NATURAL RESOURCES ASSESSMENT, INC.

General Biological Assessment
San Jacinto Valley Academy Conditional Use Permit 16-2
San Jacinto, California

Prepared for:

San Jacinto Valley Academy
480 N. San Jacinto Street
San Jacinto, CA 92583

Prepared by:

Natural Resources Assessment, Inc.
3415 Valencia Hill Drive
Riverside, California 92507
951 686 4483

June 8, 2016

Project Number: BAW16-105

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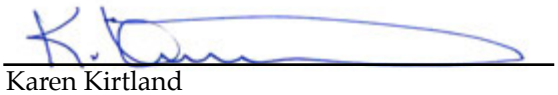
CERTIFICATION

I hereby certify that the statements furnished below and in the attached exhibits present 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 and belief.



Karen Kirtland
Natural Resources Assessment, Inc.

June 8, 2016
Date

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Executive Summary

Natural Resources Assessment, Inc. (NRAI) was contracted by the San Jacinto Valley Academy to conduct a general biological assessment for a Conditional Use Permit (CUP) 16-2, Amendment 4. The proposed project is the expansion of their campus facilities in San Jacinto, California.

The campus proposes to create additional classrooms, parking lots, an athletic field, a gym and a multipurpose room.

The biological assessment was required because of the potential presence on site of sensitive biological resources as identified in the Western Riverside County Multiple Species Habitat Conservation Plan (MSCHP). The MSHCP requires surveys for the presence of burrowing owl, jurisdictional waters, Riparian/Riverine Areas/Vernal Pools, and fairy shrimp habitat.

Ms. Karen Kirtland of NRAI and Mr. Richard Montijo of SWCA Environmental Consultants (subconsultant to NRAI) surveyed the site, evaluated the habitats present, and conducted a jurisdictional waters evaluation. Binoculars were used to aid in the identification of wildlife. All species identified by sight, call or sign (burrows, scat, tracks, etc.) were recorded.

Project development will result in the loss of a ruderal (weedy) plant community and wildlife habitat.

The MSHCP identified burrowing owl as the only species of concern for the project. No sign of burrowing owl or burrowing owl use was found.

Despite the lack of sign, burrowing owl could move on site prior to the start of construction, particularly if it is delayed until after the start of the breeding season in spring. We recommend a pre-construction survey for this species.

There will be no impacts to riparian/riverine, vernal pools, fairy shrimp or other jurisdictional waters.

There are no Urban/Wildlands Interface issues.

The project is within the Stephens Kangaroo Rat Habitat Conservation Plan (Plan) area. The project proponent may need to pay the SKR fee required under that Plan.

The project will have no impacts to raptor and migratory bird use of the site. There will be no impacts to nesting birds.

There is will be no significant habitat fragmentation and no loss of or impacts to wildlife corridors.

1.0 Introduction

Natural Resources Assessment, Inc. (NRAI) was contracted by the San Jacinto Valley Academy to conduct a general biological assessment for a proposed Conditional Use Permit (CUP 16-2, Amendment 4), on their campus in San Jacinto, California.

The biological assessment was required because of the potential presence on site of burrowing owl, as well as the potential presence of jurisdictional waters, riparian and riverine areas, vernal pools, and fairy shrimp habitat.

2.0 Site Location and Project Description

The existing campus is located within the City of San Jacinto. The proposed CUP area is located west of San Jacinto Street. The northern border is a row of houses. The southern border is formed by a vacant lot and the western border by existing housing (Figures 1 and 2). The project lies in Section 26, Township 4 south, Range 1 west, San Bernardino base and meridian (Figure 1).

The CUP consists of two parcels, A and B. Parcel A is the existing San Jacinto Valley Academy property. Parcel B is composed of two vacant lots south of the campus (Figures 3 and 4).

3.0 Methods

3.1 Data Review

NRAI conducted a data search for information on plant and wildlife species known occurrences within the vicinity of the project. This review included biological texts on general and specific biological resources, and those resources considered to be sensitive by various wildlife agencies, local governmental agencies and interest groups. Information sources included but are not limited to the following:

