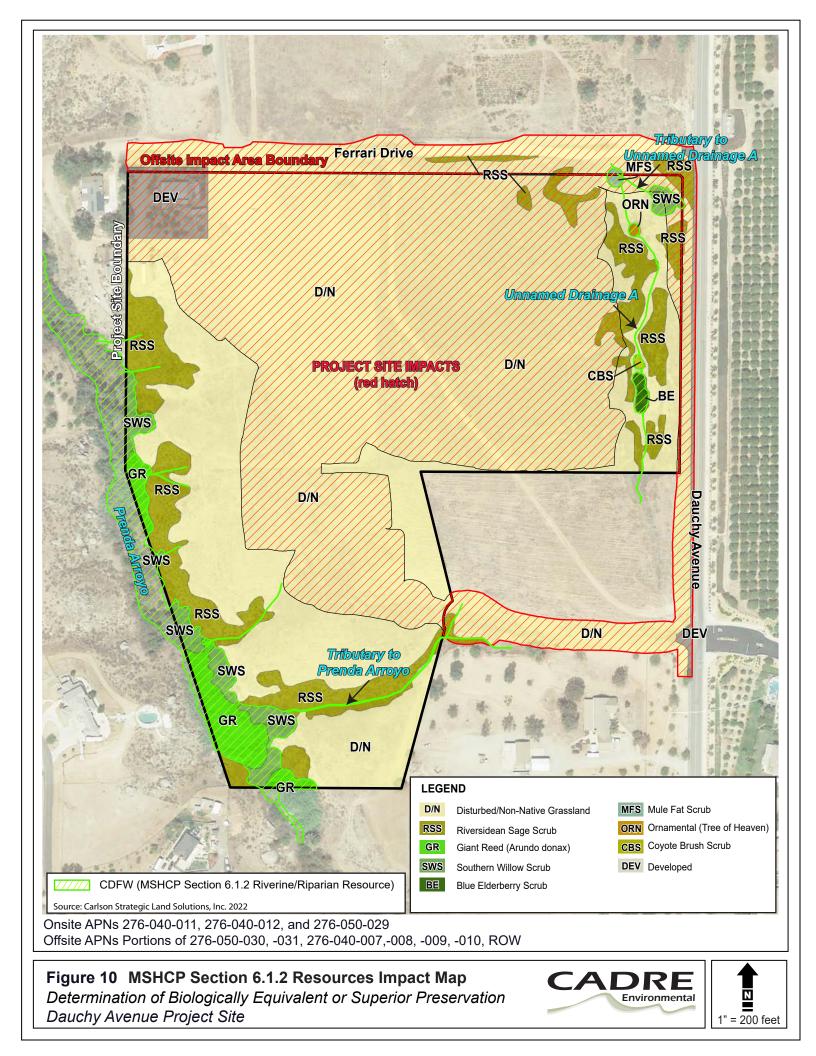


Table 3.
MSHCP Section 6.1.2 Resources Impacts

Section 6.1.2 Resources	Total Acres	Permanent Impacts Acres	Avoided Acres
Riverine			
Unnamed Drainage A	0.11	0.02	0.09
Unnamed Drainage A Tributary	0.02	0.02	0.00
Western Blue-line Drainage 1	1.04		1.04
Western Blue-line Drainage Tributaries ²	0.05	0.006 ²	0.044
Riparian		L	1
Unnamed Drainage A Tributary Southern Willow Scrub Mule Fat Scrub	0.05	0.05	0.00
Western Blue-line Drainage ¹ Giant Reed Southern Willow Scrub	1.11		1.11
TOTALS	2.38	0.096	2.284

acts are expected to occur to the western blue-line drainage

2 - The 0.006 acres of impacts to the southern-most western blue-line drainage Tributary occur due to the construction of Victor Hugo Drive.

