

Appendix C

Biological Resources Technical Report



**BIOLOGICAL RESOURCES TECHNICAL REPORT
ARROW COMMERCE CENTER PROJECT
BTC III ARROW ROUTE CC, LP
RANCHO CUCAMONGA**

**12451 ARROW ROUTE
RANCHO CUCAMONGA, CA 91739**

PROJECT NO.: 24001666.001A

MARCH 22, 2024

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A Report Prepared for:

BTC III Arrow Route CC, LP

BIOLOGICAL RESOURCES TECHNICAL REPORT

ARROW COMMERCE CENTER PROJECT

12451 ARROW ROUTE, RANCHO CUCAMONGA, CA 91739

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TABLE OF CONTENTS

EXECUTIVE SUMMARY	V
1 INTRODUCTION	1
2 BACKGROUND	2
2.1 PROJECT DESCRIPTION.....	2
2.2 PROJECT LOCATION	4
2.3 ENVIRONMENTAL SETTING.....	5
2.4 STUDY AREA DESCRIPTION	7
3 REGULATORY FRAMEWORK	13
3.1 FEDERAL STATUTES, REGULATIONS AND EXECUTIVE ORDERS.....	13
3.2 STATE STATUTES	15
3.3 LOCAL REGULATIONS.....	17
3.4 DEFINITION OF SPECIAL-STATUS AND SENSITIVE SPECIES	18
3.5 DEFINITION OF CRITICAL HABITAT	19
4 METHODS.....	19
4.1 DESKTOP REVIEW.....	20
4.2 FIELD SURVEYS	21
5 RESULTS	23
5.1 DESIGNATED CRITICAL HABITAT	23
5.2 VEGETATION COMMUNITIES ON SITE	23
5.3 WETLANDS AND AQUATIC FEATURES.....	24
5.4 BOTANICAL RESOURCES ON SITE.....	24
5.5 WILDLIFE RESOURCES ON SITE	27
5.6 WILDLIFE CORRIDORS	35
6 PROJECT IMPACTS.....	36
6.1 DESIGNATED CRITICAL HABITATS	36
6.2 VEGETATION COMMUNITIES.....	36
6.3 WETLANDS AND WATER FEATURES.....	36
6.4 BOTANICAL RESOURCES.....	37
6.5 WILDLIFE RESOURCES	37

6.6	WILDLIFE CORRIDORS	41
7	RECOMMENDED AVOIDANCE AND MINIMIZATION MEASURES (AMMS).....	42
8	CONCLUSION	43
9	REFERENCES	44

TABLES

1	Proposed Building Square Footage and Parking
2	Soil Types Mapped at Project Site

FIGURES

1	Vicinity Map
2	Site Map
3	Soils Map
4	Vegetation Communities
5	CNDDDB Results – Plants and Habitats
6	CNDDDB Results – Wildlife

APPENDICES

Appendix A	Special-Status Species Identified from Background Research
Appendix B	Wildlife Species Observed in the Study Area
Appendix C	Plant Species Observed in the Study Area
Appendix D	Site Photographs

**BIOLOGICAL RESOURCES ASSESSMENT
ARROW COMMERCE CENTER PROJECT
12451 ARROW ROUTE, RANCHO CUCAMONGA, CA 91739**

EXECUTIVE SUMMARY

The property is the site of a proposed warehouse development project in which five commercial warehouses will be constructed. The entire 94.25-acre property is expected to be developed. The project site is located in an urban, industrial area of Rancho Cucamonga, CA. The property has been developed for commercial and industrial uses for several decades. Most recently, the property was the site of steel mill operations. Most structures on the property have been removed as of May 2023, leaving behind bare ground, concrete surfacing, stormwater retention basins, a swale, and ruderal and ornamental vegetation, including tall windrows of trees.

A pedestrian survey was conducted by Kleinfelder biologists on August 8, 2023. Any identifying signs of habitat utilization by common, special-status, and sensitive wildlife species were recorded. All wildlife species observed, including their signs (e.g., scat, tracks, feathers, burrows), were also recorded. No sensitive species were observed during this or previous biological surveys. Natural habitat on the Site and in 200-foot buffer is limited. There are few opportunities for recruitment to the Site as the surrounding areas are highly developed and several major throughfares run near the property.

The Site is primarily composed of denuded, recently graded bare ground. The soils are generally composed of fine sand and loam, with some areas being more gravelly as a result of demolished concrete and asphalt that have been mixed into the soil. The remaining vegetation is ornamental and ruderal. The ornamental vegetation on the property is limited to tall, non-native trees that have been planted as windrows and landscaping in neighboring properties in the 200-foot buffer area. Ruderal species are concentrated around the water features, fencing, and northern portion of the site. A small 0.30-acre area of upland and riparian shrubs is found in the two retention basins on the western side of the Site. Leaf litter, thatch, logs, dead trees, and rocks are not present on Site. No natural wetlands or water courses are present. Water within the three retention basins is confined to the Study Area and does not have any upstream or downstream surface connections to jurisdictional features.

Seven special status plant species and 14 special status wildlife species were determined to have potential to occur in the Study Area based on nearby observations reported in publicly available databases and an assessment of the habitat existing on site. Plummer's mariposa-lily (*Calochortus plummerae*), Parry's spineflower (*Chorizanthe parryi* var. *parryi*), white rabbit-tobacco (*Pseudognaphalium leucocephalum*), and Brand's star phacelia (*Phacelia stellaris*) all rely on dry, rocky, gravelly, or sandy soils, which are

abundant on the Property. Some of these species grow in open areas, in which case the northern portion of the site is where they are most likely to occur, as the surface is less recently disturbed. Others grow in woodlands or scrub habitats. Those species would be expected to grow where shrub species are present, near the stormwater retention basins in the eastern portion of the Study Area. Other species that have potential to occur near these basins are paniculate tarplant (*Deinandra paniculata*), California muhly (*Muhlenbergia californica*), and San Bernardino aster (*Symphphyotrichum defoliatum*). These species grow near water sources. Paniculate tarplant and San Bernardino aster also prefer disturbed areas, making the Study Area potentially suitable.

The Crotch's bumble bee (*Bombus crotchii*) may be found on the western or eastern borders of the site. The retention basins to the east contain upland and riparian shrub habitat, and the drainage to the west offers an open area with sparse trees and low-growing vegetation, both consistent with habitats that this species relies on. The Delhi sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) may occur in the northern or eastern portions of the site, where sparse vegetation and indicator species (California buckwheat and telegraph weed) for this fly are growing. If present, this species would be present for foraging only as requisite and indicator soil types for Delhi sands flower-loving fly habitation is not present.

The California glossy snake (*Arizona elegans occidentalis*) may be found near the edges of the property as transients from the adjacent off-site open areas of denser vegetation. The Coast horned lizard (*Phrynosoma blainvillii*) may be found in the northern section of the property or along the borders of the property, as they prefer open areas with low-growing vegetation.

Cooper's hawks (*Accipiter cooperii*) and white-tailed kites (*Elanus leucurus*) may overfly the property to forage or nest in the tall trees in the northern and western areas of the Study Area. Cooper's hawks are common in parks and suburban neighborhoods, while white-tailed kites forage in grasslands or fields. The nearby agricultural lands, parks, residential areas, and natural open areas surrounding the Day Creek and Etiwanda Creek may attract these birds to this area. The loggerhead shrike (*Lanius ludovicianus*) may occur near the northern or western borders of the property, which offer the tall trees and bare ground or low vegetation that this species relies on. The California horned lark (*Eremophila alpestris actia*) may be found throughout the Site, as this species is commonly found on bare ground and open habitats with short vegetation.

The San Bernardino kangaroo rat (*Dipodomys merriami parvus*), Stephens' kangaroo rat (*Dipodomys stephensi*), San Diego desert woodrat (*Neotoma lepida intermedia*), and Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) may occur in the southeastern portion of the Site, near the stormwater basins where upland and riparian shrubs are growing. They may also occur in the northern portion of the site where low vegetation is growing. While the fine, sandy/loamy soils that these three

species require is abundant, vegetative cover and forage material is absent throughout most of the Site. The western yellow bat (*Lasiurus xanthinus*) may be found roosting in trees and foraging near the water retention basins. The western mastiff bat (*Eumops perotis californicus*) may roost in crevices in neighboring buildings. Suitable habitat consists of extensive open areas, which the Study Area provides.

The proposed project will develop the entire property, eliminating nearly all habitat for common or sensitive species. All trees on the property will be removed for this project, eliminating any existing nesting, roosting, or perching sites. Two stormwater retention basins and a swale will be removed for this development, which will impact wildlife species that rely on this water source for reproduction or foraging. The removal of Basin 2, at the southeast corner of the property, will eliminate 0.30 acres of mixed upland and riparian shrubs, which have potential to be used as nesting or foraging sites.

Potential impacts to common, sensitive, and special-status wildlife species could be caused by heavy equipment operation, excavation, tree removal, associated noise, and pedestrian and vehicular traffic. Heavy equipment may disrupt or destroy nests and burrows and injure or kill wildlife present on site. Any species using the site may be directly impacted by construction efforts by being excluded from burrows or territories. Potential impacts to botanical resources could be caused by heavy equipment operation, excavation, and vehicular traffic. The entire property is expected to be developed, eliminating nearly all habitat for plant or wildlife species.

No critical habitat or sensitive vegetation communities are expected to be directly impacted. Of the sensitive plant species that have potential to occur, none were observed in the Study Area. While appropriate soils for several species are abundant on site, the ground has been heavily disturbed since 1985 and the plant communities these species are typically a part of are not present on site. No native trees will be removed for the proposed project. No wildlife corridors or migration routes will be impacted by the project. No wetlands or jurisdictional water features occur within the Study Area.

1 INTRODUCTION

Kleinfelder, Inc. (KLF) has prepared this biological resources technical report at the request of BTC III Arrow Route CC, LP for a 94.247-acre property located at 12451 Arrow Route, Rancho Cucamonga, California. Additional addresses for the project site include 12343, 12353, 12455, and 12459-B Arrow Route. The property encompasses Assessor's Parcel Numbers (APNs) 0229-121-33; 0229-121-34; 0229-121-35; and 0229-131-19. For the purposes of this report, the Study Area comprises this property and a 200-foot buffer. The property is the site of a proposed distribution warehouse development, the Arrow Commerce Center Project, in which the entire property will be developed. The development includes five warehouse buildings, ancillary truck loading bays, vehicle parking areas, and paved access roads. The site has been used for agriculture, industrial, and commercial purposes since the 1930s. It is located in a highly industrialized area within the incorporated City of Rancho Cucamonga. As of May 2023, all major structures on site have been demolished and the property mainly consists of bare ground, asphalt pavement or concrete surfacing, and ornamental or ruderal vegetation. Natural communities present can be described as developed, disturbed, ornamental, and ruderal. "Natural" habitat remaining at the Site occurs in small pockets of formerly developed areas, such as retention basins and fallow soil stockpiles.

At the request of the City of Rancho Cucamonga, Ascent Environmental, Inc. (Ascent) is completing an environmental assessment of the proposed project following the California Environmental Quality Act (CEQA) guidelines. Through its partnership with Ascent, KLF is preparing technical reports supporting the environmental analysis.

The purpose of this report is to address the potential for and, if present, the location of sensitive or special-status biological resources within the Study Area, identify biological constraints to future development, and recommend mitigation measures, where necessary. This report has been prepared to provide sufficient information for an informed biological analysis as per CEQA guidelines.

2 BACKGROUND

The project site has been developed since at least 1938, where it first was used as agricultural land for row crops. Related structures were added to the parcel during the 1950s. By 1959, parking areas, a storage yard, an office building, and a water tower had been added to the eastern portion of the property. Rail spurs looped through the southern section of the site. The site continued to be used and developed for agriculture until around 1973. By 1975, the southwestern section of the property had been graded and was being used for materials storage. The northernmost portion of the property remained agricultural until 1981. By 1985, all agricultural activities had ceased, and the site was converted to industrial use. By May 1994, the windrows at the north of the property had been planted. These windrows are now one of the few remaining features of the site.

Commercial Metals Company (CMC) was conducting rebar manufacturing and was operating a steel mill until October 2021, Phoenix Industries was conducting slag processing on the property until 2021. During this time, the property was occupied by materials storage, a melt shop building, stockpiles of sand/gravel and crushed concrete, a furnace building, a cooling tower, and related structures. These have all been demolished as of May 2023, leaving bare ground and depressions where developments were removed.

2.1 PROJECT DESCRIPTION

The following project description is developed from the Notice of Preparation (NOP). The project site is located at 12451 Arrow Route in the City of Rancho Cucamonga. The project site is identified by four Assessor Parcel Numbers: 0229-121-33; 0229-121-34; 0229-121-35; and 0229-131-19 and includes approximately 4,105,388 square feet (94.247 acres) of gross lot area and 3,513,101 square feet of net lot area (approximately 80.65 acres). The project site is bounded by Arrow Route to the north, industrial land uses to the east, the Atchison Topeka and Santa Fe Railway (AT/SF Railway) to the south, and industrial manufacturing and undeveloped land uses to the west. The project site is located within the Neo-Industrial and Industrial Employment Districts of the City and is zoned Neo-Industrial (NI) and Industrial Employment (IE). The proposed project's regional setting and vicinity are shown on Figures 1 and 2, respectively.

BTC III Arrow Route CC, LP (applicant) is proposing to develop the project site, which would include the demolition and site clearing of surface paved areas and the construction, use, and maintenance of five two-story (single-story with mezzanine) buildings for general warehouse space, associated office space, and loading docks for truck trailers, and include 922 automobile parking spaces and 424 truck trailer parking spaces. The proposed project would also include the creation of a new vehicle circulation system, water quality basins, utility infrastructure, exterior lighting and signage, and provide roughly

10 percent landscape coverage. In total, the proposed project would introduce approximately 1,830,729 gross square feet of new building floor area. Vehicle access to the project site would be provided by public roadways connecting the project site to Arrow Route and Etiwanda Avenue.

Table 1 provides a summary of proposed building square footage and parking stalls for the proposed project.

Table 1.1 Proposed Building Square Footage and Parking

Building Number	Warehouse (sf)	Office 1 st Floor (sf)	Office 2 nd Floor (sf)	Total Building (sf)	Automobile Parking Stalls		Trailer Parking Stalls	
					Required	Provided	Required	Provided
1	80,223	7,000	3,000	90,223	80	81	11	11
2	73,929	5,000	3,000	81,929	70	70	8	8
3	62,637	5,000	3,000	70,637	68	69	8	8
4	1,020,861	30,000	20,000	1,070,861	457	478	158	300
5	497,079	10,000	10,000	517,079	224	224	97	97
Total	1,734,729	57,000	39,000	1,830,729	918	922	223	424

Notes:

Sf = square feet

Source: HPA Architecture, February 6, 2023.

Each warehouse will include standard loading docks and an administrative office space. Buildings 1, 2, and 3 will be built side by side in the northernmost section of the site, along Arrow Route. Building 1 is projected to be 90,173 sq. ft., building 2, 81,929 sq. ft., and building 3, 70,637 sq. ft. The fourth and largest building, 1,070,861 sq. ft., will occupy the remainder of the western portion of the property. The fifth building, 517,079 sq. ft., will be located at the eastern end of the property. Dock-high doors will be constructed along portions of the warehouses. The buildings will be surrounded by asphaltic concrete pavements in the parking and drive lanes. The remainder of the plot will be paved for parking, driveways, and a new street network for circulation within the project site. A new street, Yellow Wood Road, a continuation of Juneberry Drive, will run between buildings 4 and 5. A new public street will border the rest of the property, running along the eastern, southern, and western borders of the site, eventually intersecting with Arrow Route.

As of August 2023, the property mainly consists of bare ground, asphalt paving and concrete surfacing, and ornamental or ruderal vegetation. Entering from Juneberry Drive, there is an asphalt entrance with a driveway, parking spaces, and chain-link fencing. A guard gate and guard shack are located at the entrance as well. These structures and vegetation will be removed for the purposes of the project.

Three stormwater retention basins are located in the Study Area. One is located in the southeast corner of the property, the largest is on Goodman property and abuts the eastern border of the BTC III Arrow

Route property, and a channel leading to a shotcrete stormwater retention basin is located near the southern border. A concrete-lined swale is located above the northeastern border of the property. These structures will all be removed for the purposes of the project.

The types of tenants that would occupy the proposed buildings and the resulting business activities that would be conducted are not known at this time. For the purpose of evaluating the proposed project's environmental effects in the Draft EIR, the proposed buildings will be assumed to be used as General Warehouse, High-Cube Fulfillment Center (non-sorting), and High-Cube Cold Storage Warehouse. The proposed project will require approval of the following applications from the City: design review, tentative and final parcel map, conditional use permit, zoning map amendment, and master plan.

2.2 PROJECT LOCATION

The project site is located at 12451 Arrow Route in the City of Rancho Cucamonga. Additional addresses for the project site include 12343, 12353, 12455, and 12459-B Arrow Route. The site is generally located 1.7 miles north of Interstate 10, 0.15 miles east of Interstate 15, 2.5 miles south of State Route 210 and 0.2 miles west of Etiwanda Avenue in the City of Rancho Cucamonga, California. The site is depicted on the Guasti quadrangle of the United States Geological Survey's (USGS) 7.5-minute map series within Section 8 and Section 17 of Township 1 South, Range 6 West. The site includes APN 022-912-133, 022-912-134, 022-912-135, and 022-913-119. The location of the site can be found on the Site Location Map in Figure 1 of this report.

The area surrounding the property is developed as high intensity industrial and commercial with large buildings, roads, and highways, and very few natural or undisturbed spaces. Warehouses, industrial facilities, commercial buildings, and residential neighborhoods surround the property, as well as major roadways, including a highway less than half a mile from the property. The property is accessible via Arrow Route and Juneberry Drive.

The site is bounded to the north by Arrow Route, one of the major roads in the Rancho Cucamonga. Across this road are warehouses owned by AMQ Solutions and Planet Storage. Further north are more warehouses, commercial and industrial businesses and associated parking lots, and a large residential area extending up to the base of the San Bernardino Mountains. The Interstate 15 and State Route 210 and several other major throughfares cut through the city in this area. The Etiwanda Creek and Day Creek run north to south through this area as well, taking source north of the property in the San Bernardino Mountains. Approximately 3.5 miles north of the Property, natural open spaces become abundant where the city approaches the San Gabriel mountains.

To the east, the site is bordered by a Goodman Logistics warehouse and stormwater retention basin and, a steel mill owned by Tree Island Wire, and a truck trailer parking lot owned by Central Transport. Etiwanda Avenue, another major throughfare, runs to the east of this warehouse. The Etiwanda Creek channel runs north to south 0.36 miles east of the property. The creek is surrounded by a natural area vegetated with annuals and shrubs. Southeast of the property, beyond the creek, is a heavily industrialized area. An automobile speedway racing track is located 1.1 miles southeast of the property. Continuing south and southwest, a stretch of nearly 15 sq. mi. of land is developed as large commercial warehousing, storage yards, trailer truck lots, other industrial uses. Beyond this is a residential area and the undeveloped Jurupa Hills. Interstate 10 runs through this area. Northeast of the property is a primarily residential area with some commercial and industrial areas dotted throughout.