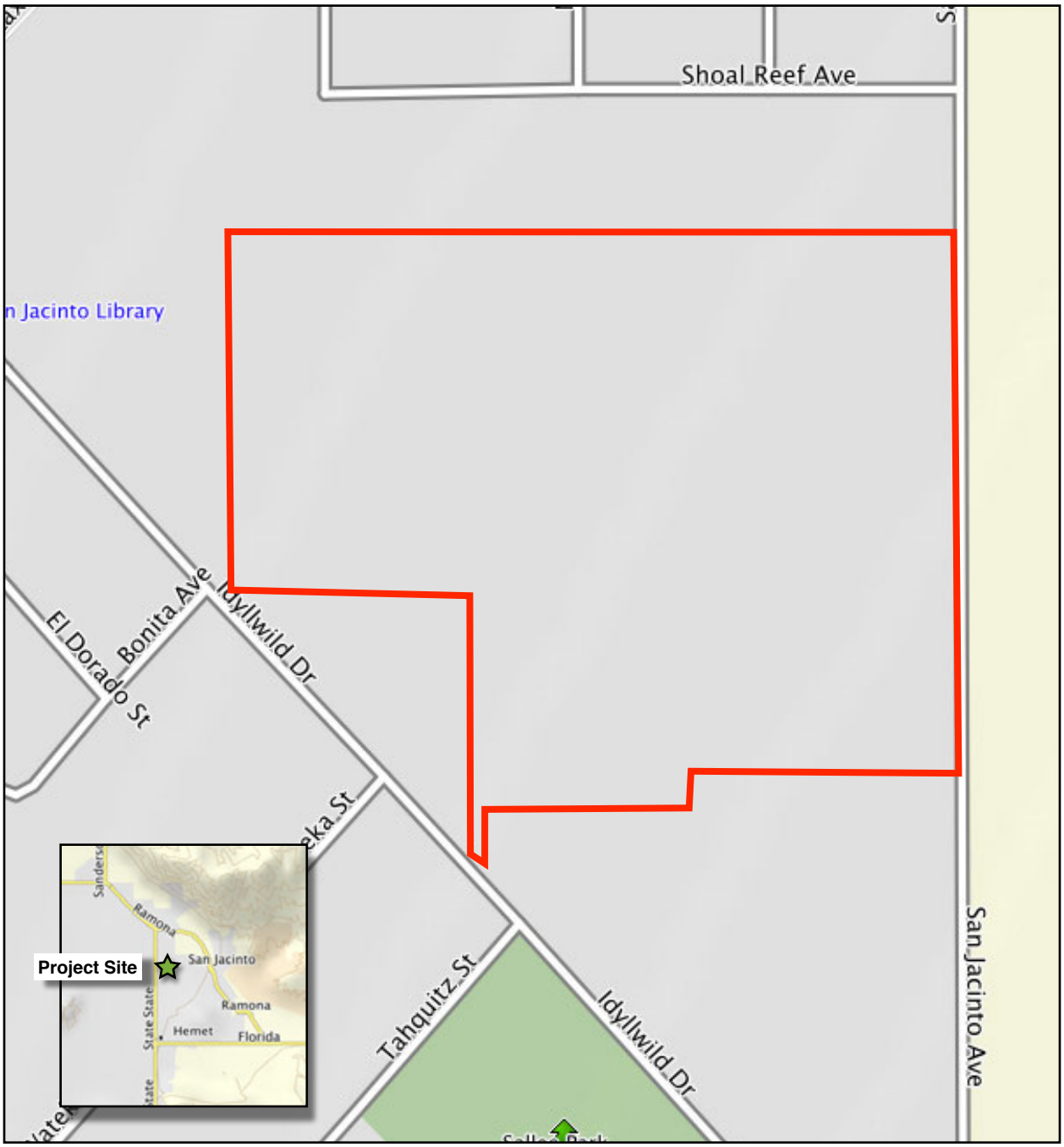
- Information provided by the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) for Assessor's Parcel Numbers (APNs) 434-200-006, 434-200-009, 434-200-010, 434-200-013, 434-200-015.
- U.S. Army Corps 404 requirements, State Water Resources Control Board requirements, California Department of Fish and Wildlife 1602 requirements.
- General texts and other documents regarding potential resources on the project

NRAI used the information to focus our survey efforts in the field. Please see Section 6.0 for a complete listing of documents reviewed.

3.2 Western Riverside County Multiple Species Habitat Conservation Plan

The MSHCP is intended to balance the demands of the growth of western Riverside County with the need to preserve open space and protect species of plants and animals that are threatened with extinction. The MSHCP addresses incidental take of "covered" species.

Of the 146 covered species addressed in the Western Riverside County MSHCP, 118 are considered to be adequately conserved simply by implementing the conservation program. Incidental take of these 118 species is permitted by the Western Riverside County MSHCP. The remaining 28 covered species are considered to be partially conserved – they would be adequately conserved when certain additional conservation requirements are implemented. The additional requirements are identified in the species-specific conservation objectives for those 28 species.