Source: Carlson Strategic Land Solutions, Inc. 2023, Cadre Environmental 2022a

3.3 Mitigation and Equivalency

A Pre-Application meeting was held on April 13th 2022 with the RCA, USFWS, CDFW, RWQCB, USACE, City of Riverside, and project applicant team to review the project impacts to both jurisdictional and MSHCP Section 6.1.2 resources. The following proposed mitigation strategy for impacts to MSHCP Section 6.1.2 resources received informal approval during the meeting from the wildlife and regulatory agencies. As summarized from Carlson Strategic Land Solutions, Inc. 2023, to meet the criteria of a biologically equivalent or superior alternative, the applicant will offset permanent impacts to 0.096-acre of MSHCP Section 6.1.2 Riverine and Riparian resources by implementing the following, as presented in the report titled Western Riverside County Multiple Species Habitat Conservation Plan Compliance Analysis for the 24.73-Acre TTM 38074 Dauchy Avenue Project Site including 3.43-acre Offsite Impact Area, City of Riverside, Western Riverside County, California (Cadre Environmental December 19th, 2022a) - BIO-3 MSHCP Riverine Resources Section 6.1.2 Compliance:

BIO-1: Permanent impacts to 0.096-acres of jurisdictional features will be mitigated at a 2:1 ratio through the purchase of 0.192 acres of re-establishment credits at the Riverpark Mitigation Bank. An agreement for sale of credits from the Riverpark Mitigation Bank will be submitted to the City of Riverside prior to grading permit issuance.

BIO-2: Prior to grading permit issuance, a conservation easement in favor of a conservation-mission third party (for oversight and compliance verification) shall be placed over all onsite "avoidance areas," including riparian/riverine resources within the western blue-line drainage, unnamed drainage A, and adjacent upland habitats.

<u>BIO-3:</u> Prior to the initiation of construction, the construction contractor shall install temporary erosion control measures around avoided drainages and conservation areas to reduce impacts to onsite drainages and open space habitat from the excess sedimentation, siltation and erosion. These measures shall consist of the installation of silt fencing, coirs, berms, or dikes to protect storm drain inlets and drainages.

<u>BIO-4:</u> During construction of the Project, the construction contractor shall implement the following measures during construction to avoid impacts to Unnamed Drainage A and its single tributary, and western blue-line drainage and its associated tributaries:

- No changing of oil or other fluids, or discarding of any trash or other construction waste materials shall occur on the Project Site.
- Any equipment or vehicles driven and/or operated within or adjacent to onsite drains shall be checked and maintained daily, to prevent leaks of materials into onsite drainages. No equipment maintenance shall be conducted near onsite drains.

<u>BIO-5:</u> Prior to grading permit issuance, no impacts shall occur to onsite drainages until appropriate permits have been obtained from the US Army Corps of Engineers (Corps) Section 404 Nation Wide Permit, Regional Water Quality Control Board (RWQCB) Section 401 Water Quality Certificate, and/or California Department of Fish and Wildlife (CDFW) Section 1602 Streambed Alteration Agreement. Specifically, the following permits or certifications will be required:

- USACE Section 404 Nation Wide Permit
- RWQCB 401 Water Quality Certificate
- CDFW Section 1602 Streambed Alteration Agreement

The River Park Mitigation Bank proposes to re-establish (recreate former but no longer existing) alkali plain wetland system habitat and rehabilitate (repair existing but degraded) alkali plain wetland system habitat for a grand total of 583 acres of restoration of various types of alkali plain wetland system plant communities. As stated by the United States Army Corps of Engineers (USACE):

"The Riverpark Mitigation Bank is a proposed 619-acre mitigation bank located along the San Jacinto River (SJR) in western Riverside County (Figures 1 and 2). The Bank property is specifically located just downstream of the Ramona Expressway and immediately upstream of Nuevo Road. The site is depicted on the U.S. Geological Survey (USGS) Perris and Romoland Quadrangle Rancho San Jacinto Nuevo y Potrero Land Grant (Figure 3) in unincorporated Riverside County, California (33° 49' 8.4"N, -117° 9' 18"W)." (USACE 2015)

"The primary objective of the proposed mitigation bank would be to replace functions and services of aquatic resources and associated habitats that have been degraded or destroyed as a result of activities conducted in compliance or in violation of Section 404 of the CWA. The proposed mitigation bank would provide mitigation for both permanent and temporary impacts to waters of the U.S. In addition, the proposed mitigation bank may be used to offset environmental losses resulting from unavoidable impacts related to regulated activities by the California Department of Fish and Wildlife and the San Diego and Santa Ana Regional Water Quality Control Boards. Specific objectives include: • Restoration of fluvial processes on site within the San Jacinto River floodplain. • Restoration of alkali playa and vernal pool habitat. • Expansion of existing sensitive plant populations across the site. • Removal of ongoing agricultural activities on the site. • Removal of existing berms and the low flow channel. • Permanent protection of the site through transfer of fee title to the Western Riverside Regional Conservation Authority (RCA). • Permanent management of the site through funding of a non-wasting endowment." (USACE 2015)