The Atchison Topeka and Santa Fe railroad, abuts the site to the south. This railroad is currently active and operated by BNSF/Metrolink. Beyond the railroad is the site of a now demolished power plant, as well as a Southern California Edison (SCE) electrical substation. A highly developed and industrialized area continues south for nearly 6 miles, developed with numerous warehouses, large commercial buildings, and storage yards. Interstate 15 and Interstate 10 cut through this area. The Etiwanda Creek runs diagonally northeast to southwest through this industrial area. The creek is surrounded by an undeveloped strip of land approximately 350 feet wide along its entire course. The Day Creek runs north to south through this area as well. This creek is also bordered by an undeveloped, natural 300-foot-wide strip of land along most of its course.

To the west is an aluminum recycling facility owned by Parallel Products and Copart, an automobile auction sales lot. The Day Creek runs southward 0.25 miles west of the property. The creek channel is bordered by a strip of undeveloped, natural land. Interstate 15 is located just 0.20 miles from the property. Beyond the interstate is a mixed industrial, commercial, and residential area. The northwestern section is primarily residential, becoming more industrial to the southwest and close to the property, with large warehouses and commercial centers. Areas of undeveloped land are dotted throughout this region. The Ontario Mills, a large shopping mall, is located 1.4 miles southwest of the property. The Ontario International Airport is located 3.4 miles southwest of the property. Interstate 10 runs through this area, north of the airport.

2.3 ENVIRONMENTAL SETTING

The proposed project is located in Rancho Cucamonga, south of the foothills of the San Gabriel Mountains and Angeles National Forest in San Bernardino County, California. The site is located within the San Bernardino Valley, a large valley within Southern California at the southern base of the Transverse Ranges. The valley is bordered by the San Gabriel and San Bernardino Mountains to the north, the San Jacinto

Mountains to the east, the Temescal Mountains and the Santa Ana Mountains to the south, and Pomona Valley to the west. Two drainage basins of the Santa Ana River are within San Bernardino Valley. The Santa Ana River is the major hydraulic feature of the valley draining surface flows from the surrounding mountain ranges and urban run-off to the Pacific Ocean. The Study Area lies within the Santa Ana watershed (HUC 180702030804).

The topography of the city slopes downward from the foothills in the north into the Santa Ana River. The San Bernardino valley is formed by a series of coalescing alluvial fans and is located along the northeastern portion of the Chino Subbasin within the Upper Santa Ana Valley Groundwater Basin. Rancho Cucamonga's climate is hot-summer Mediterranean, with hot, dry summers and most of the year's rainfall occurring in the winter.

The property is located near two riverine systems that run north to south in Rancho Cucamonga. To the east, 0.36 miles from the property, is the East Etiwanda Creek. To the west, the Day Creek is located 0.25 miles from the property.

The Etiwanda Creek runs parallel to Etiwanda Avenue and is an intermittent, seasonally flooded riverine system, classified as R4SBC by the National Wetlands Inventory (NWI). Etiwanda Creek drains runoff from the San Bernardino Mountains while heading south through Rancho Cucamonga, where it becomes channelized. It flows south into Riverside County and then flows into the Santa Ana River. The creek supports alluvial, mixed scrub, and scale broom scrub habitat within 5 miles of the Study Area (Rancho Cucamonga 2020 General Plan). Due to the intermittent and seasonal nature of water flow, robust aquatic and riparian habitats are not expected. Along most of its course, the creek is bordered by undeveloped land, including the portion of the creek that runs closest to the Study Area. North of the Study Area, the creek supports alluvial habitat, although there is ruderal and ornamental vegetation nearby as well. South of the property, the Etiwanda Creek was previously bordered by a vineyard; however, the land has been largely undisturbed and undeveloped since at least 1994 according to aerial imagery. The creek provides alluvial habitat here as well. Ruderal forbs, grasses, and low shrubs are the dominant vegetation type closer to the avenue. These open areas likely provide shelter, foraging, and nesting/breeding resources for wildlife and provide an opportunity for them to move north and south through the city.

The Day Creek is a concrete-lined artificial drainage channel that is an intermittent and seasonally flooded riverine system classified as R4SBCr by NWI. The Day Creek collects runoff from Cucamonga Peak before running south through the Valley Region. It flows from an alluvial fan at the base of the San Bernardino Mountains before the creek passes through the City of Rancho Cucamonga. It is then channelized and runs through several basins as it runs south into Riverside County before flowing into the Santa Ana River. The Day Creek supports mixed scrub, scale broom scrub, and non-native grassland habitats within 5-miles

of the Study Area according to the Rancho Cucamonga 2020 General Plan. The undeveloped Day Creek utility and flood control open space corridor which runs through Rancho Cucamonga is likely to facilitate wildlife movement from the mountains to the north of the city through the southern end of the city and may provide at a minimum a throughfare for wildlife, but it could provide additional resources. Due to the intermittent and seasonal nature of water flow, robust aquatic and riparian habitats are not expected. Scattered sycamores occur downstream in the various drainages and are included in the alluvial wash vegetation type. Day Creek and Etiwanda Creek were previously documented as containing southern sycamore-alder riparian woodland with a variety of species such as white alder (*Alnus rhombifolia*) and canyon live oak (*Quercus chrysolepis*). At least 5,000 acres of Riversidian Alluvial Fan Sage Scrub are present to the north within a 5-mile radius of the Study Area. The Day Creek runs through this habitat.

Few agricultural areas remain in Rancho Cucamonga. A 12-acre plot used for row crops is located northwest of the Study Area, across Interstate 15. A 19-acre orchard is located 0.85 miles south of the property. The largest agricultural area near the Study Area is found about 3.5 miles northeast, at the junction of Interstate 15 and State Route 210. Crops and orchards surround the junction of Interstate 15 and State Route 210 in a 1.32-square-mile area of agricultural land. This land has been used for agriculture since at least 1985.

The Ontario International Airport is located 3.1 miles southwest of the Study Area. The airport encompasses large open grassy areas. Although noise and light pollution are high, species that rely on grasses, low vegetation, and open land may find resources here.

Small parks and golf courses are found throughout the city. Mowed grass, trees, and ornamental vegetation can provide nesting, perching, and food resources. A small number of natural areas vegetated with mixed shrubs are dotted throughout the city as well. A 70-acre natural mixed scrub habitat is located 2.3 miles northwest of the property, providing habitat for a variety of native plants and wildlife.

2.4 STUDY AREA DESCRIPTION

The study area includes the 94.25-acre property and a 200-foot buffer. The study area is generally flat, with a gradual slope to the south. The elevation on the property is between 1,130 to 1,165 feet above mean sea level (msl). Most of the property is currently undeveloped and composed of bare ground with minimal vegetation. Recent earthwork by heavy equipment was evident on significant portions of the property. Blade scrap marks and track chain marks were conspicuous. Some non-natural depressions were observed in the eastern section of the site, likely caused by the removal of former structures. These also show evidence of recent earthwork with compressed soils and equipment tracks. Evidence of ponding or surface water retention was not observed in the depressions. Crushed gravel/asphalt is present

throughout the site in areas that were previously paved. In some areas, particularly the northern section of the property, loose, fine sandy soils are present.

An asphalt entrance, parking spaces, guard gate, and guard shack are located off Juneberry Drive. An ornamental camphor tree (*Camphora officinarum*) is planted in this area. There are very few poles and structures on the property. The poles and concrete barriers on site are generally short, no more than three feet tall. Chain-link fencing is present around the property and surrounding the two stormwater retention basins. Large gravel piles, totaling 1-2 acres are found in the center of the property. These stockpiles are about 40 feet tall, ranging from 40-100ft at the base.

In the northern section of the property, adjacent to Arrow Route and Juneberry Drive, four windrows of trees enclose an area that is sparsely covered with ruderal vegetation. The trees create a square, each side measuring about 800 feet. The windrows are primarily made up of Aleppo pine (*Pinus halepensi*), eucalyptus (*Eucalyptus* sp.), and Mexican sycamore (*Platanus mexicana*). Before demolition, one large building occupied the space and the remainder was fully paved with concrete. In some areas, concrete is now mixed with the soil, creating a coarse gravelly texture. Other areas have the fine, sandy/loamy soil that is native to this area. Ruderal vegetation is loosely growing throughout most of this area, in total covering about 25 percent of the ground. The remainder is bare, dry ground. The most abundant species present are a mix of native and non-native annual forbs and grasses, primarily prickly lettuce (*Lactuca serriola*), telegraph weed (*Heterotheca grandiflora*), flax leaved horseweed (*Erigeron bonariensis*), horseweed (*Erigeron canadensis*), and cowpen daisy (*Verbesina encelioides*).

A 600-foot-long windrow of Aleppo pines (*Pinus halepensi*) is planted east of Juneberry Drive, within the 200-foot buffer. Ruderal vegetation was observed beneath these trees as well, with prickly lettuce, stinknet (*Oncosiphon piluliferum*), telegraph weed, and great brome (*Bromus diandrus*).

A concrete and rip rap swale is located along the northeastern border of the property. The slopes and borders of the swale are well vegetated with a number of ruderal species, primarily cowpen daisy, pitseed goosefoot (*Chenopodium berlandieri*), prickly lettuce, telegraph weed, puncture vine (*Tribulus terrestris*), black mustard (*Brassica nigra*) and annual grasses and bunch grasses. California buckwheat (*Eriogonum fasciculatum*) is also present on the western end of the swale. The swale was dry at the time of the field visit and no hydrophytic plants or wildlife species were observed.

A small island of ornamental trees is located at the center of the property, which includes blue jacaranda (*Jacaranda mimosifolia*), orchid tree (*Bauhinia variegata*), and mulberry (*Morus* sp.). Sparse ruderal vegetation was growing in this area, including black nightshade (*Solanum nigrum*), prickly lettuce, and Bermuda grass (*Cynodon dactylon*).

AQUATIC FEATURES

Two stormwater retention basins are located on the property. A third basin, a swale, and two drainages are located within the 200-foot buffer of the Study Area (Figure 2). The retention basins, regional drainages, swale, and channels in the Study Area are not listed by the NWI. No National Hydrography Database (NHD) wetland water features were identified in the Study Area.

RETENTION BASIN 1 - SOUTHWEST

This basin and associated channel are located near the southwest corner of the property. It is a manmade structure, fully lined with shotcrete, designed to direct and retain surface water runoff from the property. It was added to the property in January 2006. The basin is 200 feet long and 138 feet wide at the widest point. A 224-foot channel runs northward from the basin and was originally connected to much a longer channel that collected water from the center of the property. By May 2023 this longer upper channel had been demolished.

The basin was dry at the time of the field survey. Aerial imagery shows this basin typically holds water from October to April. These images do not show evidence of significant vegetation growth in or near the basin or channel at any time since its creation. During the field survey, no notable soil accumulation was observed in the basin, and no riparian or hydrophytic species were present. Sparse ruderal vegetation was growing at the bottom of the basin. Staining along the slope indicates that standing water up to 6 feet deep was present in the basin this year following above-average rainfall.

RETENTION BASIN 1 - SOUTHEAST

This basin is located near the southeastern border of the property and is designed as a collection point for stormwater runoff. The basin is 362 feet long and 70 feet wide. Aerial imagery shows the basin had been created by August 2019 and has held water in the winter and spring since then. It is a manmade structure with a natural, native soil bed. The slopes are protected with erosion control mats.

The basin was dry at the time of the field survey. The edges and slopes of this basin are vegetated with shrubs, primarily mule fat (*Baccharis salicifolia*), willow (*Salix sp.*), and salt cedar (*Tamarix sp.*), as well as annual forbs including telegraph weed and field mustard (*Brassica rapa*). Mule fat, willow and salt cedar are hydrophytic species that are typically found along stream banks or other water sources. Staining and debris along the slope indicate that standing water up to 5 feet deep was present in the basin this year following above-average rainfall. Although the natural soil bed and seasonal water provide adequate habitat for riparian species, the manmade nature of the basin and the stormwater retention function led to the conclusion that this basin does not constitute a wetland.

RETENTION BASIN 3 - EAST

This basin is located within the 200-foot buffer of the Study Area, on the neighboring Goodman property. The basin was constructed around 2015 to collect stormwater runoff. It has a natural soil bed and is populated with a dense mixture of riparian and upland species. The basin was dry at the time of the field survey. The basin measures 880 feet long and 172 feet wide.

On the borders and top of the slopes, California buckwheat, sagebrush, cowpen daisy, and bush sunflower (*Encelia californica*) are present. Further into the basin, hydrophytic species such as mule fat, salt cedar, and tree tobacco (*Nicotiana glauca*) become more abundant. These plants are mature and well established. Annual forbs and grasses cover the rest of the ground. Growth of these annuals is limited to periods when the basin is not holding water.

The basin does not qualify as jurisdictional wetland habitat, but the natural soils and water retention do support a limited number of hydrophytic species and upland vegetation.

REGIONAL DRAINAGE - SOUTHWEST

This regional drainage is located adjacent to the property, just beyond the southwest corner within the 200-foot buffer of the Study Area (Figure 2). This 4.9-acre area has been undisturbed since at least 1994, although the surrounding areas have been routinely developed and disturbed during that time.

This drainage point directs stormwater from surrounding areas into culverts below the railroad tracks. The area surrounding the drainage is vegetated with upland and ruderal species, and a row of trees has been planted in the northern section of the plot. There is no evidence of ponding, water retention, or consistent water flow. It does not provide adequate habitat for riparian species; however, it has potential to provide habitat for species that rely on sandy/loamy soils.

REGIONAL DRAINAGE - SOUTHEAST

This regional drainage is located at the southeast corner of the BTC III Arrow Route property and directs surface water to culverts below the railroad tracks. Low concrete walls and fencing surround the drainage. Ruderal vegetation, primarily field mustard, spotted spurge (*Euphorbia maculata*), and Maltese star-thistle (*Centaurea melitensis*), as well as a Mexican fan palm (*Washingtonia robusta*) and tree tobacco occupy this area. A 115-foot-long area between this drain and Basin 2 has been protected with erosion control mats, as surface water from the property that is not captured by the drainage or basin flows through this area, causing soil erosion.

SWALE - NORTHEAST

A concrete and rip rap swale is located along the northerneastern border of the property. The swale is roughly 3 feet deep, 29 feet wide, and 360 yards long, divided in the center by a driveway. A culvert under the driveway connects the bisected drainage swale. Bollards line the edges of the swale. Aerial imagery indicates that the swale was added to the property in 2016. A drain is located at the western end of the eastern segment of the swale, and another drain is located at the far west end, near the pine trees.

Although the swale is concrete-lined, soil has accumulated inside the swale and along the outer slopes. The soil is made of fine sand and gravel. The swale is well vegetated with a mixture of native and non-native species of grasses, bunchgrasses, and herbaceous annuals. The swale was dry at the time of the site visit. The most prominent species were prickly lettuce, telegraph weed, puncture vine (*Tribulus terrestris*), black mustard (*Brassica nigra*), and California buckwheat. No hydrophytic plants or wildlife species were observed.

SOILS

The soil types mapped at the project site from the NRCS Web Soil Survey include a mosaic of soils. The following table summarizes the soils found within the Study Area:

Table 2.1 Soil Types Mapped at Project Site

Soil Map Unit Name	Soil Map Unit Symbol
Tujunga loamy sand, 0 to 5 percent slopes	TuB
Tujunga gravelly loamy sand, 0 to 9 percent slopes	TvC

The Study Area soils are composed 84 percent of TuB soils and 16 percent of TvC soils. Tujunga soils consist of very deep, somewhat excessively drained soils that formed in alluvium from granitic sources. Tujunga soils are on alluvial fans and floodplains, including urban areas. None of the soils present are listed as hydric.

3 REGULATORY FRAMEWORK

Sensitive biological resources are protected under various federal, state, and local ordinances. These resources include special-status plant and wildlife species, nesting birds, riparian and other sensitive habitats, and wetlands and waterways. Compliance with the following may be required for sensitive biological resources with the potential to occur in the Study Area.

3.1 FEDERAL STATUTES, REGULATIONS AND EXECUTIVE ORDERS

Federal Endangered Species Act

The Federal Endangered Species Act (FESA), administered by the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS), provides protection to plant and wildlife species listed as endangered or threatened. In general, USFWS has jurisdiction over terrestrial and freshwater species, while NMFS has jurisdiction over ocean-going species.

Section 9 of FESA generally prohibits all persons from causing the "take" of any member of a listed species. (16 U.S.C. § 1538). This prohibition applies mainly to animals; it only extends to plants in areas "under federal jurisdiction" and plants already protected under state law. (*Id.*, subd. (a)(2)(B); see also *Northern Cal. River Watch v. Wilcox* (9th Cir. 2010) 620 F.3d 1075).

"Take" is defined in the statute as, "... to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." (16 U.S.C. § 1532(19).) Harass is defined in regulation as "...an intentional or negligent act or omission that creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavior patterns that include, but are not limited to, breeding, feeding, or sheltering." (See 50 CFR § 17.3.) Harm is defined in the regulation as "...significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering." (*Id.*) Despite the general prohibition against take, FESA in some circumstances permits "incidental take," which means take that is incidental to, but not the purpose of, the carrying out of an otherwise lawful activity. (16 U.S.C. § 1539(a).) Under section 10 of FESA, persons seeking permission to engage in actions that could result in such incidental take can obtain such permission through the approval of a habitat conservation plan (HCP) by either USFWS or NMFS. (16 U.S.C., § 1539(a).)

Proposed *federal* actions that would result in take of a federal-listed or proposed species require consultation with USFWS or NMFS under section 7 of FESA. (*Id.*, § 1536.) The objective of consultation is to determine whether the proposed federal action would jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat. Where such an outcome would not occur, USFWS

or NMFS must still impose reasonable and prudent measures to minimize the effects of the incidental taking. Where such an outcome could occur, USFWS or NMFS must propose reasonable and prudent alternatives that, if implemented, would avoid such an outcome. (*Id.*)

Compliance with FESA can be achieved under Section 7 or 10 of FESA depending on the involvement of the federal government. Section 7 requires federal agencies to make a finding on all federal actions, including the approval by an agency of a public or private action, such as the issuance of a “404 permit” for filling wetlands by the U.S. Army Corps of Engineers (USACE), on the potential of the action to jeopardize the continued existence of any listed species impacted by the action or to result in the destruction or adverse modification of such species’ critical habitat. Provisions of Section 10 are implemented when there is no federal involvement in a project except compliance with FESA. A take not specifically allowed by federal permit under Section 7 or Section 10(a)(1)(B) of the FESA is subject to enforcement through civil or criminal proceedings under Section 11 of the FESA.