Map Base: San Jacinto (date unknown)
7.5′ USGS topographic quadrangle

Figure 1. Project Location and Site Vicinity

N

Feet
(approximate)
0 112.5 225

San Jacinto Valley Academy
Conditional Use Permit 16-2
San Jacinto, California

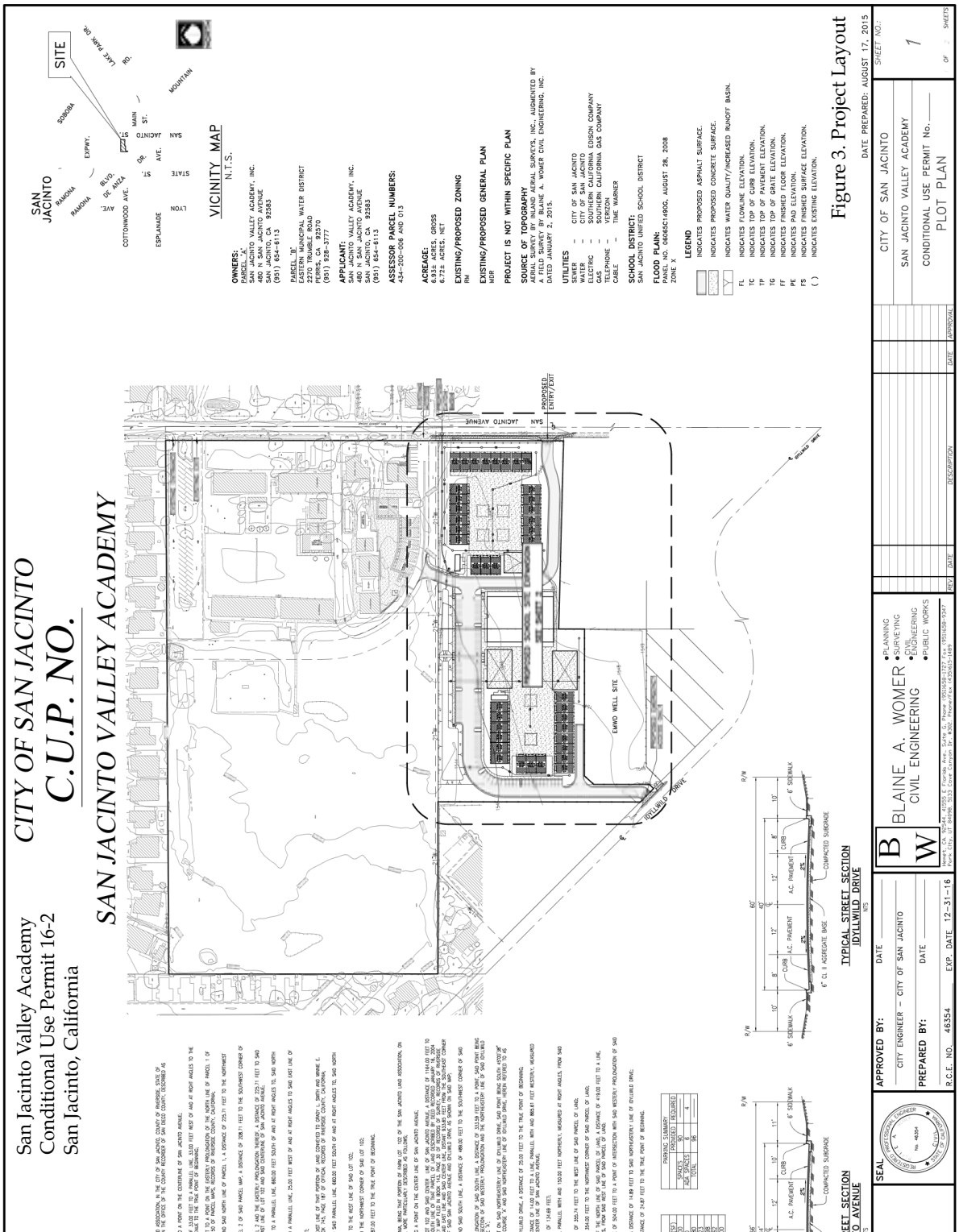
Map Base: Google Earth 2016

Figure 2. Project Aerial

N

Feet
(approximate)

0 85 170


CITY OF SAN JACINTO
C.U.P. NO.
SAN JACINTO VALLEY ACADEMY
San Jacinto Valley Academy
Conditional Use Permit 16-2
San Jacinto, California
VICINITY MAP
N.T.S.
SITE
SAN JACINTO
OWNERS:
PARCEL 'A':
SAN JACINTO VALLEY ACADEMY, INC.
480 N SAN JACINTO AVENUE
SAN JACINTO, CA 92583
(951) 654-6113
PARCEL 'B':
EASTERN MUNICIPAL WATER DISTRICT
2270 TRUMBLE ROAD
PERRIS, CA 92570
(951) 928-3777
APPLICANT:
SAN JACINTO VALLEY ACADEMY, INC.
480 N SAN JACINTO AVENUE
SAN JACINTO, CA 92583
(951) 654-6113
ASSESSOR PARCEL NUMBERS:
434-200-006 AND 013
ACREAGE:
6.83 ACRES, GROSS
6.724 ACRES, NET
EXISTING/PROPOSED ZONING
RM
EXISTING/PROPOSED GENERAL PLAN
MDR
PROJECT IS NOT WITHIN SPECIFIC PLAN
SOURCE OF TOPOGRAPHY
AERIAL SURVEYS BY INLAND AERIAL SURVEYS, INC., AUGMENTED BY A FIELD SURVEY BY BLAINE A. WOMER CIVIL ENGINEERING, INC. DATED JANUARY 2, 2015.
UTILITIES
SEWER – CITY OF SAN JACINTO
WATER – CITY OF SAN JACINTO
ELECTRIC – SOUTHERN CALIFORNIA EDISON COMPANY
GAS – SOUTHERN CALIFORNIA GAS COMPANY
TELEPHONE – VERIZON
CABLE – TIME WARNER
SCHOOL DISTRICT:
SAN JACINTO UNIFIED SCHOOL DISTRICT
FLOOD PLAIN:
PANEL NO. 06065C1490G, AUGUST 28, 2008
ZONE X
LEGEND
INDICATES PROPOSED ASPHALT SURFACE.
INDICATES PROPOSED CONCRETE SURFACE.
INDICATES WATER QUALITY/INCREASED RUNOFF BASIN.
FL INDICATES FLOWLINE ELEVATION.
TC INDICATES TOP OF CURB ELEVATION.
TP INDICATES TOP OF PAVEMENT ELEVATION.
FG INDICATES FINISHED GRADE ELEVATION.
PE INDICATES PAD ELEVATION.
FS INDICATES FINISHED SURFACE ELEVATION.
( ) INDICATES EXISTING ELEVATION.
Figure 3. Project Layout
DATE PREPARED: AUGUST 17, 2015
LEGAL DESCRIPTION
PARCEL 'A'
PARCEL 'B'
PARKING SUMMARY
TYPICAL STREET SECTION
SAN JACINTO AVENUE
TYPICAL STREET SECTION
IDYLLWILD DRIVE
EMWD WELL SITE
PROPOSED ENTRY/EXIT
SAN JACINTO AVENUE
IDYLLWILD DRIVE
BLAINE A. WOMER CIVIL ENGINEERING
PLANNING
SURVEYING
CIVIL ENGINEERING
PUBLIC WORKS
CITY OF SAN JACINTO
SAN JACINTO VALLEY ACADEMY
CONDITIONAL USE PERMIT No. ——
PLOT PLAN
SHEET NO.: 1 OF 2 SHEETS
APPROVED BY: CITY ENGINEER – CITY OF SAN JACINTO DATE
PREPARED BY: DATE
R.C.E. NO. 46354 EXP. DATE 12-31-16
SEAL
Underground Service Alert
Call: TOLL FREE 1-800 227-2600
TWO WORKING DAYS BEFORE YOU DIG