"Due to its location along the San Jacinto River and its high potential for successful restoration upon elimination of the artificial low flow channel and berms created by historic agricultural activities, the proposed mitigation bank location has been identified by several state and Federal agencies as a high-priority restoration site." (USACE 2015)

3.3.1 Direct Effects

Direct impacts are considered to be those that involve the loss, modification, or disturbance of natural resources or habitats (i.e., vegetative communities or substrate) that in turn, directly affect plant and wildlife species dependent on that habitat. Direct impacts include the destruction of individual plants or wildlife of low mobility (i.e., plants, amphibians, reptiles, and small mammals). The collective loss of individuals may also directly affect area-wide population numbers or result in the physical isolation of populations thereby reducing genetic diversity and population stability.

Permanent impacts to 0.096-acre of MSHCP Section 6.1.2 Riverine and Riparian resources will occur as a result of project implementation (Carlson Strategic Land Solutions, Inc. 2023) as outlined in Table 3, *MSHCP Section 6.1.2 Resources Impacts*, and shown in Figure 10, *MSHCP Section 6.1.2 Resources Impact Map.* No temporary impacts to MSHCP 6.1.2 Riverine or Riparian resources will result from project implementation.

3.3.2 Indirect Effects

Indirect impacts are considered to be those impacts associated with the project that involve the effects of alteration of the existing habitat and an increase in human population and or landuse within the Project Site. These impacts are commonly referred to as "edge effects" and may result in changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to the Project Site.

Indirect impacts also include the effects of increases in ambient levels of sensory stimuli (e.g., noise and light), unnatural predators (e.g., domestic cats and other non-native animals), competitors (e.g., exotic plants and non-native animals), and trampling and unauthorized recreational use due to the increase in human population. Other permanent indirect effects may occur that are related to water quality and storm water management, including trash/debris, toxic materials, and dust.

The MSHCP Urban/Wildlands Interface guidelines presented in Section 6.1.4 are intended to address indirect effects associated with locating commercial, mixed uses and residential developments in proximity to an MSHCP Conservation Area.

The Project Site is not located adjacent to an existing or proposed MSHCP Conservation Area. No mitigation proposed or required. The project is consistent with MSHCP Section 6.1.4. However, the proposed action will implement the following best management practices (BMP's) to ensure no indirect impacts occur to the adjacent western blue-line drainage.

The following project specific MSHCP Urban/Wildlands Interface guidelines represent project design features.

Water Quality/Hydrology

The project will comply with all applicable water quality regulations, including obtaining and complying with those conditions established in (WDRs) and a National Pollutant Discharge Elimination System (NPDES) permits. Both of these permits include the treatment of all surface runoff from paved and developed areas, the implementation of applicable BMPs during construction activities and the installation and proper maintenance of structural BMPs to ensure adequate long-term treatment of water before entering into any stream course.

Toxics

Storm water treatment systems (infiltration basins) will be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant material, or other elements that could degrade or harm downstream biological or aquatic resources. Toxic sources within the Project Site would be limited to those commonly associated with residential development, such as pesticides, insecticides, herbicides, fertilizers, and vehicle emissions. In order to mitigate the potential effects of these toxics, the project will incorporate structural BMPs, as required in association with compliance with WDRs and the NPDES permit system, in order to reduce or prevent the level of toxins introduced into western blue-line drainage.

Lighting

Night lighting associated with the proposed development will be directed away from western blue-line drainage. This will represent a project design measure and should be noted on final plans.

Noise

Pending the results and approval of the noise study, the proposed project will not result in noise levels that exceed residential, noise standards established for the City of Riverside, wildlife within open space habitats within the Project Site will not be subject to noise that exceeds these established standards. Short-term construction-related noise will be addressed by the implementation of the following best management practices:

- Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards, as applicable.
- The construction contractor shall limit all construction-related activities that would result in high noise levels according to the construction hours to be determined by City of Riverside staff.
- The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings.

Invasive Species

Although the Project Site is not located adjacent to an existing or proposed conservation area, a landscape plan will be prepared and will avoid to the extent possible the use of invasive species for the portions of the development areas adjacent to the western blueline drainage (Prenda Arroyo). A list of Invasive plants that will be avoided are included in Table 6-2 of the MSHCP.

Barriers

No barriers within the western blue-line drainage are proposed.