Section 404 of the Clean Water Act

USACE is responsible for the issuance of permits for the placement of dredged or fill material into waters of the United States (waters) pursuant to Section 404 of the Clean Water Act (CWA) (33 USC 1344). As defined by USACE in federal regulations found at 33 CFR 328.3(a)(3), waters are those that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; tributaries and impoundments to such waters; all interstate waters including interstate wetlands; and territorial seas.

Under USACE and U.S. Environmental Protection Agency (EPA) regulations, wetlands are defined as: “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” (33 C.F.R. § 328.3(c)(4); 40 C.F.R. § 122.2.)

In non-tidal waters, the lateral extent of USACE jurisdiction is determined by the ordinary high water mark (OHWM), which is defined as the: “... *line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*” (33 CFR 328[e]). In tidal areas, USACE jurisdiction under Section 404 of the Clean Water Act extends to the high tide line which, in the absence of actual data, is defined as “*a line of oil or scum along shore objects, a more or less continuous deposit of fine shells or debris on the foreshore or berm, other physical markings or characteristics,*

vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide.” (33 C.F.R. § 328.3.)

Section 401 (Water Quality Certification)

Pursuant to Section 401 of the CWA (33 U.S.C. § 1341), USACE cannot issue a federal permit under Section 404 until the State of California first issues a water quality certification or waiver to ensure that a project would comply with state water quality standards. The authority to issue water quality certifications in San Bernardino County is vested with the Regional Water Quality Control Board (RWQCB).

Migratory Bird Treaty Act

USFWS also administers the Migratory Bird Treaty Act of 1918. All native species of birds are protected during active nesting. The protection extends to the adult birds and nest contents, including eggs and nestlings. (See 16 USCA § 703.)

Invasive Species - Executive Order 13112

This order establishes a national policy to prevent the introduction of invasive species and provide for their control, as well as to minimize the economic, ecological, and human health impacts that invasive species cause. Federal agencies whose actions may affect the status of invasive species are to identify such actions, use relevant programs, as budgetary constraints permit, to: (a) prevent introductions of invasive species; (b) detect and control populations of such species; (c) monitor populations of invasive species; (d) provide for restoration of native species; (e) conduct research leading to prevention of introductions and more effective control measures; and (f) promote public education on invasive species.

3.2 STATE STATUTES

California Endangered Species Act

The California Department of Fish and Wildlife (CDFW) administers a number of laws and programs designed to protect fish and wildlife resources. Principal of these is the California Endangered Species Act of 1984 (CESA Fish and Game Code Section 2050 et seq.), which regulates the listing and take of state endangered and threatened species, as well as candidate species. Under Section 2081 of CESA, CDFW may authorize take of an endangered and threatened species, or candidate species. In approving an incidental permit, CDFW must ensure, among other things, that “[t]he impacts of the authorized take shall be minimized and fully mitigated.” Further, “[t]he measures required to meet this obligation shall be roughly proportional in extent to the impact of the authorized taking on the species. Where various measures are

available to meet this obligation, the measures required shall maintain the Applicant's objectives to the greatest extent possible. All required measures shall be capable of successful implementation.”

Porter-Cologne California Water Quality Control Act

Waters of the State are subject to the jurisdiction of the Regional Water Quality Control Board (RWQCB) and CDFW. The RWQCB also has authority under CWA Section 401 to issue water quality certifications for projects subject to Corps 404 permits for the discharge of fill material, and the CDFW has regulatory over rivers, creeks, and streams under Fish and Game Code section 1600 *et. seq.*

The Porter-Cologne Water Quality Control Act (California Water Code, Division 7, Sections 13000- 14958.) provides for statewide coordination of water quality regulations. This act established the California State Water Resources Control Board as the statewide authority, and nine separate RWQCBs to oversee water quality on a day-to-day basis at the regional/local level. Proposed discharges of waste that would affect State waters (that are not Federal waters) within or adjacent to the Proposed Action Area would require a Report of Waste Discharge from RWQCB. A Stormwater Pollution Prevention Plan will be prepared by a licensed individual and filed with the RWQCB prior to initiating construction.

Native Plant Protection Act (Sections 1900–1913 of the California Fish and Game Code)

The legal protection afforded listed plants under this act includes provisions that prohibit the taking of plants from the wild and impose a salvage requirement for landowners. If a landowner has been informed of a listed plant species on his property, CDFW must be notified at least 10 days in advance of any land use change that might affect the species or its habitat, thereby affording CDFW an opportunity to conduct a salvage operation. Candidate species are also protected from taking by the Native Plant Protection Act.

CDFW has demonstrated a general policy of regarding many of the plants on the California Rare Plant Rank (CRPR) Lists 1 and 2 (California Native Plant Society [CNPS]) as meeting the definitions of Chapter 10, Section 1901 of the Native Plant Protection Act. As such, those plants also qualify for protection under the California Environmental Quality Act (CEQA). In addition, plants on CNPS Lists 3 and 4, as well as unique plant communities, are often informally protected under this act.

Section 3503 of the California Fish and Game Code – Protection of Active Bird Nests

This section of the California Fish and Game Code (CFG) protects active bird nests from disturbance. Measures must be taken to avoid project-related impacts that might destroy an active nest or cause a nest to be abandoned due to disturbance.

Section 1600 et seq. of the California Fish and Game Code

The riparian zone of a waterway, to the outer dripline of trees and shrubs, is subject to CDFW jurisdiction under Section 1602 of the CFG. A Lake and Streambed Alteration Agreement is required if the project will: 1) divert, obstruct, or change the natural flow or the bed, channel, or bank of any river, stream, or lake; 2) use materials from a streambed; or 3) result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake.

3.3 LOCAL REGULATIONS

County of San Bernardino Land Use Services, Planning Division

According to the County's Valley-Mountain Region Biotic Resources Overlay Map, the Study Area is not located within any County of San Bernardino overlay zones.

Rancho Cucamonga General Plan

According to the Resource Conservation chapter of Rancho Cucamonga's General Plan, the city is focused on recognizing, protecting, and maintaining the city's natural resources. General Plan policies that are relevant to the Arrow Commerce Center Project are described below. These policies provide goals, policies, and guidance regarding the City's natural resources and their preservation.

Goal RC-3: Habitat Conservation. This goal aims to protect or improve "wildlife habitats that support various plants, mammals, and other wildlife species." RC-3.1 states that Rancho Cucamonga will encourage the preservation of the integrity of sensitive land resources that have significant native vegetation and/or habitat value such as riparian areas, creek corridors, Riversidian Alluvial Fan Sage Scrub, wetlands, and sensitive wildlife habitat that supports biological resources. Goals RC-3.2 and RC-3.3 allow and encourage the expansion of the nearby Day Creek and Etiwanda Creek Preserves, as well as the creation and maintenance of wildlife corridors with an emphasis on wildlife connectivity between habitats and the national forest. Goal RC-3.4 encourages new developments to incorporate native vegetation into landscape plans and prohibit the use of known Cal-IPC invasive species. Lastly, RC-3.6 directs new developments to limit grading and vegetation removal to the minimum extent necessary for construction.

City of Rancho Cucamonga Development Code, Chapter 17 – Tree Preservation

Rancho Cucamonga recognizes trees as a valuable natural resource that are worthy of preservation and aims to protect trees from indiscriminate cutting or removal. According to the City's Development Code Section 17.80 (2023), care shall be exercised by all individuals, developers, and contractors working near preserved trees so that no damage occurs to such trees. All construction shall preserve and protect the health of trees to remain, relocated trees, and new trees planted to replace those removed. Removal of heritage trees may require replacement with nursery-grown trees or relocation of the heritage tree.

An application for a tree removal permit must be filed and approved before the removal of heritage trees, according to the City's Development Code Section 17.16.080 (2023). All heritage trees are protected under the City's ordinance. Heritage trees are defined as follows:

1. Any tree on single family residential property in excess of 30 feet in height and having a single trunk diameter at breast height (DBH) of 20 inches or more as measured four and one-half feet from ground level; or
2. Any tree on multi-family residential and mixed-use property in excess of 15 feet in height and having a single trunk diameter at breast height (DBH) of 20 inches or more as measured four and one-half feet from ground level; or
3. Any tree on commercial, industrial, and institutional property in excess of eight feet in height and having a single trunk diameter at breast height (DBH) of 20 inches or more as measured four and one-half feet from ground level; or
4. Multi-trunk trees having a total diameter at breast height (DBH) of 30 inches or more as measured four and one-half feet from ground level; or
5. A stand of trees the nature of which makes each dependent upon the others for survival; or
6. Any other tree as may be deemed historically or culturally significant by the planning director because of age, size, condition, location, or aesthetic qualities.

3.4 DEFINITION OF SPECIAL-STATUS AND SENSITIVE SPECIES

Special-status species are defined as species that are included on one or more of the following lists:

- Plant and wildlife species listed as threatened or endangered, or are candidates for listing as threatened or endangered, under the federal Endangered Species Act (ESA).
- Plant and wildlife species listed as threatened or endangered, or are candidates for listing as threatened or endangered, under the California Endangered Species Act (CESA).

- California Department of Fish and Wildlife (CDFW)-designated Fully Protected species.

For the purposes of this report, sensitive species are defined as species that are included on one or more of the following lists:

- Plant and wildlife species that are proposed for listing as threatened or endangered under the ESA or CESA.
- Candidates for possible future listing as threatened or endangered under the ESA or CESA.
- Species that meet the definitions of endangered, rare, or threatened under Section 15380 of the California Environmental Quality Act, except ESA and/or CESA species listed as threatened or endangered.
- California Department of Fish and Wildlife (CDFW)-designated Species of Special Concern, Special Plants, Special Animals, and Rare plant species.
- Plants listed as rare under the California Native Plant Protection Act (California Fish and Game Code, Section 1900 et seq.)
- Plants designated by the California Native Plant Society (CNPS) with a California Rare Plant Rank (CRPR) of 1, 2, or 4.
- Bird species listed as protected by the Migratory Bird Treaty Act (MBTA) or listed as Birds of Conservation Concern (BCC) by the USFWS.

3.5 DEFINITION OF CRITICAL HABITAT

The USFWS designates Critical Habitat when planning the conservation of a species listed as threatened or endangered under the Endangered Species Act (ESA). Critical Habitat refers to a specific geographic area that contains features considered essential for the conservation of a threatened or endangered species. Critical Habitat may include areas that are not currently occupied by a species but will be needed for its recovery. As such, Critical Habitat is often designated on a gross scale with several intervening properties and/or habitats included within.

4 METHODS

Understanding of the proposed project is based on project drawings and the Request for Quote from the city of Rancho Cucamonga. Previous site assessment reports, including the Roux Phase I Environmental Site Report dated December 7, 2021, and the ELMT Biological Due Diligence Report dated November 29, 2021 were also consulted. However, these studies were lacking the vigor of analysis to

inform a CEQA environmental assessment; to address this knowledge gap, KLF conducted reviews and surveys to identify and document sensitive or special-status biological resources that currently occur, or have the potential to occur, in the Study Area.

4.1 DESKTOP REVIEW

A literature review was conducted using standard biological references, including relevant species lists and databases, pertaining to the status and occurrence of sensitive and special-status biological resources (including plant and wildlife species, wetlands and water features, and sensitive habitats/natural communities) and USFWS designated critical habitats. Other resources consulted included aerial photographs, topographic maps, soil survey maps, climatic data, relevant policy and planning documents, and previous biological reports prepared for all or part of the Study Area and nearby areas. A list of potentially occurring sensitive and special-status biological resources and designated critical habitats was then prepared following this literature review. This list included sensitive and special-status biological resources and designated critical habitats with known occurrence records within five miles of the Study Area and unreported sensitive and special-status species affiliated with habitat and soil conditions present. Previously documented wetlands and water features within or near the Study Area were also identified during our literature review. In particular, the USFWS National Wetland Inventory (NWI; USFWS 2023) and USGS National Hydrography Database (NHD; USGS 2023) were consulted when identifying previously documented wetlands and water features. The results of the literature review with respect to the status and known occurrences of sensitive and special-status biological resources at the Study Area and in the surrounding area are discussed under relevant sections later in this document.

The following sources were among those reviewed and consulted during the literature review:

- Biogeographic Information and Observation System (BIOS), CDFW, data as of September 2023.
- California Natural Communities List, CDFW, June 2023.
- California Natural Diversity Database (CNDDDB) Rarefind 5 report for five-mile radius from Study Area, CDFW, data as of August 2023.
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (online edition, v-9.5) report for the 7.5' USGS Guasti, CA and eight adjacent quadrangles, CNPS, data as of August 2023.
- Jepson eFlora, The Jepson Herbarium (Jepson), September 2023.
- USFWS Endangered species lists, USFWS, September 2023.

- USFWS Critical Habitat Mapper for Threatened and Endangered Species, USFWS, data as of August 2023.
- USFWS National Wetlands Inventory Mapper, USFWS, data as of September 2023.
- National Hydrography Dataset, U.S. Geologic Survey, accessed via National Oceanic and Atmospheric Agency, Environmental Response Management Application, Southwest, data as of September 2023.
- Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities, CDFW, March 2018.
- Special Animals List, CDFW, July 2023.
- List of Special Vascular Plants, Bryophytes, and Lichens, CDFW, July 2023.
- Web Soil Survey, USDA National Resources Conservation Service, September 2023.
- All About Birds: Bird Guide, Cornell Lab of Ornithology (Cornell), September 2023.
- Guide to North American Birds, Audubon, September 2023.
- A Guide to the Amphibians and Reptiles of California, California Herps (CalHerps), September 2023.
- The Jepson Manual: Vascular Plants of California, Baldwin, 2012.
- Information on California plants for education, research and conservation, Calflora, 2020.
- eBird: An online database of bird distribution and abundance [web application], Cornell Lab of Ornithology, 2023.

4.2 FIELD SURVEYS

A field survey was conducted on August 8, 2023 by KLF biologists W. Vogler and E. Bredy using a meandering pedestrian survey throughout the accessible portions of the Study Area, ensuring that all areas in the Study Area were visually inspected. Where property access was not available, KLF biologists were able to inspect the land by looking through or over fences and using binoculars. The survey was conducted from 8:15 a.m. to 10:45 a.m. Temperatures ranged from 80° to 85° Fahrenheit with clear skies and 3 to 5 mph winds. The survey focused on identifying and documenting the biological resources present within the Study Area, including the presence of sensitive and special-status plant and wildlife species, habitat elements that may support sensitive and special-status plant and wildlife species, and potential jurisdictional water features. Any identifying signs of habitat utilization by common,

special-status, and sensitive wildlife species were recorded in field notes. All wildlife species observed, including their signs (e.g., scat, tracks, feathers, burrows), were also recorded.

Botanical surveys

Plant species observed within the Study Area were identified to the lowest taxon to determine special-status or sensitive classification and documented. Some plants were identified to species or genus based on current and prior year vegetation and seed heads as the survey date occurred outside the blooming period for many species. Photographs were taken to document site conditions throughout the Study Area (Appendix D).

A meandering pedestrian survey was conducted throughout the Study Area ensuring that thorough coverage was provided to all habitats. Vegetation communities were identified following the methods provided in the Manual of California Vegetation, Second Edition (Sawyer et al. 2009). A list of the species present in each vegetation community was compiled, and relevant observations about ecosystem structure and community were noted. These include slope and aspect, total vegetative cover, percent cover of dominant and co-dominant native species, percent cover of non-native species, and percent cover of bare soil and/or thatch, leaf litter, downed woody debris, and soil biotic crust. Vegetation types were first classified by physiognomy (e.g., grassland, scrub, woodland, forest) and then by floristic composition to the lowest granular level possible given field conditions (i.e., alliance or association). Areas that did not contain natural or semi-natural stands were identified by land cover type (e.g., developed, disturbed, ornamental).

5 RESULTS

5.1 DESIGNATED CRITICAL HABITAT

The Study Area does not occur within any USFWS-designated Critical Habitat. The nearest designated Critical Habitat is for the San Bernardino Merriam's kangaroo rat (*Dipodomys merriami parvus*) approximately 2.60 miles north of the property, and for the coastal California gnatcatcher (*Poliophtila californica californica*) 4.27 miles south of the property. No conservation areas, sensitive habitat, or habitat for protected plant or animal species occur within the Study Area.

5.2 VEGETATION COMMUNITIES ON SITE

The Study Area is mostly denuded of vegetation and highly disturbed with recently graded soils. The soils are fine, sandy/loamy, and dry. In several areas, crushed gravel from previous asphalt or concrete surfacing has been left behind and mixed with the natural soil. Vegetation is sparse; communities present include ruderal, ornamental, riparian, and upland. Trees are limited but have been planted in windrows in the northern section of the Study Area and west of the property line.

Ornamental

In the center of the property is a small island of vegetation composed of ornamental trees: camphor tree, orchid tree, blue jacaranda, and mulberry.

A single row of Aleppo pines is planted east of Juneberry Drive, within the 200-foot buffer. These trees are tall and well established. More windrows of ornamental trees, including eucalyptus, Aleppo pine, and Mexican sycamore are located in the northern section of the lot. Tree height varies widely, but overall, the trees are mature and well established. Other trees, such as tree tobacco, Mexican fan palm, and oleander are dispersed in small numbers around the property, primarily around fencing that encloses the lot and near stormwater basins, culverts, and swale.

Ornamental landscaping is also present along roads and in neighboring properties.

Ruderal

Ruderal vegetation is present in patches throughout the site, with sparse cover of native and non-native grasses and forbs. The most common species observed in the Study Area were prickly lettuce, telegraph weed, flax leaved horseweed, horseweed, cowpen daisy, yellow mustard, Bermuda grass, Maltese star-thistle, and spotted spurge.

The northern section of the property enclosed by windrows has about 25 percent cover of ruderal vegetation. This is the largest vegetated area on the property. The swale along the northern border of the property is vegetated with black mustard, puncture vine and annual grasses and bunch grasses in addition to the common species found at this site. The stormwater canal and basin at the southwestern end of the property are lined with fencing that is surrounded by ruderal vegetation. Sparse forbs and grasses are growing at the bottom of the basin as well. The culvert at the southeast corner of the property is dominated by yellow mustard, spotted spurge, and Maltese star-thistle.

Upland and Riparian

Upland and riparian vegetation is found within and surrounding Basin 3 beyond the eastern site property boundary on Goodman property but within the Study Area. The stormwater retention basin and its slopes are a mosaic of California buckwheat scrub (*Eriogonum fasciculatum* Shrubland Alliance) and mulefat thickets (*Baccharis salicifolia* Shrubland Alliance). Upland species include California buckwheat, sagebrush, bush sunflower, cowpen daisy, and telegraph weed. Hydrophytic species including mule fat, willow, and salt cedar mix with these upland species along the slopes and bottom of the basin. Similar species are found on the slopes of Basin 2 in the southeast corner of the site but with less diversity and less vegetative cover.