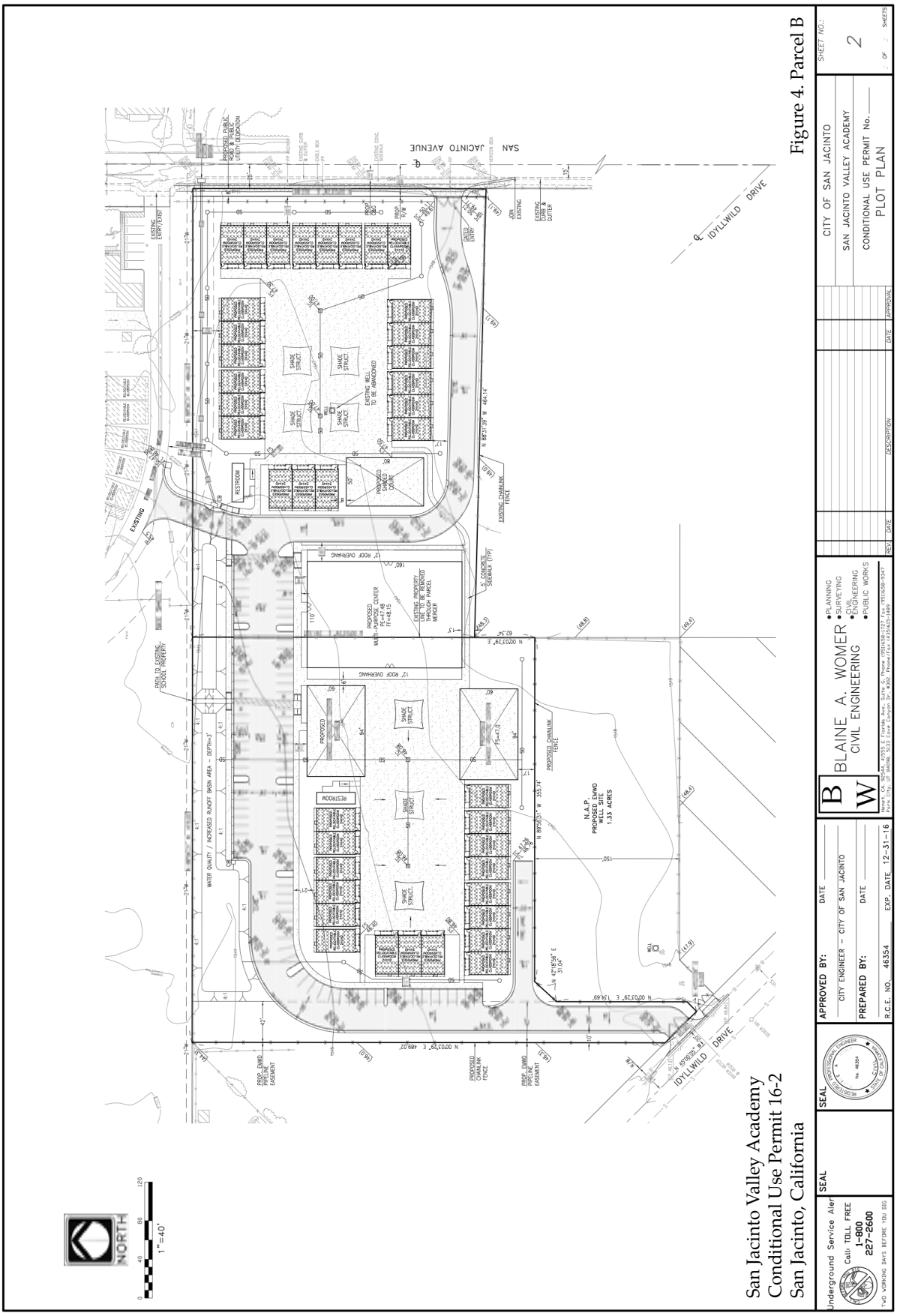


Figure 4. Parcel B

San Jacinto Valley Academy
Conditional Use Permit 16-2
San Jacinto, California

SEAL

APPROVED BY: DATE
CITY ENGINEER – CITY OF SAN JACINTO

PREPARED BY: DATE

R.C.E. NO. 46354 EXP. DATE 12-31-16

BLAINE A. WOMER
CIVIL ENGINEERING
• PLANNING • SURVEYING • CIVIL ENGINEERING • PUBLIC WORKS

CITY OF SAN JACINTO
SAN JACINTO VALLEY ACADEMY
CONDITIONAL USE PERMIT No. ——
PLOT PLAN

SHEET NO.: 2 OF 2 SHEETS

3.3. Field Assessment

Ms. Karen Kirtland of NRAI and Mr. Richard Montijo of SWCA Environmental Consultants (subconsultants to NRAI), conducted a biological assessment of the two parcels on April 25, 2016. The field team evaluated the surrounding habitats, making notes on the general and sensitive biological resources present and taking representative photographs. The surveys included focused habitat assessment surveys for species covered under the MSHCP survey requirements.

Parcel A, the existing campus, only required a quick overview, since there are no native habitats in this parcel. The field team walked transects across Parcel B, surveying the entire area for protected resources.

4.0 Results

4.1 Weather, Topography and Soils

Weather at the beginning of the survey was 55 degrees Fahrenheit, with overcast skies and winds of 1.3 miles per hour (mph), gusting to 3.5 mph. By the end of the survey, the temperature was 60 degrees, overcase, with winds of 1.3 mph, gusting to 3.0 mph.

The site is generally flat, with a less than one percent slope east to west.

There are six soils on site (Figure 5, Soil Survey Staff 2016). The soils on Parcel A, the campus, have completely altered by mass compaction during the building of the Academy. The following discussion identifies all six soils, but location descriptions are limited to Parcel B.