Implementation of all Urban/Wildlands Interface project design feature guidelines will minimize adverse project indirect impacts and is consistent with MSHCP Section 6.1.4.

4. NARROW ENDEMIC PLANT SPECIES MITIGATION (SECTION 6.1.3)

The MSHCP has determined that all of the sensitive species potentially occurring onsite or within the offsite Project Site have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required for narrow endemic plants if suitable habitat is documented and the assessment area is located within a predetermined "Survey Area" (MSHCP 2004).

The Project Site does not occur within a predetermined Survey Area for MSHCP narrow endemic plant species; therefore, no surveys are required (RCA GIS Data Downloads 2022). The project will be consistent with MSHCP Section 6.1.3

4.1 Methods

The Project Site does not occur within a predetermined Survey Area for MSHCP narrow endemic plant species; therefore, no surveys are required (RCA GIS Data Downloads 2022). The project will be consistent with MSHCP Section 6.1.3

4.2 Results/Impacts

Compliance with Section 6.1.3 respective of MSHCP narrow endemic plants is not applicable to the proposed Project Site.

4.3 Mitigation and Equivalency

Compliance with Section 6.1.3 respective of MSHCP narrow endemic plants is not applicable to the proposed Project Site.

4.3.1 Direct Effects

Compliance with Section 6.1.3 respective of MSHCP narrow endemic plants is not applicable to the proposed Project Site.

4.3.2 Indirect Effects

Compliance with Section 6.1.3 respective of MSHCP narrow endemic plants is not applicable to the proposed Project Site.

5. CRITERIA AREA SPECIES MITIGATION (SECTION 6.3.2)

The MSHCP has determined that all of the sensitive species potentially occurring onsite or within the offsite Project Site have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required for criteria area species if suitable habitat is documented onsite and the assessment areas are located within a predetermined "Survey Area" (MSHCP 2004).

5.1 Criteria Area Species Survey Area – Plants

The Project Site does not occur within a predetermined Survey Area for MSHCP criteria area plant species; therefore, no surveys are required (RCA GIS Data Downloads 2022). The project is consistent with MSHCP Section 6.3.2.

5.1.1 Methods

The Project Site does not occur within a predetermined Survey Area for MSHCP criteria area plant species; therefore, no surveys are required (RCA GIS Data Downloads 2022). The project is consistent with MSHCP Section 6.3.2.

5.1.2 Results/Impacts

Compliance with Section 6.3.2 respective of MSHCP criteria area plants is not applicable to the proposed Project Site.

Compliance with Section 6.3.2 respective of MSHCP criteria area plants is not applicable to the proposed Project Site.

5.2 Criteria Area Species Survey Area – Burrowing Owl

The MSHCP has determined that all of the sensitive species potentially occurring onsite have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required wildlife species if suitable habitat is documented onsite and/or if the property is located within a predetermined "Survey Area" (MSHCP 2004).

Suitable burrowing owl burrows potentially utilized for refugia and/or nesting were documented within the property including foraging habitat documented throughout the project site. Therefore, focused surveys were conducted by Cadre Environmental during the spring of 2021 (Cadre Environmental 2022b).

5.2.1 Methods

Burrowing Owl Habitat Assessment and Focused Surveys

In accordance with the MSHCP Burrowing Owl Survey Instructions (2006), survey protocol consists of two steps, Step I – Habitat Assessment and Step II – Locating Burrows and Burrowing Owls. Step II is comprised of two parts, Part A: Focused Burrow Surveys and Part B: Focused Burrowing Owl Surveys.

Each step is briefly outlined below, followed by the methodology and results of each survey conducted within the Project Site. All initial habitat assessment, burrow and focused surveys were conducted by Ruben Ramirez.

Surveys were conducted during weather that is conducive to observing owls outside their burrows and detecting burrowing owl sign. Surveys were not conducted during rain, high winds (> 20 mph), dense fog, or temperatures over 90 °F. None of the surveys were conducted within five (5) days of measurable precipitation.

In addition to the MSHCP guidelines, field notes were taken daily. These notes recorded the date, location, animal species observed, and general habitat characteristics of each area and habitat examined that day.

Step I – Habitat Assessment

Step 1 of the MSHCP habitat assessment for burrowing owl consists of a walking survey to determine if suitable habitat is present onsite. Cadre Environmental conducted the habitat assessment on November 9th, 2020. Upon arrival at the Project Site, and prior to initiating the assessment survey, Cadre Environmental used binoculars to scan all suitable habitats on and adjacent to the property, including perch locations, to ascertain owl presence.