5.3 WETLANDS AND AQUATIC FEATURES

Wetlands and Jurisdictional Features

No streams, wetlands, or riparian areas occur within the Study Area and no National Wetland Inventory (NWI) or National Hydrography Database (NHD) wetland or riparian areas were identified in our desktop review or observed during field surveys. The observations of the current site conditions do not support or warrant further investigation of a potential jurisdictional water feature.

Water within the three retention basins is confined to the Study Area and does not have any upstream or downstream surface connections to jurisdictional features. Therefore, the basins do not qualify as wetlands that fall under USACE jurisdiction.

5.4 BOTANICAL RESOURCES ON SITE

An assessment of the potential for sensitive plant species to occur in the project site is included in Appendix A, and a list of plant species observed in the Study Area during the field survey is included in Appendix C. No sensitive or special-status botanical resources were observed in the Study Area.

Sensitive plant species: None of the special-status plant species that occur in the project region or 13 sensitive or special-status plant species that have documented CNDDDB occurrences within five miles of the Study Area were observed on the property or within the 200-foot buffer (Figure 5). However, the survey was conducted outside the growing and blooming period for most special-status species that occur in the region.

Tree resources: The trees present on site are common ornamental species and occur in single rows or as standalone individuals dispersed throughout the site. Aerial images confirm the windrow trees have been present since at least 1994. These trees may provide nesting habitat and perches for birds and bats. A pair of common ravens (*Corvus corax*) was observed nesting in a pine tree in the Study Area. No raptors were observed in the Study Area, either in trees or flying over.

Sensitive vegetation communities: Three sensitive habitats have documented CNDDDB occurrences within five miles of the Study Area (Figure 5): Coastal and Valley Freshwater Marsh 4.92 miles from property, Riversidian Alluvial Fan Sage Scrub 1.83 miles from property, and California Walnut Woodland 4.20 miles from the property. These habitats are all located north of the Study Area near the San Bernardino Mountains. No sensitive vegetation communities are present on site.

The seven plant species of interest that have potentially suitable habitat in the Study Area are described below.

Plummer's mariposa-lily (*Calochortus plummerae*). The Study Area falls within five miles of known occurrence records. Plummer's mariposa-lily is a rare (CNPS rank 4.2) perennial bulbiferous herb endemic to southern California. The species grows in coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, and lower montane coniferous forest. Plummer's mariposa-lily occurs on dry rocky and sandy sites, usually of granitic or alluvial material. The blooming period is May to July. There is potential for this species to occur in the northern section of the Study Area. The Tujunga soils on site are loamy sand and form in alluvium from granitic sources. The site is dry and less disturbed in the northern section surrounded by windrows of trees. This species was not observed during field surveys.

Parry's spineflower (*Chorizanthe parryi* var. *parryi*). The Study Area falls within five miles of known occurrence records. An observation was made 0.5 miles north of the Study Area. Parry's spineflower is a rare (CNPS rank 1B.1) annual herb that grows in coastal scrub, chaparral, cismontane woodland, valley and foothill grassland on dry slopes and flats. It is found on dry rocky or sandy soils. The blooming period is April – June. There is potential for this species to occur in the Study Area. The soil type on the property is dry and sandy, and less disturbed in the northern section surrounded by windrows of trees. This species was not observed during field surveys.

Paniculate tarplant (*Deinandra paniculata*). Paniculate tarplant is a rare (CNPS rank 4.2) annual herb endemic to southern California. This species is native to coastal scrub, valley and foothill grassland, open chaparral and woodland, disturbed areas, sometimes on sandy soils and usually vernal mesic habitats. The blooming period is April to November. Suitable sandy, disturbed habitat exists in the northern section that is surrounded by windrows of trees, and there is potential for this species to occur near the stormwater retention basins at the southeast end of the Study Area; however, the likelihood of this species being present is low due to fragmentation and prior disturbance history. There are no known occurrences within 5 miles of the Study Area and this species was not observed during field surveys.

California muhly (*Muhlenbergia californica*). The Study Area falls within five miles of known occurrence records. California muhly is a rare (CNPS rank 4.3) perennial rhizomatous herb endemic to southern California. The species grows in coastal scrub, chaparral, lower montane coniferous forest, meadows, canyons, near streams and seeps. The blooming period is June to September. There is potential for this species to occur in the Study Area near the stormwater retention basins at the southeast end of the property where soils are moist during the rainy season. This species was not observed during field surveys.

Brand's star phacelia (*Phacelia stellaris*). Brand's star phacelia is a rare (CNPS rank 1B.1) annual herb endemic to southern California. The species grows in coastal scrub, and coastal dunes in open areas. The blooming period is March to June. The Study Area falls within 0.3 miles of an observation of this species in 2003. There is potential for this species to occur in the northern section that is surrounded by windrows of trees, which is an open area with sandy soil. This species was not observed during field surveys.

White rabbit-tobacco (*Pseudognaphalium leucocephalum*). White rabbit-tobacco is a rare (CNPS rank 2B.2) perennial herb. This species grows in riparian woodland, cismontane woodland, coastal scrub, chaparral, and sandy, gravelly sites. The blooming period is August to November. The Study Area falls within five miles of known occurrence records. There is potential for this species to occur in the Study Area as gravelly, sandy soils are present throughout. Limited shrub vegetation near the two stormwater retention basins at the southeast end of the Study Area may also serve as suitable habitat as riparian species are present. This species was not observed during field surveys.

San Bernardino aster (*Symphyotrichum defoliatum*). The Study Area falls within five miles of known occurrence records. San Bernardino aster is a rare (CNPS rank 1B.2) perennial rhizomatous herb. This species grows in meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, and valley and foothill grassland. This species also grows in vernal mesic grasslands or near ditches, streams and springs, and disturbed areas. The blooming period is July to November. There is potential for this species to occur in the Study Area near the two stormwater retention basins on the eastern side of the site. The natural soils in and around the basins may provide the moisture

this species requires. Scrub and riparian vegetation is growing in these basins as well. This species was not observed during field surveys.

5.5 WILDLIFE RESOURCES ON SITE

Thirty-four special status wildlife species have the potential to occur in the Study Area with 17 of those having one or more documented CNDDDB occurrences within five miles of the Study Area (Figure 6). A description of all sensitive wildlife species with potential to occur in the Study Area is included in Appendix A, and a list of wildlife species observed during the field survey is included in Appendix B. No sensitive or special-status species were observed during the field survey. The following is a discussion of those sensitive species with a potential to occur at the property, and species with particular local importance.

Fish

No persistent bodies of water were found in the Study Area. The creeks and water retention basins are intermittent and with inundation driven by storm events and therefore do not provide suitable habitat for fish.

Invertebrates

The Study Area is primarily composed of bare, recently disturbed ground. The soils on site are suitable for invertebrates that rely on loose, fine, sandy, loamy, or gravelly soils. Fire ants (*Solenopsis sp.*) were observed in these sandy soils near the Juneberry Drive entrance.

The trees and forbs in the northern section of the property can provide foraging resources and habitat; however, the vegetation is sparse and does not provide the dense cover that many invertebrates prefer or require. Two butterflies, a gray hairstreak (*Strymon melinus*) and a checkered white (*Pontia protodice*) were observed on plants in this area.

The three stormwater retention basins in the Study Area provide a water source during the winter and spring. This standing water offers breeding habitat for invertebrates. The shrubs and annuals that grow around the basins provide foraging resources and shelter. The two basins at the southeast end of the property and the regional drainage west of the property are the most hospitable areas of the Study Area to invertebrates. They are fenced off and therefore less disturbed, and they provide natural soils, moisture, and vegetative cover (40-90 percent cover) with a mixture of native and non-native forbs, shrubs, and trees. Two figeater beetles (*Cotinis mutabilis*) were seen in Basin 2.

Two special status invertebrate species have a probability to occur in the Study Area. The following is a discussion of those sensitive species.

Crotch's bumble bee (*Bombus crotchii*). Crotch's bumble bee is a state candidate for listing as endangered or threatened (SC) and is classified as Endangered by IUCN. Crotch's bumble bee occurs primarily in California in the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills throughout most of southwestern California. Historically, California's Central Valley served as the primary population center. Crotch's bumble bee has experienced an 85 percent decline since 1900. The Crotch's bumble bee nests underground in abandoned rodent nests, or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees. Colonies are annual, with mated queens hibernating during the winter and emerging in the early spring. Queens are active between March and May, males from May to September, and workers from April to August. The Crotch's bumble bee inhabits open grassland and scrub habitats but is able to persist in semi-natural habitats surrounded by intensely modified landscapes. Crotch's bumble bee is a dietary generalist, but relies heavily on *Asclepias*, *Chaenactis*, *Lupinus*, *Medicago*, *Phacelia*, and *Salvia* as food sources.

The most recent observations within a 5-mile radius of the Study Area were located 3.1 miles southwest of the site in 2019 and 2020. The probability for this species to occur is low. Although Crotch's bumble bee can persist in modified landscapes, the Study Area is highly disturbed and only provides a very restricted area of scrub vegetation. Additionally, the species' preferred food sources are not present in the Study Area. This species was not observed during field surveys.

Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*). The Delhi Sands flower-loving fly (DSF) is a large, approximately one-inch, orange-brown fly with dark brown oval spots. The Delhi Sands flower-loving fly was listed as a federally endangered species in 1993 and is fully protected under the Endangered Species Act of 1973. This insect is generally found in northwestern Riverside County and southwestern San Bernardino County in areas containing Delhi series soils which are fine, sandy soils. The insect is endemic to the Colton Dunes, which originally covered about 50 squares miles, but have dwindled to only two percent of their original area, lost to agricultural, industrial, and residential uses.

Quality suitable habitat consists of areas with open sands and sparse, native vegetation (10-40 percent). Four indicator plant species are typically present in DSF habitat: California buckwheat, Deer weed (*Acmispon glaber*), Telegraph weed, and California croton (*Croton californicus*) (USFWS 1997). Adults are most active during the warmest, sunniest parts of the day, and both males and females extract nectar from California buckwheat and other plants (Kingsley 1996).

Oviposition occurs within loose, sandy soils in late summer months and may primarily occur near Telegraph weed (Rogers and Mattoni 1993; Kingsley 1996). All larvae were found within relatively moist soil several feet (> 1 meter) below the soil surface in association with other soil-dwelling insect larvae. The observations suggest that the larvae are opportunistic subterranean predators (K. Osborne and G. Ballmer

pers. comm. 2007), although little is known about their diet. Larval stages develop completely underground and emerge as adults from July through September. The flight period begins as early as July 1 based on several observations of adult DSF (AMEC Earth and Environmental, Inc. 2002).

The Property is located within the known range of the DSF and is in the Ontario Recovery Unit. Delhi series sands are found 630 feet south of the property. This large area of Delhi soils is located southwest of the property. There is a known population and conservation area in the Jurupa Hills, which are located 5 miles southeast of the Study Area.

There is potential for DSF to occur in the Study Area. The most recent observation within a 5-mile radius of the Study Area was in August 2010, 1.50 miles to the east. The Study Area is home to a small but dense and healthy population of California buckwheat on the eastern end of the property, most concentrated along the fence dividing the property from the adjacent stormwater basin located on Goodman property. Telegraph weed is sporadically present throughout the Study Area, scattered throughout the areas containing ruderal vegetation. The two other indicator species, deerweed, and California croton were not found in the Study Area. This species was not observed during field surveys.

Herptiles

Amphibians require water or moist soils from ponds, streams, and other persistent water sources. Some species rely on intermittent or seasonally flooded areas (e.g. vernal pools). During the winter and spring, the standing water and moist natural soils in Basin 2 and Basin 3 have potential to be used by amphibians. However, many species require nearby vegetation like grasslands or other vegetative cover from chaparral or riparian areas to forage and shelter. Leaf litter, thatch, logs, or rocks create moist, cool areas often needed for shelter and foraging, none of which are present in the Study Area. For these reasons, the Study Area is unlikely to be used by amphibians. It is unknown if any amphibians have previously used the basins or any other part of the Study Area. Recruitment to the site from the Day Creek and Etiwanda Creek is possible but unlikely. The nearby developments and large arterial roads may prevent individuals from crossing into the site, and the lack of vegetation does not create suitable habitat.

The soils in the Study Area are suitable for reptiles that rely on loose, fine, sandy/loamy soils for burrowing. Recent demolition has created gravelly soils in some areas of the property as well. However, the property has been developed and used for industrial purposes for decades, limiting the availability of burrowing sites. Basking and perching sites are abundant, as large portions of the Study Area are bare and some poles and low concrete structures remain on site.

Scattered ruderal vegetation, particularly around the swale and northern section of the property can provide foraging resources and habitat; however, reptiles that require dense cover of grasses, shrubs, or

forbs are unlikely to be found in this area. Some shrubs are present around the two basins at the southeast end of the property and the regional drainage west of the property. These may be used by reptiles for shelter or foraging. The vegetation and moisture or standing water in the basins or drainages may attract prey items. No mammals or mammal burrows were observed in the Study Area. Reptiles who rely on small mammals for their diet or their burrows as refugia may not find sufficient resources in the Study Area.

A hatchling western fence lizard (*Sceloporus occidentalis*) was observed near the swale in an open sandy and gravelly area. Two hatchling western side-blotched lizards (*Uta stansburiana elegans*) were observed below a mulberry tree near the center of the property. These two species of lizards are insectivorous and prefer open, rocky or sandy areas with scattered vegetation. The presence of juveniles indicates that sufficient foraging resources are available in the Study Area to support the reproduction of insectivorous reptiles.

Two special status reptile species have a probability to occur in the Study Area. The following is a discussion of those sensitive species.

California glossy snake (*Arizona elegans occidentalis*). The California glossy snake is a CDFW Species of Special Concern reptile. This species is found in the central San Joaquin Valley south to the Tehachapi Mountains and along the base of the Coast Range mountains farther south to San Quintin, Baja California. This species is a nocturnal snake that feeds on lizards and small mammals. It is found in grasslands, fields, coastal sage scrub, and chaparral. The California glossy snake prefers open patches in areas surrounded by denser vegetation. This species prefers loose soil which allows for burrowing.

The Study Area falls within five miles of California glossy snake CNDDDB occurrence records. No individuals were observed during field surveys. The potential for this species to occur is low. The soil in the Study Area provides suitable burrowing opportunities; however, much of the Study Area is composed of bare ground with no vegetative cover and food sources are limited.

Coast horned lizard (*Phrynosoma blainvillii*). The coast horned lizard is a CDFW Species of Special Concern reptile. This species is a terrestrial, flat-bodied lizard with two horns at the back of their head and rows of pointed scales along each side of their body. They inhabit open areas with loose, fine, sandy soil and low vegetation and may occur in grasslands, scrublands, woodlands, valleys, foothills, and semiarid mountains. Ants are an important food source; they can make up 90% of prey items.

The Study Area falls within five miles of known CNDDDB occurrence records. No coast horned lizards were observed during field surveys. There is potential for this species to occur in the Study Area. Open, loose, sandy/loamy areas are present at the northern end of the Property, although the rest of the site has recently been heavily disturbed and tilled. Marginal scrub habitat occurs to the east the Study Area.

Birds

No dead trees, tall poles, or towers are present on site; however, tall trees and fences are available for perching in the Study Area. A mourning dove (*Zenaida macroura*) was seen perching on a fence near the entrance by Juneberry Drive. The windrows near the drainage west of the property and in the northern section of the property provide perching and nesting opportunities. These trees are planted in single rows, which does not provide sufficient cover or density for many species. Common ravens (*Corvus corax*) were heard and observed flying overhead and perching in the Aleppo pines and on a building in the adjacent property east of Juneberry Drive. A nesting pair was seen repeatedly returning to the same tree and many feathers were observed nearby. No raptors were seen flying overhead or perching in the Study Area.

Large bare open areas are abundant in the Study Area, providing foraging opportunities for birds who rely on this habitat type. Low-growing, sparse forbs in the northern section of the property provides minimal foraging resources for various species. Ground nesting in this area is possible but unlikely. Dense grasses and shrubs are not available for those species that nest a few feet above ground.

Mixed shrub and forb habitat is present around the retention basins at the southeast corner of the Study Area. This vegetation is denser (40-90 percent cover) and can provide shelter, nesting habitat, prey items, seeds, and nectar to birds. Although these areas are fenced off and less disturbed than the rest of the Study Area, the property has been used for industrial purposes and historically has likely not provided suitable nesting habitat for many species. An Allen's hummingbird (*Selasphorus sasin*) was observed flying and perching near the drainage on the southeast corner of the property.

The three water retention basins in the Study Area provide a water source during the winter and spring that may be used for drinking or bathing. Additionally, this standing water likely acts as breeding habitat for invertebrates which are an important food resource for many birds.

Four special status bird species have a probability to occur in the Study Area. The following is a discussion of those sensitive species.

Cooper's hawk (*Accipiter cooperii*). Cooper's hawks are not formally listed but are considered a "Taxa to Watch" by the CDFW because it was previously, but not currently, considered a Species of Special Concern. These birds are protected under the Migratory Bird Treaty Act when breeding. Cooper's hawks are common hawks found in woodlands, parks, and suburban neighborhoods. Individuals typically present an upright posture, with grey upperparts and reddish barring on the chest and belly, though plumage is variable. This species is frequently confused with sharp-shinned hawks (*Accipiter striatus*), which look similar and occasionally overlap in size. Cooper's hawks primarily eat other birds but may also consume small mammals. Cooper's hawks typically nest in tall trees, often in dense stands.

There is low potential for Cooper's hawks to occur in the Study Area. Some tall trees are present on site, but they are planted in single rows and do not provide the density this species prefers. Numerous small parks and residential areas are located within 5 miles of the Study Area which may offer denser stands. Very few birds were observed in the Study Area, indicating that foraging resources for this species are limited. No nesting activity was observed. No Cooper's hawks were observed during field surveys.

White-tailed kite (*Elanus leucurus*). White-tailed kites are listed as a fully protected bird species in California. White-tailed kites are small hawks with mostly white and grey bodies, and can typically be found foraging in grasslands, marshes, and fields for small mammals. This species occurs year-round along the Central Coast of California and nests in trees.

There is potential for white-tailed kite to occur in the Study Area, particularly the northern section enclosed by windrows. Some tall trees are present on site. Numerous small parks and residential areas are located within 5 miles of the Study Area which may attract this bird to the property. No nesting activity was observed. No white-tailed kites were observed during field surveys.