The most common one is Dello loamy fine sand (DrA), found on zero to two percent slopes. This soil is a loamy fine sand made alluvium derived from granite. It is a somewhat poorly drained, non-saline to very slightly saline soil found on flood plains. Dello loamy fine sand makes up the majority of the center of Parcel B (Figure 5).

The second most common soil on site is Grangeville fine sandy loam, loamy substratum, drained (GwA), found on zero to two percent slopes. This soil is made up of alluvium derived from granite, and is a moderately well-drained, non-saline to very slightly saline soil found on alluvial fans. It makes up a small portion of the northeast corner of Parcel B.

The third most common soil on site is Grangeville loamy fine sand, drained (GoB) found on zero to two percent slopes. This soil is made up of alluvium from sedimentary rock. It is a moderately well-drained soil found on alluvial fans.

The fourth most common soil is Dello loamy sand, gravelly substratum (DnB) found on zero to five percent slopes. This soil is made up of alluvium derived from granite. It is a somewhat poorly drained, nonsaline to slightly saline soil found on alluvial fans. It is found in a very small fraction of the extreme southwestern extension of Parcel B.

The fifth most common soil over the entire two parcels, but which makes up a large portion of Parcel B (Figure 5) is San Emigdio fine sandy loam (SeA) found on zero to two percent slopes. It is formed of residuum derived from sedimentary rock. San Emigdio fine sandy loam is a well-drained, nonsaline to slightly saline soil found on alluvial fans.

The least common soil is Metz loamy fine sand, gravelly sand substratum (MgB) found on zero to five percent slopes. It is formed of alluvium derived from sedimentary rock. Metz loamy sand is a somewhat excessively well-drained, nonsaline to slightly saline soil found on alluvial fans. It occurs as a tiny fraction of the soils on Parcel B, at the extreme southwestern extension of the parcel.

Figure 5. Soils Map

San Jacinto Valley Academy
Conditional Use Permit 16-2
San Jacinto, California

4.2 Land Uses

Parcel A is occupied by the San Jacinto Academy, and is completely urbanized. Parcel B has been in extensive agricultural use until at least 2010, and appears to have been disked for weed control on a regular basis since that time. The soil surface is broken and furrows were observed across the site

4.3 Plant Communities

The plant communities on Parcel A are all landscaped based, with no remaining native vegetation. The plant community on Parcel B is a ruderal (weedy) non-native community dominated by Caifornia tansy mustard (*Descurainia californicum*), red-stemmed filaree (*Erodium cicutarium*), and mouse barley (*Hordeum murinum*) (Photos 1 and 2).

The land has been highly disturbed by plowing, vehicles, and trash. Any native scrub vegetation has been removed by disking. The field team could not determine exactly when the latest disturbance occurred but it was within the last year. At the time of the field survey, much of the vegetation observed is invasive or introduced.

A list of all plant species observed is provided in Appendix A.

4.4 Wildlife

Only a few wildlife species were observed, mostly due to the lack of plant cover, water and native food resources. Bird species observed included common species such as mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), and house finch (*Haemorhous mexicanus*). No reptiles or amphibian species were observed. The only mammal species observed was Botta's pocket gopher (*Thomomys bottae*).

A list of all wildlife species observed is provided in Appendix A.

4.5 MSHCP Consistency Analysis

The project site is located within the MSHCP Conservation Area. Section 6 of the MSHCP states that all projects must be reviewed for compliance with plan policies pertaining to riparian and riverine resources, Criteria Area plants species, Narrow Endemic Plant Species, urban/wildlands interface, and additional survey needs as applicable.

4.5.1 Criteria Area and Narrow Endemic Plant Species

The MSHCP did not identify the project study area has having habitat for any Criteria Area or Narrow Endemic Plant species

4.5.2 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2)

4.5.2.1 Riparian/Riverine Areas

Riparian/Riverine Areas are defined by the MSHCP as "*lands which contain Habitat dominated by tress [sic], 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*".

Project Findings

The site is almost flat, and has been disked for weed control on a regular basis. There are no flow channels or evidence of contained flow. It is our professional judgment that there are no riparian or riverine areas on site.

Photo 1. Western half of Parcel B. Looking south from near the northern boundary.

Photo 2. Eastern half of Parcel B. Looking southeast from near the northern boundary.

4.5.2.2 Vernal Pools

Vernal pools are defined by the MSHCP 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. . . . Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records" (Riverside County Transportation and Land Management Agency, website address: http://www.rctlma.org).

Project Findings

The field team surveyed for vernal pools but the level of disturbance, lack of rain, and lack of vegetation growth indicators made it difficult to determine if vernal pools were present. None were observed.

Based on the observations made, this area is intensively disked on a regular basis. It is our professional judgement that no vernal pools exist on site.

4.5.2.3 Vernal Pool Fairy Shrimp

Vernal pool fairy shrimp (*Branchinecta lynchi*) is found in grasslands in ponded areas such as vernal pools, cattle watering holes, basins, etc. Fairy shrimp are confined to temporary pools that fill in spring and evaporate by late spring to early summer.

In southern California, this species is found primarily in the interior of western Riverside County, central Santa Barbara County, and eastern Orange County and more recently in Los Angeles County.

Since most pools preferred by fairy shrimp are found in flat areas, many have been lost to agricultural activities and residential development. The limited extent of available habitat, plus the ongoing loss has resulted in the vernal pool fairy shrimp being listed as threatened by the U.S. Fish and Wildlife Service (USFWS).

Project Findings

As described in the vernal pool section, the site appears unsuitable for the formation of vernal pools. The soils are unsuitable for the formation of long-term ponds, and no obligate wetland perennial plant species were observed. There are no other sources of standing water, such as cattle ponds or watering holes that would provide suitable habitat for the vernal pool fairy shrimp.