All suitable areas of the Project Site were surveyed on foot by walking slowly and methodically while recording/mapping areas that may represent suitable owl habitat onsite. Primary indicators of suitable burrowing owl habitat in western Riverside County include, but are not limited to, native and non-native grassland, interstitial grassland within shrub lands, shrub lands with low density shrub cover, golf courses, drainage ditches, earthen berms, unpaved airfields, pastureland, dairies, fallow fields, and agricultural use areas. Burrowing owls typically use burrows made by fossorial mammals, such as ground squirrels (*Otospermophilus beecheyi*) or badgers (*Taxidea taxus*), but they often utilize man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock, or wood debris piles, or openings beneath cement or asphalt pavement. Burrowing owls are often found within, under, or in close proximity to man-made structures.

According to the MSHCP guidelines, if suitable habitat is present the biologist should also walk the perimeter of the property, which consists of a 150-meter (approximately 500 feet) buffer zone around the Project Site boundary. If permission to access the buffer area cannot be obtained, the biologist shall not trespass, but visually inspect adjacent habitats with binoculars.

Results from the habitat assessment indicated that suitable burrowing owl burrows potentially utilized for refugia and/or nesting were documented within the property including foraging habitat documented throughout the Project Site. Accordingly, if suitable habitat is documented onsite, both Step II surveys and the 30-day preconstruction surveys are required in order to comply with the MSHCP guidelines.

Step II – Locating Burrows and Burrowing Owls

Concurrent with the initial habitat assessment, a detailed focused burrow survey was conducted and included documentation of appropriately sized natural burrows or suitable man-made structures that may be utilized by burrowing owl - as part of the MSHCP protocol, which is described below under Part A. Focused Burrow Survey. The MSHCP protocol indicated that no more than 100 acres should be surveyed per day/per biologist.

Part A: Focused Burrow Survey

A systematic survey for burrows, including burrowing owl sign, was conducted by walking across all suitable habitats mapped within the Project Site on November 9th, 2020. Pedestrian survey transects were spaced to allow 100% visual coverage of the ground surface. The distances between transect centerlines were no more than 20 meters (approximately 66 ft.) apart, and owing to the terrain, often much smaller. Transect routes were also adjusted to account for topography and in general ground surface visibility.

All observations of suitable burrows or dens, natural or man-made, or sightings of burrowing owl, were recorded and mapped during the survey.

Part B: Focused Burrowing Owl Surveys

Four (4) focused burrowing owl surveys (in addition to the initial focused burrow survey – Step II, Part A) were conducted on March 24th, April 20th, May 5th and 14th, 2021 from one hour before sunrise to two hours after sunrise as outlined in Table 4, *Burrowing Owl*

Survey Schedule. During visual surveys, all potentially suitable burrow or structure entrances were investigated for signs of owl occupation, such as feathers, tracks, or pellets, and carefully observed to determine if burrowing owls utilize these features, when present. All burrows are monitored at a short distance from the entrance, and at a location that would not interfere with potential owl behavior, when present. In addition to monitoring potential burrow locations, all suitable habitats in the Project Site were walked along transects averaging 20 meters (approximately 66 feet) between centerlines.

An existing residence is located in the northwest corner of the Project Site. This area was adequately surveyed from the boundaries for the presence/absence of individuals within and adjacent to this region.

Survey	Dates (Conditions) 2021 Start – End Times	Results
1	March 24 th 52°F to 62°F, winds 4-12 mph, no rain 6:30am – 9:30am	No burrowing owls or characteristic sign detected within the Project Site.
2	April 20th 54°F to 68°F, winds 2-8 mph, no rain 6:30am – 9:30am	No burrowing owls or characteristic sign detected within the Project Site.
3	May 5th 58°F to 75°F, winds 0-4 mph, no rain 6:30am – 9:30am	No burrowing owls or characteristic sign detected within the Project Site.
4	May 14th 55°F to 74°F, winds 4-10 mph, no rain 6:30am – 9:30am	No burrowing owls or characteristic sign detected within the Project Site.

Table 4.Burrowing Owl Survey Schedule

5.2.2 Results/Impacts

No burrowing owl or characteristic sign such as white-wash, feathers, tracks, or pellets were detected within or immediately adjacent to the Project Site during the spring 2021 MSHCP focused survey effort (Cadre Environmental 2022b).