California horned lark (*Eremophila alpestris actia*). The California horned lark is not a formally listed species but is considered a "Taxa to Watch" by the CDFW. California horned larks are small brownish-gray birds commonly found on bare ground, including fallow fields, grasslands, and other open habitats with short vegetation. They are known to visit areas recently cleared by humans such as plowed fields and mowed expanses. This species breeds from March through July, nesting on the ground.

There is potential for California horned lark to occur in the Study Area. The majority of the Study Area is composed of open, bare ground, with sparse vegetation in some places that has been recently disturbed. No nesting activity was observed. No California horned larks were observed during field surveys.

Loggerhead shrike (*Lanius ludovicianus*). The Loggerhead shrike is a CDFW Bird Species of Special Concern and protected under the Migratory Bird Treaty Act when breeding. This species requires tall shrubs or trees, as well as open areas with short vegetation or bare ground. They also require impaling sites for prey.

There is low potential for this Loggerhead shrike to occur in the Study Area. In the northern section of the Property, windrows of tall trees surround an open area with scattered, low vegetation, which could serve as appropriate foraging habitat. No nesting activity was observed. No Loggerhead shrikes were observed during field surveys.

Other Protected Birds. Other bird species that may use the Study Area for foraging, breeding, or during migration may be protected. Breeding birds found within the Study Area (or within a designated distance

of the Study Area for some species) would be protected under the Migratory Bird Treaty Act (MBTA) of 1918. Nesting habitat for a variety of bird species occurs in and around the Study Area. Given available nesting habitat within and around the Study Area, nesting activities are likely to be limited to shrubs near water retention basins, or the ornamental pine and eucalyptus trees.

Mammals

The soils in the Study Area are suitable for mammals that rely on loose, fine, sandy/loamy soils for burrowing or food storage. Recent demolition has created gravelly soils in some areas of the property as well. However, the property has been developed and used for industrial purposes for decades, limiting the history of wildlife usage and established habitation.

The forbs in the northern section of the property can provide habitat and foraging resources for granivorous and insectivorous species; however, the vegetation is sparse and does not provide the dense cover that some mammals prefer. The tall trees in this northern section and in the eastern regional drainage offer habitat and potential foraging opportunities.

The mixed shrubs and forbs around the two basins at the southeast end of the property and the regional drainage west of the property may be used for shelter as they are fenced off and therefore less disturbed. The vegetative cover reaches 90 percent in some places near these seasonal water features. These areas also offer natural soils that mammals may use for burrowing. The vegetation and moisture or seasonally standing water provide shelter, food (insects, green vegetation, seeds), and a water source. No mammals, dens, or burrows were observed in the Study Area. Canid prints were observed in an open area between a depression on the western site of the property and the island of ornamental trees.

Six special status mammal species have a probability to occur in the Study Area. The following is a discussion of those sensitive species.

San Bernardino kangaroo rat (*Dipodomys merriami parvus*). The San Bernardino kangaroo rat is a CDFW Species of Special Concern mammal. This species is found in alluvial fan sage scrub, coastal sage scrub and chaparral with approximately 50 percent canopy cover. Granivorous, this species also relies on insects and green vegetation. They depend on sandy and loamy soils for burrowing, food storage, and rearing young.

The most recent CNDDDB occurrence record within a 5-mile radius of the Study Area was in 2013, 3.7 miles north of the property. There is potential for the San Bernardino kangaroo rat to occur in the Study Area. Marginal habitat is present near the eastern stormwater catch basins where scrub species and appropriate canopy cover are present. Appropriate sandy, loamy soils for burrowing are present in the Study Area.

This species was not observed during field surveys. Small mammal burrows were almost not existent on the property.

Stephens' kangaroo rat (*Dipodomys stephensi*). Stephens' kangaroo rat is listed as Threatened by USFWS and CDFW. This species is found in open grasslands and sparse scrub (under 30 percent canopy cover) with a higher proportion of forbs. This species is granivorous, but also relies on insects and green vegetation. They require friable, loamy soils for burrowing and rearing young. This mammal often colonizes areas following disturbances such as fire or grazing (including ongoing grazing), which create the open conditions they require.

There is low potential for the Stephens' kangaroo rat to occur in the Study Area. Marginal scrub/alluvial habitat is present near the eastern stormwater catch basins. Appropriate sandy, loamy soils for burrowing are present in the Study Area. Open conditions have been created by disturbance (tilling, demolishing buildings). This species was not observed during field surveys. Small mammal burrows were almost not existent on the property. The Stephens' kangaroo rat does not have any CNDDDB occurrence records within five miles of the Study Area.

San Diego desert woodrat (*Neotoma lepida intermedia*). The San Diego desert woodrat is a CDFW Species of Special Concern mammal. This species is found in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.

There is potential for the San Diego desert woodrat to occur in the Study Area. The Study Area falls within five miles of CNDDDB occurrence records for this species, with one observation in November 2002 located 270 yards away from the northwestern border. Marginal scrub habitat near stormwater retention basins could provide habitat for this species. No individuals were observed during field surveys. Woodrat middens were not observed within the Study Area.

Los Angeles pocket mouse (*Perognathus longimembris brevinasus*). The Los Angeles pocket mouse is a CDFW Species of Special Concern mammal. This species is found in lower elevation grasslands and coastal sage scrub in areas with fine, sandy soils.

There is potential for the Los Angeles pocket mouse to occur in the Study Area. The Study Area falls within five miles of CNDDDB occurrence records for this species, with four observations located no more than 1.5 miles away, the most recent of which were in February 2003 and September 2001. No individuals were observed during field surveys. Marginal scrub near stormwater retention basins could provide habitat for this species. Fine, sandy soils are present on the Property. Small mammal burrows were almost not existent on the property.

Western mastiff bat (*Eumops perotis californicus*). The western mastiff bat is a CDFW Species of Special Concern mammal. This species is found in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban areas. Suitable habitat consists of extensive open areas with abundant roost locations provided by crevices in rock outcrops and buildings. When roosting in rock crevices, this species needs vertical faces to drop off to take flight. This bat catches and feeds on insects in flight.

There is potential for the western mastiff bat to occur in the Study Area. The Study Area falls within five miles of CNDDDB occurrence records for this species. No individuals were observed during field surveys. Some scrub and windrows of tall trees, primarily eucalyptus and Aleppo pines are found in the northern section of the Study Area. Adjacent buildings may provide roosting opportunities. Open areas caused by recent disturbance are present, including the Study Area and the open property south of the railroad. At the time of the survey insects were not abundant, although the stormwater retention basins may provide habitat for insects in the winter and spring.

Western yellow bat (*Lasiurus xanthinus*). The Western yellow bat is a CDFW Species of Special Concern mammal. This species is found in dry, thorny vegetation and desert areas. This bat roosts in trees, hanging from the underside of a leaf, commonly in the skirt of dead fronds of palm trees. Insect captures are associated with water bodies: stock tanks, ponds, streams, rivers, pools, lawns, orchards, riparian areas.

There is potential for the Western yellow bat to occur in the Study Area. The Study Area falls within five miles of CNDDDB occurrence records for this species. No individuals were observed during field surveys. Some windrows of tall trees, primarily eucalyptus and Aleppo pines are found in the northern section of the Study Area, which may provide opportunities for roosting. Some shorter Mexican fan palms are dispersed throughout Study Area. At the time of the survey, insects were not abundant, although the stormwater retention basins may provide habitat for insects in the winter and spring.

5.6 WILDLIFE CORRIDORS

A wildlife corridor is a link of habitat which joins two or more larger areas of similar habitat. Corridors can be natural or artificial; local, sub-regional, or regional; as well as continuous or discontinuous (e.g., “stepping-stones”). The Study Area is a historically developed and disturbed site with limited ornamental and ruderal vegetation that does not provide cover for medium or large sized wildlife. Fencing around much of the Site limits access to the site for larger species. The surrounding areas are highly developed and industrialized and do not provide habitat for most species. Throughout the city, scattered parks, natural areas, creeks, and water retention basins such as those in the Study Area provide small pockets of scrub, alluvial, grassland, and riparian habitat that have the potential to serve as stepping stones for

wildlife; however, these are limited and scattered within a densely developed region where movement between islands is unlikely. As such, the Study Area is not expected to serve as a corridor for most wildlife.

Rancho Cucamonga has natural and man-made drainages that provide a means for plants and wildlife to enter deep into the developed areas of the city. While the Day Creek is a man-made, concrete-lined drainage channel, there are open space corridors along its flow path that are likely to facilitate wildlife movement from the mountains through the southern end of the city and may provide at a minimum a throughfare for wildlife but could provide additional resources. However, two major freeways, State Route 210 and Interstate 15 likely hinder wildlife movement into the project area. Large arterial roadways surrounding the property are often frequented by round-the-clock shipping truck movement further decreasing the likelihood of wildlife movement into the Site.

Etiwanda Creek is made of natural soils and provides a similar function as the Day Creek, supporting alluvial vegetation and offering a throughfare to plants and wildlife. This creek also passes under State Route 210 and Interstate 15 before nearing the project site, potentially limiting wildlife movement.

6 PROJECT IMPACTS

6.1 DESIGNATED CRITICAL HABITATS

The Study Area does not occur within USFWS-designated Critical Habitat. No direct or indirect impacts are expected.

6.2 VEGETATION COMMUNITIES

The 94.25-acre property is largely devoid of vegetation and habitat. The proposed project would directly impact approximately 0.30 acres of upland shrub vegetation and mule fat scrub in Basin 2. No sensitive vegetation communities were observed within the Study Area; therefore no impacts to sensitive vegetation communities will result from this project.

6.3 WETLANDS AND WATER FEATURES

No wetlands or jurisdictional water features are present in the Study Area; therefore, impacts are not expected. Direct or indirect impacts to Etiwanda Creek and Day Creek are not anticipated.

The drainage and two stormwater retention basins located on the property will be removed for the purposes of this project. Basin 1, located in the southwest corner of the property, is sparsely vegetated with common ruderal species and does not provide suitable habitat for riparian or sensitive plants or wildlife. No impacts to sensitive or common species are expected from the removal of this basin. Basin 2,

located at the southeast corner of the property, is vegetated with ruderal annuals and hydrophytic shrubs. No sensitive plant or wildlife species were observed in this basin; however, the survey was conducted outside of the wet season and blooming season for many species, so additional surveys may be necessary to accurately assess impacts to sensitive species. There is potential for this basin to serve as breeding habitat for invertebrates, which could in turn provide foraging opportunities for birds, bats, and reptiles. The removal of this basin may reduce 0.30-acres of foraging opportunities or shrub nesting habitat.

Direct impacts are not expected for Basin 3, which is located on Goodman property, or for the regional drainage west of the Arrow Commerce Center Project property. Temporary impacts may occur during construction as heavy equipment operation, associated noise, and pedestrian and vehicular traffic could disturb wildlife and impact nesting and foraging. Once the project is completed, no direct or indirect permanent impacts are expected.

The planned grading, paving, and removal of the two stormwater retention basins will change water flow and drainage patterns on the Property. According to the conceptual drainage plan, all surface water is expected to flow directly south into the two culverts that flow under the Atchison Topeka and Santa Fe railroad, located in the southeast and southwest corners of the Study Area. Surface water will no longer percolate through the loamy/sandy soils or be retained on the property.

6.4 BOTANICAL RESOURCES

Historically, the property has not provided vegetative habitat for decades. The entire Study Area has been subject to a variety of anthropogenic disturbances. Due to historical and current land uses, no undisturbed native plant communities or natural communities of special concern were observed in the Study Area. These disturbances have eliminated the natural plant communities that once occurred on and surrounding the Property. No sensitive or special-status plant species or natural communities were detected within the Study Area during field surveys. No impacts are expected.

All trees will be removed from the property for the purposes of this project. These trees are non-native ornamental species.

6.5 WILDLIFE RESOURCES

Potential impacts to wildlife resources—including common, sensitive, and special-status wildlife species—could be caused by heavy equipment operation, excavation, associated noise, and pedestrian and vehicular traffic. The likelihood and magnitude of these impacts depends on the exact activities implemented but can be reduced by the implementation of avoidance and minimization measures.

In general, though, loss of individuals would be due to animals being crushed by vehicles and equipment, animals being trapped in burrows, and animals not surviving after being excluded from burrows or territories. Project activities may result in the mortality of small-bodied, slow moving, ground-dwelling species and ground-nesting birds adapted to open habitats (e.g., California horned lark). Project activities may also temporarily impact the behavior of wildlife species and nesting birds, which may use the Study Area for foraging or breeding. Trash brought on the Study Area by workers could attract wildlife, resulting in increased indirect mortality from vehicular collisions and predation or the attraction scavengers/predators.

Potential impacts to these sensitive or special-status wildlife species with potential to occur in the Study Area are described below.

Invertebrates

Crotch's bumble bee. Direct impacts are possible, but not expected. Limited foraging habitat within the Study Area. The Study Area is highly disturbed and nesting sites are limited due to the decades of industrial activity that has taken place on the property. Direct impacts (e.g., crushed by equipment, collision with vehicles) to individuals coming to forage on site or passing through are unlikely.

Delhi Sands flower-loving fly. Direct impacts are possible, but not expected. Two of the species' four indicator species are sporadically present on the Property. These plants will be removed, which is not expected to affect regional food availability for this species. No direct impact to this species' nesting habitat is expected to be caused by the project as Delhi series soils are not present in the Project Area. Direct impacts (e.g., crushed by equipment, collision with vehicles) to individuals coming to forage on site or passing through are unlikely.

Reptiles

California glossy snake. Direct impacts are possible, but not expected. The Study Area provides the loose, fine sandy soil and open areas that this species requires. However, there is limited refuge and forage available within the disturbance footprint. Ground disturbances and vehicular traffic may injure or kill this ground-dwelling species. Direct impacts to transients from ground disturbances and vehicular traffic are marginally possible but not expected.

Coast horned lizard. Direct impacts are possible, but not expected. The Study Area provides the loose, fine sandy soils and low vegetation that this species requires. Direct impacts to transients due to ground disturbances and vehicular traffic are marginally possible but unlikely.

Birds

Cooper's hawk. Impacts not expected. The Study Area provides marginal foraging habitat for this species but not breeding habitat. Ground disturbances and vehicular traffic are not expected to injure or kill this mobile species. However, these activities may disrupt foraging activities at the limited and marginal habitat provided within the disturbance footprint.

White-tailed kite. Impacts not expected. The Study Area provides marginal foraging habitat for this species but not breeding habitat. Ground disturbances and vehicular traffic are not expected to injure or kill this mobile species. However, these activities may disrupt foraging activities.

California horned lark. Potential for direct impacts. The Study Area provides foraging and nesting habitat for this species. Ground disturbances and vehicular traffic are not expected to injure or kill this mobile species while foraging. Such ground disturbances may disrupt or destroy nests and foraging resources.

Loggerhead shrike. Potential for direct impacts. The Study Area provides foraging and nesting habitat for this species. Ground disturbances and vehicular traffic are not expected to injure or kill this mobile species while foraging. Such ground disturbances may disrupt or destroy nests and foraging resources.

Mammals

San Bernardino kangaroo rat. Potential for direct impacts. The Study Area provides marginal habitat for this species. Equipment and vehicle movement within or near the Study Area could injure or kill individuals while dispersing or foraging or while individuals inhabit burrows within the Study Area.

Stephens' kangaroo rat. Potential for direct impacts. The Study Area provides marginal habitat for this species, and recent disturbance may have recruited individuals to the property. Equipment and vehicle movement within or near the Study Area could injure or kill individuals while dispersing or foraging or while individuals inhabit burrows within the Study Area.

San Diego desert woodrat. Direct impacts are possible, but not expected. The Study Area provides marginal habitat for this species. Equipment and vehicle movement within or near the Study Area could injure or kill individuals while dispersing or foraging. Evidence of any woodrat species occupation of the property was not detected.

Los Angeles pocket mouse. Potential for direct impacts. Fine sandy soils and scrub near basins provide suitable burrowing habitat. Equipment and vehicle movement within or near the Study Area could injure or kill individuals while dispersing or foraging or while individuals inhabit burrows within the Study Area. However, burrows and other evidence of small mammal habitat of the property were not detected.

Western mastiff bat. Potential for direct impacts. The Study Area provides suitable open areas and roosting trees for this species. Tree removal and development of the entire parcel will eliminate potential roosting habitat locally from the Site, but roosting opportunity remains in the surrounding area. Construction activity is not expected to occur at night when this nocturnal species is active. Individuals roosting in trees may be lost or injured during tree removal.

Western yellow bat. Potential for direct impacts. The Study Area provides suitable roosting trees and water sources for this species. Tree removal and development of the entire parcel will eliminate potential roosting habitat locally from the Site, but roosting opportunity remains in the surrounding area. Removal

of water basins on the property will reduce insect foraging opportunities. Construction activity is not expected to occur at night when this nocturnal species is active. Individuals roosting in trees may be lost or injured during tree removal.

6.6 WILDLIFE CORRIDORS

As no wildlife movement corridors were detected in the Study Area, no direct impacts are anticipated.

7 RECOMMENDED AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

The following measures to protect botanical and wildlife resources, including sensitive and special-status species, are recommended. Their implementation should reduce impacts to sensitive and special-status natural resources within the Study Area.

The KLF field survey was conducted in August, outside the blooming and growing season for many plant species. A floristic survey during the blooming period is recommended to accurately identify and confirm the presence or absence of special status or sensitive plant species in the Study Area.

- Before the removal of trees from the property, a nesting bird survey is recommended. If tree and vegetation removal is to occur during the bird nesting season, a nesting bird survey is recommended.
- If ground disturbances and vegetation removal occur during the bird nesting season, a ground nesting bird survey is recommended to avoid impacts to California horned lark.
- Small mammal burrows were observed in the Study Area. Small mammal trapping is recommended for the proposed project as several special status species have a potential to occur in the Study Area and suitable habitat for burrowing sites is available.
- Western yellow bats and western mastiff bats use trees as roosting sites. Prior to tree removal, a bat survey is recommended.

8 CONCLUSION

The property is the site of a proposed distribution warehouse development, the Arrow Commerce Center Project, in which the entire 94.25-acre property will be developed. Five commercial warehouse buildings and associated roads, loading docks, and parking areas will be constructed. The project site is located in an urban, industrial area of Rancho Cucamonga, CA. The property has been used for industrial purposes since 1985. Bare ground, ornamental trees, and ruderal vegetation comprise nearly the entire property.

The proposed project will develop the entirety of the property, eliminating nearly all habitat. The Study Area provides marginal habitat for a number of sensitive or special-status plant and wildlife species. These species may be directly impacted by construction efforts. All trees on the property will be removed for this project, eliminating potential nesting, roosting, or perching habitat. Two retention basins will be removed for this development, which may impact wildlife species that rely on this water source for foraging. The removal of Basin 2 will eliminate 0.30 acres of mixed upland and riparian shrubs.