4.5.2.4 Riverside Fairy Shrimp

Riverside fairy shrimp (*Streptocephalus woottoni*) are known only from ephemeral pools in farmlands and similar open, flat terrain. Fairy shrimp are confined to temporary pools that fill in spring and evaporate by late spring to early summer.

The Riverside fairy shrimp is known only from southern Orange and western Riverside and San Diego Counties. Ongoing farming and development in these areas has resulted in the loss and degradation of these habitats. Therefore, the USFWS has listed the Riverside fairy shrimp as endangered.

Project Findings

As described in the vernal pool section, the site appears unsuitable for the formation of pools. The soils are unsuitable for the formation of long-term ponds, and no obligate wetland perennial plant species were observed. There are no other sources of standing water, such as cattle ponds or watering holes that would provide suitable habitat for the Riverside fairy shrimp.

4.5.3 Additional Survey Needs and Procedures (Section 6.3.2)

4.5.3.1 Burrowing Owl

The burrowing owl (*Athene cunicularia hypogea*) is a resident species in lowland areas of southern California (Garrett & Dunn 1980). It prefers open areas for foraging and burrowing, and is found widely scattered in open desert scrub. This species is scarce in coastal areas, being found mainly in agricultural and grassland habitats. The largest remaining numbers are in the Imperial Valley, where it is common in suitable habitat adjacent to the agricultural fields.

The burrowing owl prefers large flat open areas for nesting and hunting (Garrett & Dunn 1981). This species lives in burrows constructed by other ground-dwelling species in grassy or sparse shrubby habitat. Burrowing owls also take over other types of burrows, including manmade objects such as pipes. This species forages low over the ground surface for insect prey, and seldom flies very high in the air.

As a result of coastal development, the burrowing owl is declining in coastal habitats. The California Department of Fish and Wildlife (CDFW) has designated the burrowing owl as a California Species of Special Concern (CSC). These species are so designated because "declining population levels, limited ranges and/or continuing threats have made them vulnerable to extinction." (California Department of Fish and Wildlife 2012).

Project Findings

The entire project site is within the survey area for the burrowing owl. Habitat for burrowing owl was assesssesd in accordance with MSHCP "Burrowing Owl Survey Instructions". The assessment included looking for burrowing owl burrows, whitewash, pellets, animal remains and other burrowing owl indicators.

Burrowing owls need sparse shrubby habitat (such as grasslands and desert scrub) to provide food for their insect and other small prey items. The site does not contain any sparse shrubby habitats or similar grassland habitats preferred by this species. No burrows were observed suitable or in use by this species. No burrows belonging to Beechey ground squirrels were found on or along the boundary of the project site. No sign of burrowing owl use was observed.

Most of the available habitat is highly disturbed and is located adjacent to human use areas, making it highly unlikely, but not impossible, that birds will nest in suitable habitat on site in the future.

4.5.4 Guidelines Pertaining to the Urban/Wildland Interface (Section 6.1.4)

The Urban/Wildland Interface guidelines of the MSHCP address indirect effects associated with locating development in the MSHCP Conservation Area near wildlands or other open space areas.

Project Findings

The two parcels are bordered by residential development on all four sides. There are no expected impacts to adjacent wildlands.

4.5.5 Habitat Conservation Plan for the Stephens Kangaroo Rat

The species objectives for the Stephens kangaroo rat (SKR) in the Western Riverside MSHCP were designed to incorporate the objectives and be consistent with the Long-Term Stephens Kangaroo Rat Habitat Conservation Plan (SKR Plan). Any projects that are within the MSHCP boundaries must meet the SKR Plan requirements.

Project Findings

The project is located within the SKR fee area.

4.5.6 Project Relationship to Reserve Assembly, San Jacinto Valley Area Plan (Section 3.3.13)

Reserve assembly is concerned with the identification of specific areas that are necessary to assemble a sufficiently large and diverse parcel to protect the resources of concern for that reserve. The smallest unit of a Reserve Assembly is the Cell, which individually form the basis for Cell Groups that make up Area Plans. The project site is within the San Jacinto Valley Area Plan.

All the Cells have been identified during the preparation of the MSHCP and form the basis for identifying areas of sensitivity. Areas outside Cells are generally not considered to have a high sensitivity for the species identified by the MSHCP, although they could have resources such as riparian habitat that are considered to be sensitive and require additional analysis.

Project Findings

The site is not within a cell that is part of the Reserve Assembly for the San Jacinto Valley Area Plan (Plan. It is not adjacent to any Criteria Cells, and there are no expected direct or indirect impacts to Criteria Cells. This project is not expected to affect reserve assembly for the Plan.

4.6 Jurisdictional Waters

4.6.1 Army Corps of Engineers

The Corps regulates discharges of dredged or fill material into waters of the United States. These watersheds include wetlands and non-wetland bodies of water that meet specific criteria. The lateral limit of Corps jurisdiction extends to the Ordinary High Water Mark (OHWM) and to any wetland areas extending beyond the OHWM; thus, the maximum jurisdictional area is represented by the OHWM or wetland limit, whichever is greater.

Corps regulatory jurisdiction pursuant to Section 404 of the Clean Water Act is founded on a connection or nexus between the water body in question and interstate (waterway) commerce. This connection may be direct, through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce, or may be indirect, through a nexus identified in the Corps regulations.

Project Findings

Water may have historically flowed across the project site, but the natural flow was altered years ago by the development of agriculture and more recently by the construction of adjacent residential development. There are no waters or wetland habitats that would come under the jurisdiction of the Corps.

4.6.2 Regional Water Quality Control Board

The Corps has delegated the authority for use of 404 permits to each individual state. The use of a 404 permit in California is regulated by the State Water Resources Control Board (SWRCB) under Section 401 of the Clean Water Act regulations. The Board has authority to issue a 401 permit that allows the use of a 404 permit in the state, with the authority in the state being vested in regional offices known as Regional Water Quality Control Boards (RWQCB).