5.2.3 Mitigation and Equivalency

A 30-day MSHCP preconstruction survey will also be required immediately prior to the initiation of construction to ensure protection for this species and compliance with the conservation goals as outlined in MSHCP Section 6.3.2. This requirement has been included as a condition of approval in the report "Western Riverside County Multiple Species Habitat Conservation Plan Compliance Analysis for the 24.73-Acre TTM 38074 Dauchy Avenue Project Site including 3.43-acre Offsite Impact Area, City of Riverside, Western Riverside County, California. (Cadre Environmental 2022a).

Following submittal, review and approval of the 30-day burrowing owl preconstruction survey report by the City of Riverside and compliance with all species-specific

conservation goals, if detected within or adjacent to the Project Site, the project will be consistent with MSHCP Section 6.3.2.

If burrowing owls are detected onsite during the 30-day preconstruction survey, during the breeding season (February 1st to August 31st) then construction activities shall be limited to beyond 300 feet of the active burrows until a qualified biologist has confirmed that nesting efforts are competed or not initiated. In addition to monitoring breeding activity, if construction is proposed to be initiated during the breeding season or active relocation is proposed, a burrowing owl mitigation plan will be developed based on the City of Riverside, CDFW and USFWS requirements for the relocation of individuals to predetermined preserves.

Following submittal, review and approval of the 30-day burrowing owl preconstruction survey report by the City of Riverside and compliance with all species-specific conservation goals, if detected within or adjacent to the Project Site, the project will be consistent with MSHCP Section 6.3.2.

5.3 Criteria Area Species Survey Area – Mammals

The MSHCP has determined that all of the sensitive species potentially occurring onsite or within the offsite Project Site have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required if suitable habitat for mammals is documented onsite and the property is located within a predetermined "Survey Area" (MSHCP 2004).

The Project Site does not occur within a predetermined Survey Area for mammal species. Compliance with Section 6.1.3 respective of MSHCP mammals is not applicable to the proposed Project Site.

5.3.1 Methods

Compliance with Section 6.1.3 respective of MSHCP mammals is not applicable to the proposed Project Site.

5.3.2 Results/Impacts

Compliance with Section 6.1.3 respective of MSHCP mammals is not applicable to the proposed Project Site.

5.3.3 Mitigation and Equivalency

Compliance with Section 6.1.3 respective of MSHCP mammals is not applicable to the proposed Project Site.

5.4 Criteria Area Species Survey Area – Amphibians

The MSHCP has determined that all of the sensitive species potentially occurring onsite or within the offsite Project Site have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required if suitable habitat for amphibian species is documented onsite and the property is located within a predetermined "Survey Area" (MSHCP 2004).

The Project Site does not occur within a predetermined Survey Area for amphibian species. Compliance with Section 6.1.3 respective of MSHCP amphibians is not applicable to the proposed Project Site.

5.4.1 Methods

Compliance with Section 6.1.3 respective of MSHCP amphibians is not applicable to the proposed Project Site.

5.4.2 Results/Impacts

Compliance with Section 6.1.3 respective of MSHCP amphibians is not applicable to the proposed Project Site.

6. **REFERENCES**

- Cadre Environmental. 2022a. Western Riverside County Multiple Species Habitat Conservation Plan Compliance Analysis for the 24.73-Acre TTM 38074 Dauchy Avenue Project Site including 3.43-acre Offsite Impact Area, City of Riverside, Western Riverside County, California.
- Cadre Environmental. 2022b. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Focused Burrowing Owl Surveys for the 24.73-Acre Dauchy Avenue Project Site including 3.43-acre Offsite Impact Area, City of Riverside, Western Riverside County, California.
- California Department of Fish and Wildlife. 2012. Staff Report on Burrowing Owl Mitigation, State of California Natural Resources Agency.
- Carlson Strategic Land Solutions, Inc. 2023. Jurisdictional Delineation for the Dauchy Project Site located in the City of Riverside.
- County of Riverside. 2006. Burrowing Owl Survey Instructions Western Riverside Multiple Species Habitat Conservation Plan Area.

Regional Conservation Authority. 2022. Online GIS Database - https://www.wrc-rca.org/

- Riverside County Integrated Project (RCIP) Multiple Species Habitat Conservation Plan (MSHCP), March 2004.
- U.S. Department of Agriculture. 2022. Custom Soil Resources Report for Western Riverside Area, California. Natural Resources Conservation Service.

Certification "I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge."

June 15, 2023 uln Author: Date: an

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