No critical habitat or sensitive vegetation communities are expected to be impacted. Of the sensitive plant species that have potential to occur, none were observed in the Study Area. While appropriate soils for several species are abundant on site, the ground has been heavily disturbed for decades and the plant communities these species are typically a part of are not present on site. No native trees will be removed for the proposed project. No wildlife corridors or migration routes will be impacted by the project. No wetlands or jurisdictional water features occur within the Study Area.

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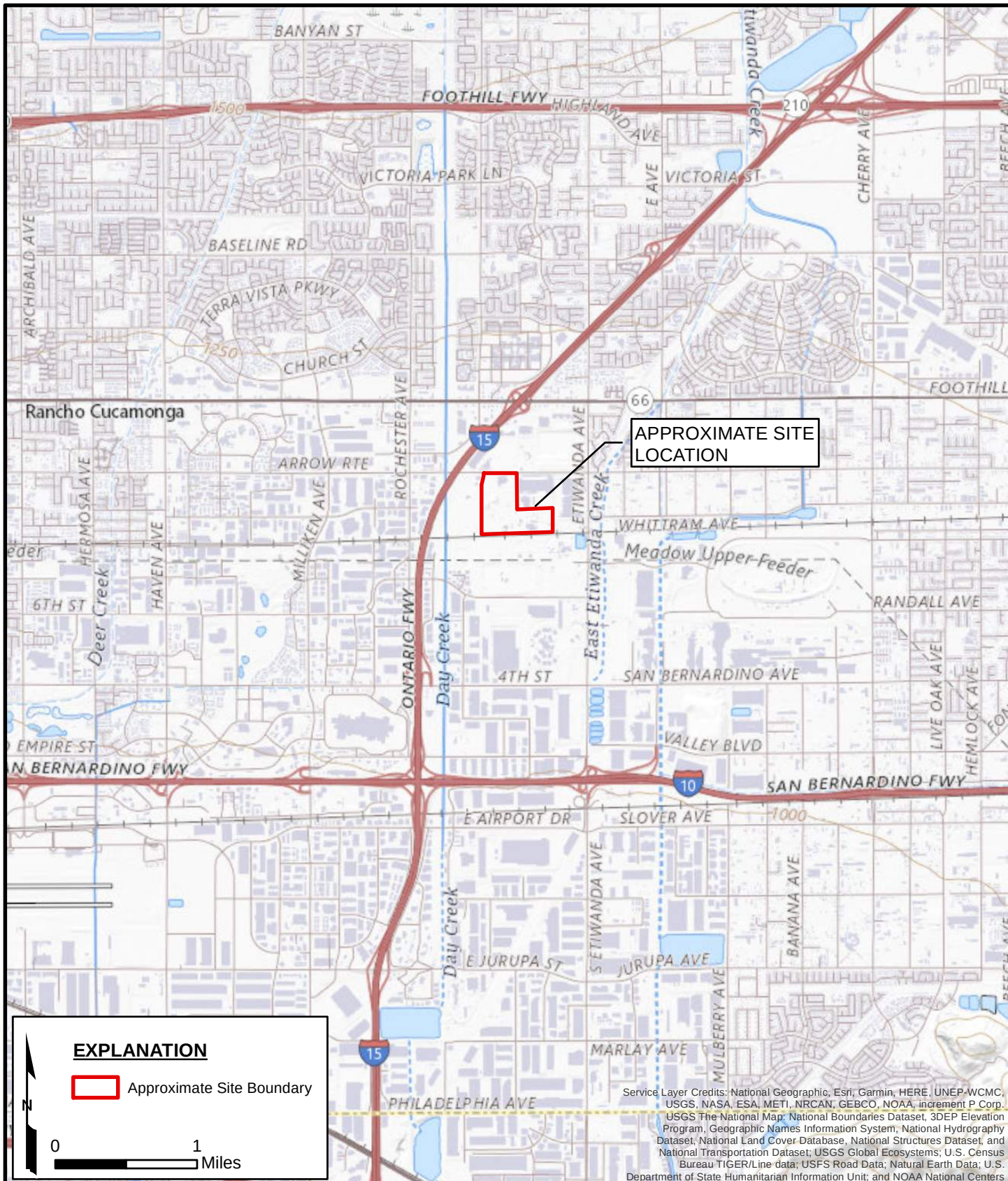
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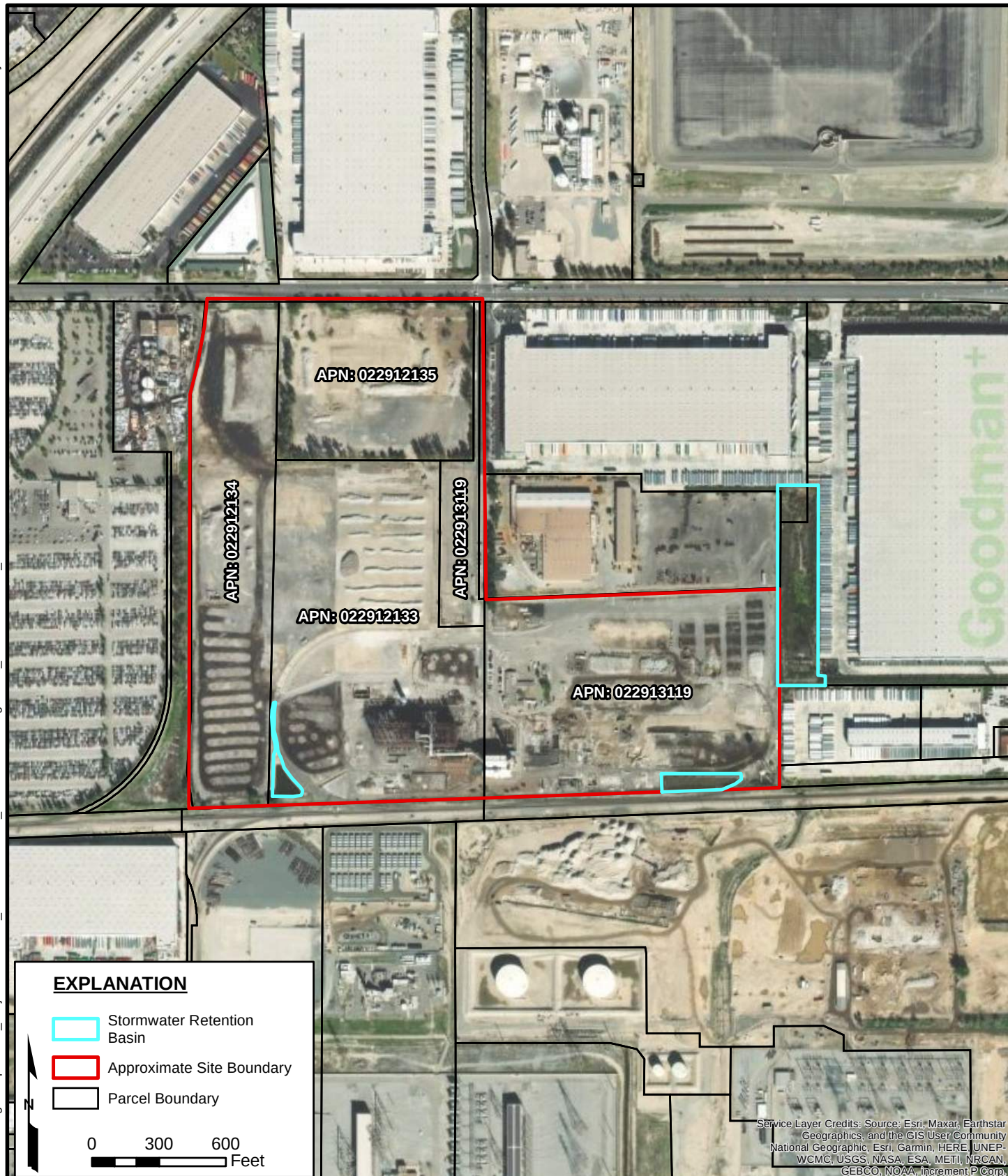
FIGURES



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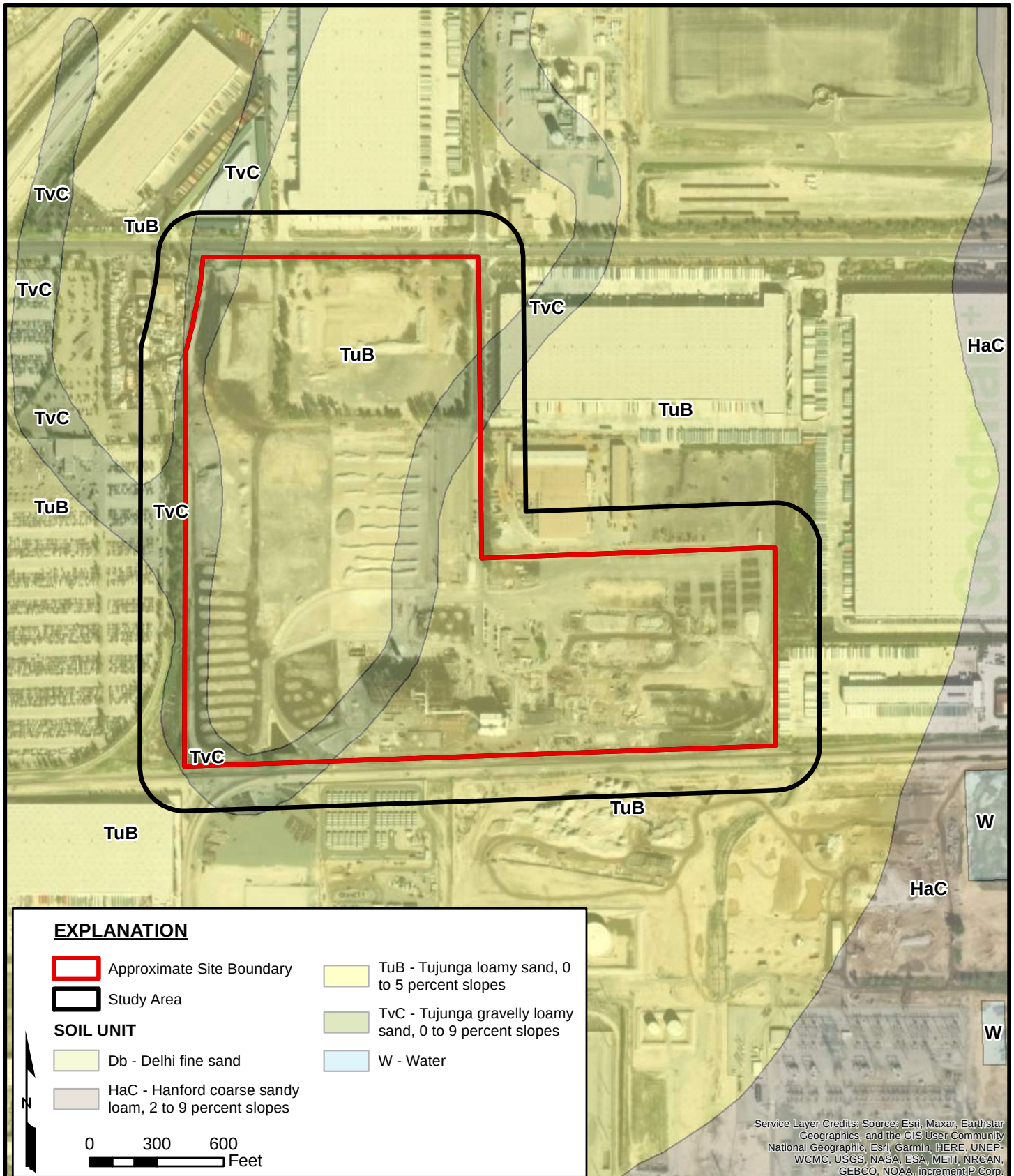
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PROJECT: 24001666.001A		SITE VICINITY MAP	FIGURE 1
DRAWN: NOV 2023			
DRAWN BY: RA		BIOLOGICAL RESOURCES TECHNICAL REPORT SOUTHEAST INDUSTRIAL QUADRANT DEVELOPMENT PROJECT (SEIQ) SITE 1 ETS RANCHO CUCAMONGA, CALIFORNIA	
CHECKED BY: WV			
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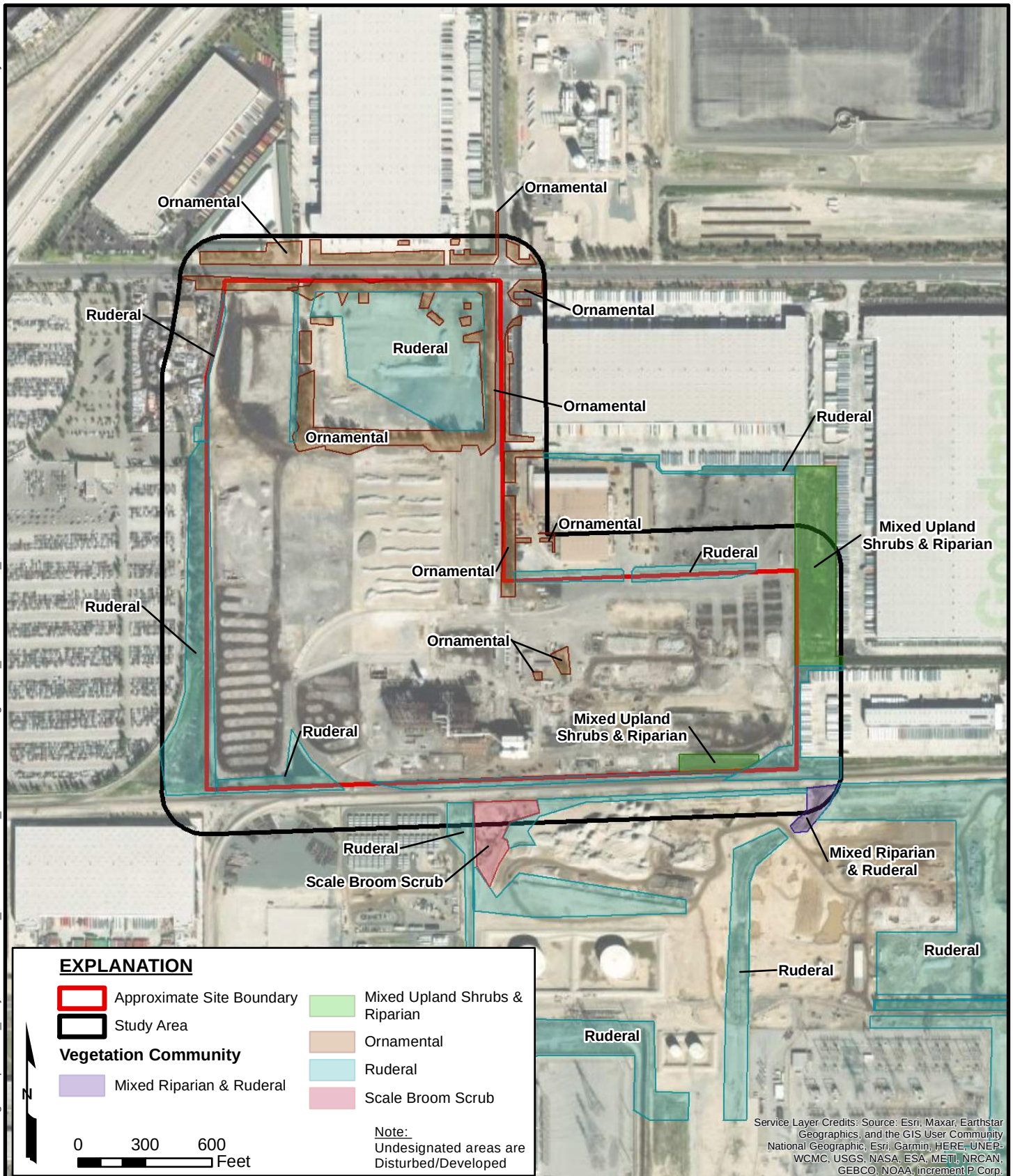


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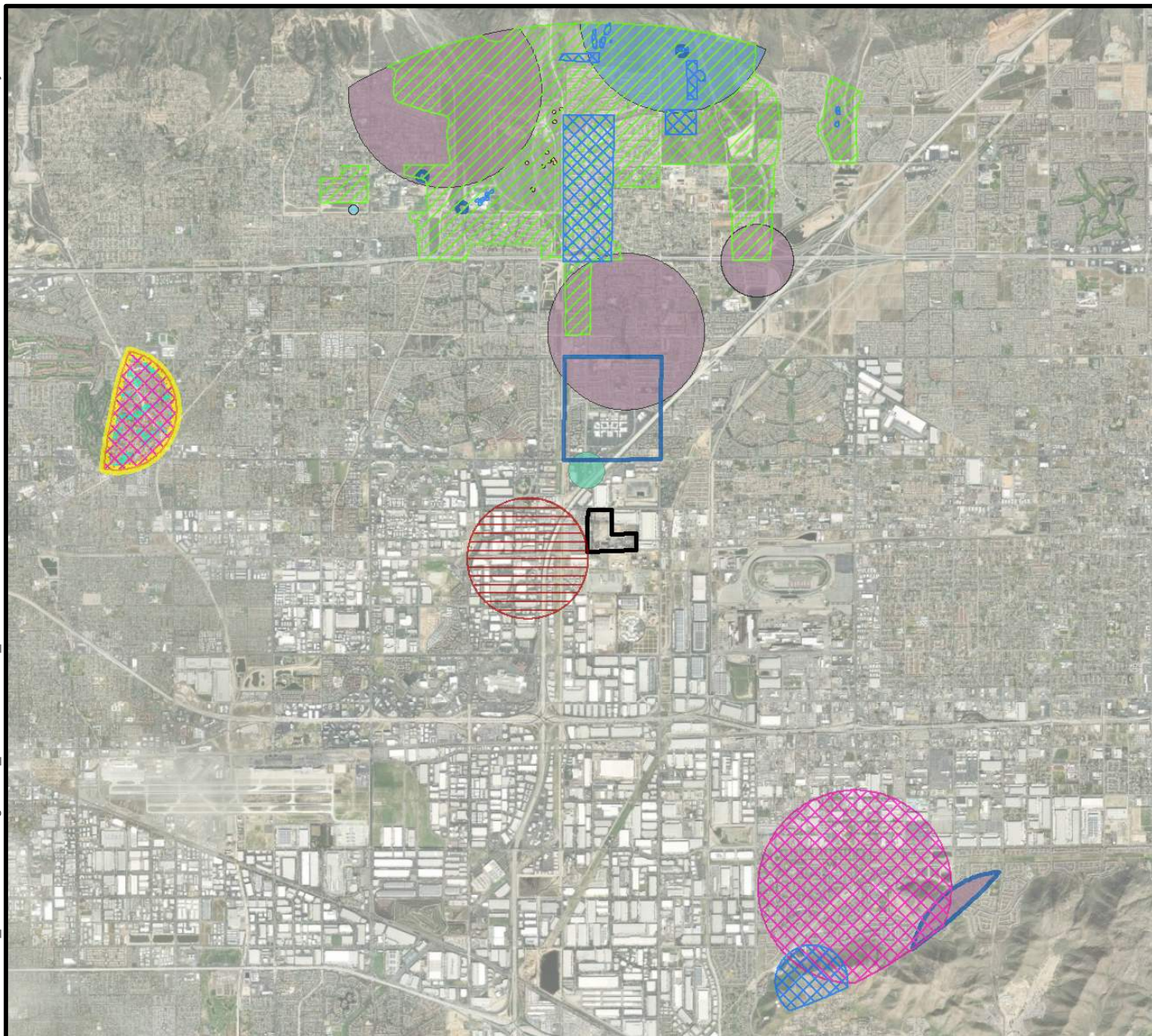
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		DRAWN: NOV 2023		
		DRAWN BY: RA	BIOLOGICAL RESOURCES TECHNICAL REPORT SOUTHEAST INDUSTRIAL QUADRANT DEVELOPMENT PROJECT (SEIQ) SITE 1 ETS RANCHO CUCAMONGA, CALIFORNIA	
		CHECKED BY: WV		
FILE NAME: 24001666s1_F2.mxd				



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		DRAWN: NOV 2023		
		DRAWN BY: RA		
		CHECKED BY: WV		
FILE NAME: 24001666s1_F4.mxd		BIOLOGICAL RESOURCES TECHNICAL REPORT SOUTHEAST INDUSTRIAL QUADRANT DEVELOPMENT PROJECT (SEIQ) SITE 1 ETS RANCHO CUCAMONGA, CALIFORNIA		



EXPLANATION

Approximate Site Boundary

PLANTS AND HABITATS

Aparejo grass

Brand's star phacelia

California Walnut Woodland

California muhly

California saw-grass

Chaparral ragwort

Coastal and Valley Freshwater Marsh

Intermediate mariposa-lily

Mesa horkelia

Parry's spineflower

Plummer's mariposa-lily

Prostrate vernal pool navarretia

Riversidian Alluvial Fan Sage Scrub

San Bernardino aster

Sanford's arrowhead

White rabbit-tobacco

Source: CDFW CNDDDB (2023)

0 1 2 Miles

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.