Under the Porter-Cologne Act of 2003, the SWRCB has extended its responsibilities to include impacts to water quality from non-point source pollution.

In addition, the SWRCB has the responsibility to require that projects address ground water and water quality issues, which would be evaluated as part of the geotechnical and hydrology studies. Their authority extends to all waters of the State (of California).

Project Findings

Water may have historically flowed across the project site, but the natural flow was altered years ago by the development of agriculture and more recently by adjacent residential development. There are no waters or any riparian habitat that would come under the jurisdiction of the Santa Ana RWQCB or provide any Beneficial Uses (BUs) that might come under the RWQCB protection.

4.6.3 California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW), through provisions of the State of California Administrative Code, is empowered to issue agreements for any alteration of a river, stream or lake where fish or wildlife resources may adversely be affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and at least an intermittent flow of water. Lateral limits of jurisdiction are not clearly defined, but generally include any riparian resources associated with a stream or lake, CDFW regulates wetland areas only if those wetlands are part of a river, stream or lake as defined by CDFW.

Project Findings

Water may have historically flowed across the project site, but the natural flow was altered years ago by the development of agriculture and more recently by residential development to the east. There are no streams, creeks, washes, or similar waterways, or any riparian habitat, that would come under the jurisdiction of the CDFW.

4.7 Raptors, Migratory Birds, and Habitat

Most of the raptor species (eagles, hawks, falcons and owls) are experiencing population declines as a result of habitat loss. Some, such as the peregrine falcon, have also experienced population losses as a result of environmental toxins affecting reproductive success, animals destroyed as pests or collected for falconry, and other direct impacts on individuals. Only a few species, such as the red-tailed hawk and barn owl, have expanded their range in spite of or a result of human modifications to the environment. As a group, raptors are of concern to state and federal agencies.

Raptors and all migratory bird species, whether listed or not, also receive protection under the Migratory Bird Treaty Act (MBTA) of 1918. The MBTA prohibits individuals to kill, take, possess or sell any migratory bird, bird parts (including nests and eggs) except according to regulations prescribed by the Secretary of the Interior Department (16 U. S. Code 703).

Additional protection is provided to all bald and golden eagles under the Bald and Golden Eagle Protection Act of 1940, as amended. State protection is extended to all birds of prey by the CDFW Code, Section 2503.5. No take is allowed under these provisions except through the approval of the agencies or their designated representatives.

Project Findings

There is suitable nesting habitat for raptors and migratory birds in a grove of eucalyptus trees on the western boundary of Parcel B (Photo 3).There is no groves or woodlands on Parcel A suitable for nesting, although the buildings may provide some nesting for swallows are other mud nesting species, but the level of disturbance that might affect nesting birds is already occurring because of campus use. There are no suitable shrub or grassland habitats on either parcel.

Photo 3. Grove of eucalyptus on the western boundary of Parcel B.

The eucalyptus grove on the western boundary is contiguous with an existing residential development, which has already impacted nesting use in this area. While there may be an increase in noise and activity level both during construction and during site use of Parcel B, this is not expected to have a significant impact on nesting birds adjacent to the parcel.

4.8 Habitat Fragmentation and Wildlife Movement

The fragmentation of wildlife habitat and disruption of wildlife movement are recognized as important issues that must be considered in assessing impacts to wildlife. In summary, habitat fragmentation is the division or breaking up of larger habitat areas into smaller areas that may or may not be capable of independently sustaining wildlife and plant populations.

Wildlife movement (more properly recognized as species movement) is the temporal movement of species along various types of corridors. Wildlife corridors are especially important for connecting fragmented wildlife habitat areas.

Project Findings

The project site is in area already fragmented and is entirely surrounded by urban development. There are few native habitats left in the nearby surrounding areas, and impacts to wildlife movement and habitat fragmentation have already occurred. There will be no additional fragmentation of habitat or affects to wildlife movement.

5.0 Discussion

5.1 General Biological Resources

Parcel A has no native habitats. There will be a loss of approximately 8.07± acres of ruderal habitat on Parcel B. This impact is not considered to be significant.

5.2 MSHCP Consistency Analysis

5.2.1 Criteria Area Plant Species and Narrow Endemic Plant Species

There are no Criteria Area Plant Species or Narrow Endemic Plant Species identified as potentially present on site. No suitable habitat exists.

5.2.2 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2)

There is no riparian/riverine areas or vernal pools and therefore no requirement to protect species associated with these habitats.

5.2.3 Additional Survey Needs and Procedures (Section 6.3.2)

The burrowing owl is not resident on site. The available habitat is poor and is located adjacent to human use areas, making it unlikely, but not impossible, that birds will nest in suitable habitat on site in the future.

Because site conditions may change over time, we recommend a pre-construction burrowing owl survey (as described in the MSHCP) be conducted for this project to ensure no owls have moved on site since the current field survey.

5.2.4 Guidelines Pertaining to the Urban/Wildlands Interface (Section 6.1.4)

The Best Management Practices (BMPs) are not applicable to this project.

5.2.5 Habitat Conservation Plan for the Stephens Kangaroo Rat

The project proponent may be required to pay the Stephens kangaroo rat fee required under the Long-Term Stephens Kangaroo Rat Habitat Conservation Plan.

5.2.6 Project Relationship to Reserve Assembly, San Jacinto Valley Area Plan (Section 3.3.9)

The project site is not within a Cell proposed for acquisition in the San Jacinto Valley Area plan. No further action is required.

5.3 Jurisdictional Waters

The project site does not have jurisdictional waters. No further action is required.