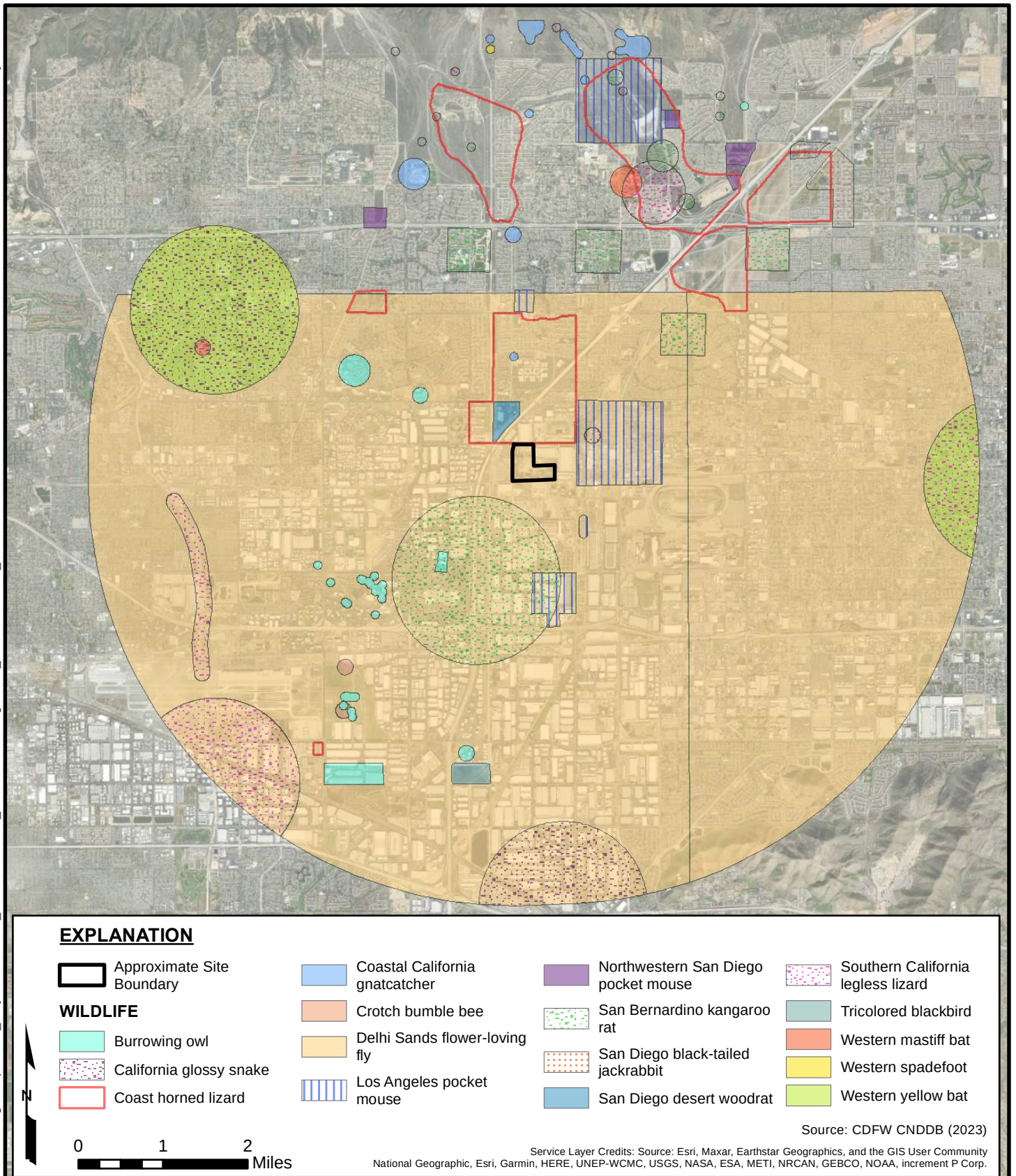
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DRAWN:	NOV 2023
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FILE NAME:	24001666s1_F5.mxd

CNDDDB RESULTS – PLANTS AND HABITATS
BIOLOGICAL RESOURCES TECHNICAL REPORT SOUTHEAST INDUSTRIAL QUADRANT DEVELOPMENT PROJECT (SEIQ) SITE 1 ETS RANCHO CUCAMONGA, CALIFORNIA

FIGURE
5



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PROJECT:24001666.002A

DRAWN: NOV 2023

DRAWN BY: RA

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FILE NAME: 24001666s1_F6.mxd

CNDDDB RESULTS – WILDLIFE

BIOLOGICAL RESOURCES TECHNICAL REPORT
SOUTHEAST INDUSTRIAL QUADRANT
DEVELOPMENT PROJECT (SEIQ)
SITE 1 ETS
RANCHO CUCAMONGA, CALIFORNIA

FIGURE

6

APPENDIX A
SPECIAL-STATUS SPECIES IDENTIFIED FROM BACKGROUND RESEARCH

Common Name	Scientific Name	Status Fed/State/ Other*	General Habitat Description	Potential to Occur
PLANTS				
San Diego ambrosia	<i>Ambrosia pumila</i>	FE / - / 1B.1	Chaparral, coastal scrub, valley and foothill grassland. Sandy loam or clay soil; sometimes alkaline. In valleys; persists where disturbance has been superficial. Sometimes on margins or near vernal pools. 3-580 m. Apr-Oct.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area.
Braunton's milk-vetch	<i>Astragalus brauntonii</i>	FE / - / 1B.1	Chaparral, coastal scrub, valley and foothill grassland. Recent burns or disturbed areas; usually on sandstone with carbonate layers. Soil specialist; requires shallow soils to defeat pocket gophers and open areas, preferably on hilltops, saddles or bowls between hills. 3-640 m. Jan-Aug.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area.
Catalina mariposa-lily	<i>Calochortus catalinae</i>	- / - / 4.2	Valley and foothill grassland, chaparral, coastal scrub, cismontane woodland. In heavy soils, open slopes, openings in brush. 15-700 m.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area.

Common Name	Scientific Name	Status Fed/State/ Other*	General Habitat Description	Potential to Occur
Plummer's mariposa-lily	<i>Calochortus plummerae</i>	- / - / 4.2	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on dry rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60-2500 m.	<i>Low.</i> Dry, sandy, gravelly soils (alluvium from granitic sources) present in the Study Area, but suitable habitat is disturbed and marginal.
Intermediate mariposa-lily	<i>Calochortus weedii</i> <i>var. intermedius</i>	- / - / 1B.2 / USFS	Coastal scrub, chaparral, valley and foothill grassland. Dry, rocky open slopes and rock outcrops. 60-1575 m.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area.
Parry's spineflower	<i>Chorizanthe parryi</i> <i>var. parryi</i>	/ - / 1B.1 / USFS / BLM	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland. Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 90-1220 m.	<i>Potential.</i> Disturbed, dry sandy soils are present in the northern portion of the property, but there are no nearby sources for recruitment. Small area of coastal scrub present to the east of Study Area.
California saw-grass	<i>Cladium californicum</i>	- / - / 2B.2 / USFS	Meadows and seeps, marshes and swamps (alkaline or freshwater). Freshwater or alkaline moist habitats. -20-2135 m.	<i>Not expected.</i> Dry conditions on site. Stormwater retention basins do not provide consistent water or moisture.

Common Name	Scientific Name	Status Fed/State/ Other*	General Habitat Description	Potential to Occur
Paniculate tarplant	<i>Deinandra paniculata</i>	- / - / 4.2	Coastal scrub, valley and foothill grassland, vernal pools, open chaparral and woodland, disturbed areas, sometimes on sandy soils. 25 – 940 m elev. Apr-Nov.	<i>Low.</i> Disturbed sandy soils and limited coastal scrub present in Study Area. No nearby sources for recruitment.
Slender-horned spineflower	<i>Dodecahema leptoceras</i>	FE / SE / 1B.1	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub). Flood deposited terraces and washes; associates include Encelia, Dalea, Lepidospartum, etc. Sandy soils. 200-765 m. Apr-Jun.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area.
Mesa horkelia	<i>Horkelia cuneata</i> <i>var. puberula</i>	- / - / 1B.1	Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. 70 – 810 m elev. Feb-Jul(Sep).	<i>Not expected.</i> Disturbed sandy soils and limited coastal scrub present in Study Area, but no recent known occurrences in greater vicinity.
Southern California black walnut	<i>Juglans californica</i>	- / - / 4.2	Chaparral, coastal scrub, cismontane woodland. Slopes, canyons, alluvial habitats. 50-900 m.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area.
California muhly	<i>Muhlenbergia californica</i>	- / - / 4.3	Coastal scrub, chaparral, lower montane coniferous forest, meadows, canyons, and seeps. Usually found near streams or seeps. 100-2000 m.	<i>Low.</i> Limited coastal scrub vegetation near stormwater retention basins, but they do not provide consistent water or moisture. The Study Area is dry.

Common Name	Scientific Name	Status Fed/State/ Other*	General Habitat Description	Potential to Occur
Aparejo grass	<i>Muhlenbergia utilis</i>	- / - / 2B.2	Chaparral, cismontane woodland, coastal scrub, creosote bush scrub, wetland-riparian, marshes and swamps, meadows, seeps. Alkaline and serpentinite. Oct-Mar. 25-2325 m.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area.
Prostrate vernal pool navarretia	<i>Navarretia prostrata</i>	- / - / 1B.2	Coastal scrub, valley and foothill grassland, vernal pools, meadows and seeps. Alkaline soils in grassland, or in vernal pools. Mesic, alkaline sites. 3-1235 m.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area.
Brand's star phacelia	<i>Phacelia stellaris</i>	- / - / 1B.1	Coastal scrub, coastal dunes. Open areas. 3-370 m.	<i>Potential.</i> Open habitat with marginal coastal scrub present in the Study Area.
White rabbit-tobacco	<i>Pseudognaphalium leucocephalum</i>	- / - / 2B.2	Riparian woodland, cismontane woodland, coastal scrub, chaparral. Sandy, gravelly sites. 35-515 m.	<i>Low.</i> Gravelly, sandy soils are present in Study Area. Limited coastal scrub vegetation near stormwater retention basins. No observations near Study Area for over a century.
Sanford's arrowhead	<i>Sagittaria sanfordii</i>	- / - / 1B.2 / BLM	Marshes and swamps. In standing or slow-moving freshwater ponds, marshes, and ditches. 0-605 m.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area.

Common Name	Scientific Name	Status Fed/State/ Other*	General Habitat Description	Potential to Occur
Chaparral ragwort	<i>Senecio aphanactis</i>	- / - / 2B.2 / BLM	Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats, dry open rocky areas. 20-855 m.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area.
San Bernardino aster	<i>Symphyotrichum defoliatum</i>	- / - / 1B.2 / USFS / BLM	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland. Vernal mesic grassland or near ditches, streams and springs; disturbed areas. 2-2040 m.	<i>Low.</i> Marginal habitat by stormwater retention basins. Potential habitat in open, disturbed areas at north of Property.
WILDLIFE				
Crotch's bumble bee	<i>Bombus crotchii</i>	- / - / SSC	Nests underground in abandoned rodent nests or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees. Inhabits open grassland and scrub habitats but is able to persist in semi-natural habitats surrounded by intensely modified landscapes. Dietary generalist, but relies heavily on <i>Asclepias</i> , <i>Chaenactis</i> , <i>Lupinus</i> , <i>Medicago</i> , <i>Phacelia</i> , and <i>Salvia</i> as food sources.	<i>Low.</i> Preferred food sources very limited in Study Area.

Common Name	Scientific Name	Status Fed/State/ Other*	General Habitat Description	Potential to Occur
Monarch butterfly	<i>Danaus plexippus</i>	- / - / SSC	Monarch adults make massive, multi-generation migrations from August-October, flying south thousands of miles to hibernate along the California coast and in central Mexico. Monarchs stop to feed on flower nectar and to roost together at night. During warm winter days, the butterflies may take moisture and flower nectar. Most mating happens before they journey north in the spring, when females lay single eggs along the way under host plant leaves (<i>Asclepias</i> sp.); caterpillars eat flowers and leaves. Overwintering sites along the California coast are important for conservation of this species.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area, forage resources limited.
Delhi Sands flower-loving fly	<i>Rhaphiomidas terminatus abdominalis</i>	FE / - / -	Fine, sandy soils often associated with wholly or partially consolidated dunes referred to as the "Delhi" series. Vegetation consists of a sparse cover, including California buckwheat, California croton, deerweed, telegraph weed, and evening primrose.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area. The Delhi sands required by this species are not present, although there is a population of California buckwheat and telegraph weed.

Common Name	Scientific Name	Status Fed/State/ Other*	General Habitat Description	Potential to Occur
Southwestern pond turtle	<i>Actinemys pallida</i>	FC / - / SSC	Western pond turtle is found in rivers, lakes, streams, ponds, wetlands, ephemeral creeks, reservoirs, agricultural ditches, estuaries, and brackish waters. Western pond turtles prefer areas that provide cover from predators, such as vegetation and algae, as well as basking sites for thermoregulation. Adults tend to favor deeper, slow moving water, whereas hatchlings search for slow and shallow water that is slightly warmer. Terrestrial habitats are used for egg laying and wintering and usually consist of burrows in leaves and soil. They are rarely found at altitudes above 1,500 meters (5,000 ft).	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area.
Arroyo toad	<i>Anaxyrus californicus</i>	FE / - / SSC	Arroyo toad occurs in semi-arid habitats near washes, sandy riverbanks, riparian areas, palm oasis, Joshua trees, mixed chaparral, and sagebrush. It requires stream channels for breeding (typically 3rd order) and adjacent stream terraces and uplands for foraging and wintering.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area.

Common Name	Scientific Name	Status Fed/State/ Other*	General Habitat Description	Potential to Occur
Southern California legless lizard	<i>Anniella stebbinsi</i>	- / - / SSC	Secretive, fossorial. Occurs in areas with warm, moist, loose sandy or organic soils and sparse vegetation in oak woodland, chaparral, riparian woodland, oak-pine woodland, coastal dune, and valley-foothill and desert scrub habitats. 0-1,800 m (0-5,900 feet). Typically found in areas with leaf litter under trees and bushes in sunny locations. Forages in sand and leaf litter for insect prey.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area.
California glossy snake	<i>Arizona elegans occidentalis</i>	- / - / SSC	Nocturnal, hides underground under rocks, burrows, or loose soil during daytime. Found in desert, chaparral, sagebrush, rocky washes, grasslands, valley-foothill hardwood, and pine-juniper. Prefer open sandy areas with scattered brush. Water is not an important habitat element. Feed primarily on lizards. Elevations from below sea level to 1,830 m (6,000 ft).	<i>Low.</i> Sandy, open habitat lined with brush near stormwater retention basins present is in Study Area. Limited food sources.

Common Name	Scientific Name	Status Fed/State/ Other*	General Habitat Description	Potential to Occur
Coastal whiptail	<i>Aspidoscelis tigris stejnegeri</i>	- / - / SSC	Widely distributed but only abundant in desert regions. Found in a variety of habitats, primarily hot and dry areas: chaparral, woodland, desert scrub, desert wash, alkali scrub, and annual grassland. Most common in and around dense vegetation. Forage actively on the ground near the base of vegetation, taking in a variety of ground-dwelling invertebrates. Does not require permanent water.	<i>Low.</i> Hot, dry conditions are present, dense vegetation is very marginal near stormwater retention basins.
Coast horned lizard	<i>Phrynosoma blainvillii</i>	- / - / SSC	Uncommon to common in suitable habitats. Forages in open spaces, especially sandy areas, washes, flood plains, and wind-blown deposits. Usually occurs at elevations below 900 m (0-2,950 feet), in valley-foothill hardwood, conifer, and riparian, pine-cypress, and juniper habitats, and annual grasslands. Ants an important food source, but other insects are also consumed.	<i>Potential.</i> Open, sandy/loamy areas abundant on Property, although recently disturbed from tilling and earthwork. Food sources and appropriate vegetation are limited in the Study Area.
Mountain yellow-legged frog	<i>Rana muscosa</i>	FE / SE / SSC	Southern mountain yellow-legged frog occurs in lakes, ponds, meadow streams, isolated pools and open riverbanks, typically in rocky, narrow canyons and chaparral.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area.

Common Name	Scientific Name	Status Fed/State/ Other*	General Habitat Description	Potential to Occur
Western spadefoot	<i>Spea hammondi</i>	- / - / SSC	Occurs primarily in grasslands, occasionally in valley-foothill hardwood woodlands or orchards/vineyards. Breed and lay eggs in shallow, temporary pools formed by heavy winter rains, vernal pools. 0-1,263 m (0-4,460 ft).	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area. Stormwater retention basins may hold water during winter, but surrounding vegetation is lacking. Most recent observation in CNDDDB records was 4.6 miles north of Property in 2005.
Northwestern San Diego pocket mouse	<i>Chaetodipus fallax fallax</i>	- / - / SSC	Nocturnal mouse found in coastal scrub, chaparral, sagebrush, desert wash, desert scrub, and annual grassland. Prefers rocky, sandy, or gravelly areas. Rests and nests in underground burrows. Forages on seeds of grasses, forbs, and shrubs. Elevation: sea level to 1,350 m (4,500 ft).	<i>Not expected.</i> Sandy, gravelly soils present, but vegetation and food sources are very limited. Shrubs only present near stormwater retention basins.
Los Angeles pocket mouse	<i>Perognathus longimembris brevinasus</i>	- / - / SSC	Found in lower elevation grasslands and coastal sage scrub in areas with fine, sandy soils.	<i>Potential.</i> Marginal scrub habitat near stormwater retention basins. Sandy soil conditions are present on the Property. Individuals have been found in the vicinity of the Study Area.

Common Name	Scientific Name	Status Fed/State/ Other*	General Habitat Description	Potential to Occur
San Bernardino kangaroo rat	<i>Dipodomys merriami parvus</i>	FE / SC / SSC	Found in alluvial fan sage scrub, coastal sage scrub and chaparral with approx. 50% canopy cover. Granivorous; also relies on insects and green vegetation. Depends on sandy and/or loamy soils for burrowing, food storage, and rearing young.	<i>Potential.</i> Marginal scrub found near stormwater retention basins, limited food sources. Appropriate sandy, loamy soils for burrowing are present in the Study Area. Individuals have been found in the vicinity.
Stephens' kangaroo rat	<i>Dipodomys stephensi</i>	FT / ST / -	Found in open grasslands and sparse scrub (under 30% canopy cover) with a higher proportion of forbs. Granivore; also relies on insects and green vegetation. Requires friable, loamy soils for burrowing and rearing young. Often colonize areas following disturbances such as fire, grazing (including ongoing grazing), which create the open conditions they require.	<i>Low.</i> Marginal scrub found near stormwater retention basins, limited food sources. Open conditions have been created by disturbance (tilling, demolishing buildings). Appropriate sandy, loamy soils for burrowing are present in the Study Area. No records of individuals being found in the vicinity.

Common Name	Scientific Name	Status Fed/State/ Other*	General Habitat Description	Potential to Occur
San Diego black-tailed jackrabbit	<i>Lepus californicus bennettii</i>	- / - / SSC	Occupy a variety of habitats, most common among shortgrass habitats. Also occur in sage scrub and non-natural areas (agricultural, residential, urban developments) but need open habitat. Typically do not burrow, but take shelter at the base of shrubs and shallow depressions.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area. Open conditions on site only created by recent disturbance. Lack of appropriate food sources. Marginal scrub habitat near stormwater retention basins.
San Diego desert woodrat	<i>Neotoma lepida intermedia</i>	- / - / SSC	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	<i>Potential.</i> Marginal scrub habitat near stormwater retention basins. This species has been found in the vicinity of the Study Area.

Common Name	Scientific Name	Status Fed/State/ Other*	General Habitat Description	Potential to Occur
Western mastiff bat	<i>Eumops perotis californicus</i>	- / - / SSC	Western mastiff bat occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban areas. Suitable habitat consists of extensive open areas with abundant roost locations provided by crevices in rock outcrops and buildings. When roosting in rock crevices, this species needs vertical faces to drop off to take flight. Catches and feeds on insects in flight.	<i>Potential.</i> Some scrub and windrows of tall trees (Eucalyptus, Aleppo pines) found in the Study Area. Open areas caused by recent disturbance are present, although these may not be extensive enough for this species.
Western yellow bat	<i>Lasiurus xanthinus</i>	- / - / SSC	Roosts in trees, hanging from the underside of a leaf, commonly in the skirt of dead fronds of palm trees. Insect captures associated with water bodies: stock tanks, ponds, streams, rivers, pools, lawns, orchards, riparian areas. Found in dry, thorny vegetation, desert areas.	<i>Potential.</i> Some windrows of tall trees (Eucalyptus, Aleppo pines) found in the Study Area. Some small mexican fan palms present. Stormwater retention basins on Property do not provide consistent water or moisture necessary for insect captures.

Common Name	Scientific Name	Status Fed/State/ Other*	General Habitat Description	Potential to Occur
Cooper's hawk	<i>Accipiter cooperii</i>	- / - / WL	Found in woodlands, city parks, and suburban neighborhoods. Nests in trees.	<i>Low.</i> Potential to overfly site. Some tall trees present on site, but lack density this hawk prefers. Foraging very limited in the Study Area. No nesting activity observed.

Common Name	Scientific Name	Status Fed/State/ Other*	General Habitat Description	Potential to Occur
Tricolored blackbird	<i>Agelaius tricolor</i>	- / ST / SSC	Nest in freshwater marshes or freshwater ponds with thick cattail, rushes, and willows.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area.
Southern California rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	- / - / WL	Found on moderate slopes vegetated with low, fairly open cover of coastal sage scrub and grass. Secretive, forage on the ground. Nest on the ground or 1-3 feet above ground at the base of shrubs or dense grasses.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area.
Burrowing owl	<i>Athene cunicularia</i>	- / - / SSC	Found in open, dry annual and perennial grasslands, deserts, and shrublands. Nests in small mammal burrows or structurally equivalent features.	<i>Not expected.</i> No appropriate burrowing sites, lack of small mammal burrows to occupy. Study Area is highly disturbed. No nesting activity observed.
Northern harrier	<i>Circus hudsonius</i>	- / - / SSC	Forages and breeds in open habitats, including grasslands and marshes. Ground nesting.	<i>Not expected.</i> Potential to overfly site, but there is a lack of vegetation cover, food sources, and undisturbed available nesting sites.
White-tailed kite	<i>Elanus leucurus</i>	- / - / CFP	Forages in grasslands, marshes, and fields. Resident year-round and nests in trees.	<i>Potential.</i> Potential to overfly site. Some tall trees present on site. No nesting activity observed.

Common Name	Scientific Name	Status Fed/State/ Other*	General Habitat Description	Potential to Occur
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	FE / SE / SSC	Willow flycatcher is found in bushes, willow thickets, brushy fields, and upland groves. It breeds in thickets of deciduous trees and shrubs, especially willows, or along woodland edges. It is often found near streams or marshes (especially in southern part of range).	<i>Not expected.</i> Lack of suitable habitat, including vegetation cover, food sources, and undisturbed available nesting sites.
California horned lark	<i>Eremophila alpestris actia</i>	- / - / WL	Open, dry ground with little to no vegetative cover: prairies, dunes, deserts, heavily grazed pastures, areas recently cleared by humans such as plowed fields and mowed expanses. Ground nesting. 0-13,000 ft (0-3960 m)	<i>Potential.</i> The majority of the Property is composed of bare, open ground with little to no vegetative cover. Recently disturbed, tilled site.
California condor	<i>Gymnogyps californianus</i>	FE / SE / FP	California condor nests in rock formations, deep caves, and occasionally in cavities in giant sequoia trees (<i>Sequoiadendron giganteus</i>). It forages in relatively open habitats where large animal carcasses can be detected.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area.

Common Name	Scientific Name	Status Fed/State/ Other*	General Habitat Description	Potential to Occur
Loggerhead shrike	<i>Lanius ludovicianus</i>	- / - / SSC	Loggerhead shrike is a year-round resident in most areas of California that contain grasslands, open areas, orchards and areas with scattered trees. It feeds on small vertebrates and invertebrates, and impales prey on thorns or barbed wire. Nests in thorny vegetation, trees, shrubs, brush piles, or tumbleweeds 2-4ft above ground.	<i>Low.</i> Open conditions with windrows of trees present in Study Area. Food resources are very limited and site is highly disturbed. Potential nesting sites in trees, shrubs near basins, and regional drainage to the east.
California gull	<i>Larus californicus</i>	- / - / WL	Occurs in a variety of habitats. Winters along California Coast. Known to forage in farm fields and pastures.	<i>Not expected.</i> Lack of nearby water sources. Suitable habitat for this species does not exist in the Study Area.
California black rail	<i>Laterallus jamaicensis coturniculus</i>	- / ST / CFP	California black rail occurs near freshwater marshes along the margins of ponds, lakes, and water impoundments, as well as herb dominated wetlands on sloped ground associated with springs, canal leaks, seepage from agricultural irrigation. Requires water depths of about one inch that do not fluctuate during the year, and dense vegetation for nesting habitat.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area. Stormwater retention basins on Property do not provide consistent water or moisture.

Common Name	Scientific Name	Status Fed/State/ Other*	General Habitat Description	Potential to Occur
Coastal California gnatcatcher	<i>Polioptila californica californica</i>	FT / - / SSC	Requires coastal sage scrub and coastal bluff scrub. Strong association with California sagebrush. 0 - 2,500 ft.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area.
California spotted owl	<i>Strix occidentalis occidentalis</i>	- / - / SSC	California spotted owl nests and forages in dense, old-growth, multi-layered mixed conifer, redwood and Douglas-fir habitats. Prey items include primarily flying squirrels and dusky-footed woodrats, as well as mice, voles, rabbits, birds and bats.	<i>Not expected.</i> <i>Suitable habitat for this species does not exist in the Study Area.</i>
Least Bell's vireo	<i>Vireo bellii pusillus</i>	FE / SE / -	Least Bell's vireo primarily occupies riverine riparian habitats, including dry portions of intermittent streams that typically provide dense cover within 3-6 feet of the ground, often adjacent to a complex, stratified canopy. Prey items include bugs, beetles, grasshoppers, moths, spiders, and caterpillars. They glean insects from leaves, twigs, and branches by hovering and picking prey off these stationary objects, and also utilize aerial pursuit.	<i>Not expected.</i> Suitable habitat for this species does not exist in the Study Area.

* FT = Federal listed threatened species

FE = Federal listed endangered species

FC = Candidate for federal-listing as threatened or endangered.

R = Under review by CDFW for listing as state-listed threatened or endangered.

SE = State-listed endangered species

SC = State candidate for listing as endangered or threatened

ST = State-listed threatened species

SR = State-listed rare species

CFP = California "Fully Protected" species

1B = California Rare Plant Rank (CRPR): Plants rare and endangered in California and elsewhere.

2 = California Rare Plant Rank. Plants rare and endangered in California, but more common elsewhere.

SSC = Species of special concern in California

NatureServe Conservation Status Assessments:

S1 = Critically imperiled

S2 = Imperiled

S3 = Vulnerable

S4 = Apparently secure

.1 = Very threatened

.2 = Threatened

SNR = Unranked - National or sub-national conservation status not yet assessed.

WL = Former SSC. Now on CDFW watch list.

APPENDIX B
WILDLIFE SPECIES OBSERVED IN THE STUDY AREA

Common Name	Scientific Name	Protected Status*
Birds		
Common Raven	<i>Corvus corax</i>	M
Allen's Hummingbird	<i>Selasphorus sasin</i>	M
Mourning Dove	<i>Zenaida macroura</i>	M
Reptiles		
Western fence lizard	<i>Sceloporus occidentalis</i>	--
Western Side-blotched lizard	<i>Uta stansburiana elegans</i>	--
Mammals		
Canid (prints)		
Invertebrates		
Gray hairstreak	<i>Strymon melinus</i>	--
Checkered white	<i>Pontia protodice</i>	--
Fire ant	<i>Solenopsis sp.</i>	--
Figeater beetle	<i>Cotinis mutabilis</i>	--

*Protected Status:

CSC – California Species of Special Concern

M – Migratory Bird Treaty Act

TW – California 'Taxa to Watch' (i.e., species that were CSC previously but not at present)

APPENDIX C
PLANT SPECIES OBSERVED IN THE STUDY AREA

Scientific Name	Common Name	Cal-IPC ¹	I/N ²
<i>Ambrosia acanthicarpa</i>	Flatspine bursage		N
<i>Artemesia californica</i>	Sage brush		N
<i>Atriplex semibaccata</i>	Australian saltbush	M	I
<i>Avena sp.</i>	Wild oats	M	I
<i>Baccharis salicifolia</i>	Mule fat		N
<i>Bauhinia variegata</i>	Orchid tree		I
<i>Brassica nigra</i>	Black mustard	M	I
<i>Brassica rapa</i>	Field mustard	L	I
<i>Bromus diandrus</i>	Great brome	M	I
<i>Bromus hordeaceus</i>	Soft brome	L	I
<i>Bromus madritensis ssp. rubens</i>	Red brome	H	I
<i>Camphora officinarum</i>	Camphor tree		I
<i>Centaurea melitensis</i>	Maltese star-thistle	M	I
<i>Chenopodium berlandieri</i>	Pitseed goosefoot		N
<i>Cynodon dactylon</i>	Bermuda grass	M	I
<i>Datura inoxia</i>	Pricklyburr		I
<i>Datura wrightii</i>	Sacred datura		N
<i>Encelia californica</i>	Bush sunflower		N
<i>Erigeron bonariensis</i>	Flax leaved horseweed		I
<i>Erigeron canadensis</i>	Horseweed		N
<i>Eriogonum fasciculatum</i>	California buckwheat		N
<i>Eucalyptus sp.</i>	Eucalyptus	L	I
<i>Euphorbia maculata</i>	Spotted spurge		I
<i>Heterotheca grandiflora</i>	Telegraph weed		N
<i>Jacaranda mimosifolia</i>	Blue jacaranda		I
<i>Lactuca serriola</i>	Prickly lettuce		I
<i>Lophostemon confertus</i>	Brush box		I
<i>Morus sp.</i>	Mulberry tree		I

Scientific Name	Common Name	Cal-IPC ¹	I/N ²
<i>Nerium oleander</i>	Oleander		I
<i>Nicotiana glauca</i>	Tree tobacco	M	I
<i>Oncosiphon piluliferum</i>	Stinknet		H
<i>Pennisetum setaceum</i>	Fountain grass	M	I
<i>Pinus halepensi</i>	Aleppo pine		I
<i>Platanus mexicana</i>	Mexican sycamore		I
<i>Polygonum aviculare</i>	Knotweed		I
<i>Pseudognaphalium luteoalbum</i>	Jersey cudweed		I
<i>Salix spp.</i>	Willow		N
<i>Salsola tragus</i>	Russian thistle	L	I
<i>Schinus molle</i>	Peruvian peppertree	L	I
<i>Solanum nigrum</i>	Black nightshade		I
<i>Stipa miliacea var. miliacea</i>	Smilo grass	L	I
<i>Tamarix ramosissima</i>	Salt cedar	H	I
<i>Tribulus terrestris</i>	Puncture vine	L	I
<i>Verbesina encelioides</i>	Cowpen daisy		N
<i>Washingtonia robusta</i>	Mexican fan palm	M	I

¹**Cal-IPC** (California Invasive Plant Council Inventory)

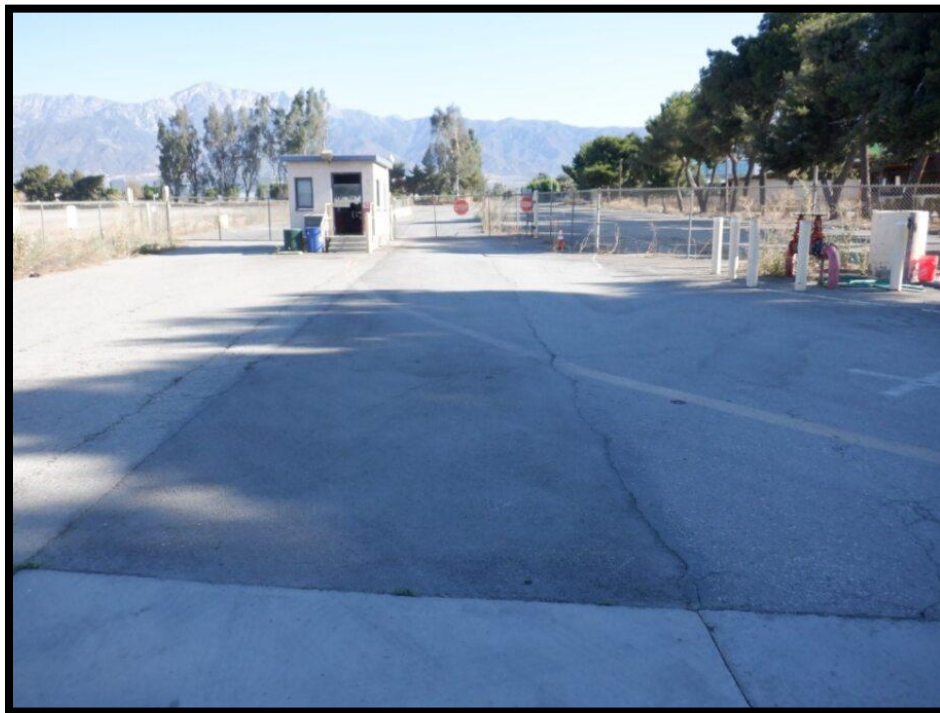
H = High – These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

M = Moderate – These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

L = Limited – These species are invasive, but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

²**I/N/U** **I** = Introduced/naturalized species **N** = Native to San Bernardino County **U** = Unknown

APPENDIX D SITE PHOTOGRAPHS



Looking north toward the guard shack and asphalt/concrete entrance from Juneberry Drive. The Aleppo pine windrow is visible to the right, and the Eucalyptus windrows are on the left.



A typical view of the property, looking north. The gravel stockpiles are found in the center of the property. The fine sand and crushed gravel composition of the soil is clearly visible.



View of the eastern side of the property. The swale is pictured on the left side of the photo. Goodman warehouses are visible in the background.



Looking south at the active Atchison Topeka and Santa Fe railroad, currently used by BNSF/Metrolink. Recent earthwork by heavy equipment is evident.



Looking east, a view into the swale. Dry, ruderal vegetation occupies the swale with no evidence of hydrophytic vegetation, persistent water flow, or standing water.



A view into Basin 3, east of the property. A mixture of vegetation types, some riparian and some upland, fill the basin.



A view into Basin 2 at the southeast corner of the property. The water line is apparent though staining and debris. Annual forbs and hydrophytic shrubs are growing in the basin.



Looking into Basin 1 at the southwest end of the property. The shotcrete structure of the basin allows only for minimal vegetation growth.



Looking north, a view of the channel associated with Basin 1 to help collect and direct surface water.



Looking southwest, this photo shows the windrow tree composition in the northern section of the property. Stockpiles on the property are visible to the right. The neighboring recycling facility can be seen to the right of the image.



Looking east from the northern section of the property, ruderal vegetation and tall trees are visible. Neighboring warehouses are in the background.