5.4 Raptors and Nesting Habitats

There will be no significant impacts to raptors foraging or nesting habitats for native birds. Most of the original ground and shrub habitat has been substantially eliminated due to intense disking.

5.5 Habitat Fragmentation and Wildlife Movement

The project will not add to the ongoing fragmentation of habitat in this area, nor will it substantially affect wildlife movement in this area of Riverside County.

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Appendix A - Plant and Animal Species Observed

*denotes non-native plants
List does not include some cultivated or landscape plants

ANGIOSPERMAE: DICOTYLEDONES	**DICOT FLOWERING PLANTS**
Amaranthaceae	**Amaranthus family**
**Amaranthus albus*	White tumbleweed
Asteraceae	**Sunflower family**
Acamptopappus shockleyi	Goldenhead
**Cotula australis*	Australian brass buttons
Boraginaceae	**Borage family**
Amsinckia menziesii	Fiddleneck
Brassicaceae	**Mustard family**
Descurainia californicum	California tansy mustard
**Hirschfeldia incana*	Short-podded mustard
Chenopodiaceae	**Saltbush family**
**Chenopodium album*	Lamb's quarters
**Salsola tragus*	Russian thistle
Geraniaceae	**Geranium family**
**Erodium cicutarium*	Red-stemmed filaree
Malvaceae	**Mallow family**
**Malva parviflora*	Cheeseweed
Solanaceae	**Nightshade family**
Datura wrightii	Jimson weed
ANGIOSPERMAE: MONOCOTYLEDONAE	**MONOCOT FLOWERING PLANTS**
Poaceae	**Grass family**
**Avena barbata*	Slender wild oats
**Festuca octoflora*	Eight-flowered foxtail
**Hordeum murinum*	Mouse barley
**Schismus barbatus*	Mediterranean grass

Taxonomy and nomenclature follow Hickman 1993 and Munz 1974.

Animals

AVES	**BIRDS**
Columbidae	**Pigeons and doves**
Zenaida macroura	Mourning dove
Tyrannidae	**Tyrant flycatchers**
Sayornis nigricans	Black phoebe
Tyrannus vociferans	Cassin's kingbird
Tyrannus verticaulis	Western kingbird
Picidae	**Woodpeckers**
Picoides nuttallii	Nuttall's woodpecker
Corvidae	**Crows and ravens**
Corvus brachyrhynchos	American crow
Corvus corax	Common raven
Turdidae	**Thrushes**
Sialia mexicana	Western bluebird
Mimidae	**Mimic thrushes**
Mimus polyglottos	Northern mockingbird
Sturnidae	**Starlings**
Sturnus vulgaris	European starling
Icteridae	**Blackbirds, orioles and relatives**
Euphagus cyanocephalus	Brewer's blackbird
Fringillidae	**Finches**
Haemorhous mexicanus	House finch
Passeridae	**Old World sparrows**
Passer domesticus	House sparrow
MAMMALIA	**MAMMALS**
Geomyidae	**Pocket gophers**
Thomomys bottae	Botta's pocket gopher

Nomenclature follows Hall 1981 and Grenfell et al. 2003.

Appendix B - Definitions of Species Status Classification

FED: Federal Classifications

END Taxa listed as endangered

THR Taxa listed as threatened

PE Taxa proposed to be listed as endangered

PT Taxa proposed to be listed as threatened

C2* The U.S. Fish and Wildlife Service (USFWS) revised its classifications of candidate taxa (species, subspecies, and other taxonomic designations). Species formerly designated as "Category 1 Candidate for listing" are now known simply as "Candidate". The former designation of "Category 2 Candidate for listing" has been discontinued. The USFWS will continue to assess the need for protection of these taxa and may, in the future, designate such taxa as Candidates. NRAI has noted the change in species status by marking with an asterisk (*) those C2 candidates that were removed from the list.

C Candidate for listing. Refers to taxa for which the USFWS has sufficient information to support a proposal to list as Endangered or Threatened and issuance of the proposal is anticipated but precluded at this time.

BCC Bird of Conservation Concern

ND Not designated as a sensitive species

STATE: State Classifications

END Taxa listed as endangered

THR Taxa listed as threatened

CE Candidate for endangered listing

CT Candidate for threatened listing

CFP California Fully Protected. Species legally protected under special legislation enacted prior to the California Endangered Species Act.

SSC Species of Special Concern. Taxa with populations declining seriously or that are otherwise highly vulnerable to human development.

SA Special Animal. Taxa of concern to the California Natural Diversity Data Base regardless of their current legal or protected status.

WL Watch list.

ND Not designated as a sensitive species

CNPS: California Native Plant Society Classifications

1A Plants presumed by CNPS to be extinct in California

1B Plants considered by CNPS to be rare or endangered in California and elsewhere

2P Plants considered by CNPS to be rare, threatened or endangered in California, but which are more common elsewhere.

3 Review list of plants suggested by CNPS for consideration as endangered but about which more information is needed.

4 Watch list of plants of limited distribution whose status should be monitored

CNPS: Threat Codes

.1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2 Fairly endangered in California (20-80% occurrences threatened)

.3 Not very endangered in California (<20% of occurrences threatened or no current threats known)

Appendix C - Plants to be Avoided in Areas Adjacent to Wildlands

BOTANICAL NAME	COMMON NAME
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

BOTANICAL NAME	COMMON NAME
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

BOTANICAL NAME	COMMON NAME
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

BOTANICAL NAME	COMMON NAME
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.

Sources: California Exotic Pest Plant Council, United States Department of Agriculture-Division of Plant Health and Pest Prevention Services, California Native Plant Society, Fremontia Vol. 26 No. 4, October 1998, The Jepson Manual; Higher Plants of California, and County of San Diego-Department of Agriculture.