APPENDIX B – BIOLOGICAL LITERATURE REVIEW

October 27, 2021
5 Hutton Centre Drive, Suite 750
Santa Ana, CA 92707

Shanna Farley-Judkins
Community Development Department, City of Moorpark
799 Moorpark Ave.,
Moorpark, CA 93021

Subject: Desktop Analysis/Biological Literature Review for the Everett Street Terraces Project

Dear Ms. Farley-Judkins,

Chambers Group, Inc. (Chambers Group) was retained by the City of Moorpark to conduct a biological literature review for the Everett Street Terraces Project (Project). A formal biological reconnaissance-level survey was not conducted; however, a biologist has visited the site to verify present conditions and verify the statements described herein.

Project Site Location and Description

Newton and Associates (Applicant) proposes the construction of a 60-unit residential condominium complex consisting of 2- and 3-bedroom units on an approximately 2.438-acre vacant parcel located at the northern intersection of Everett Street and Walnut Canyon Road in the City of Moorpark (City), Ventura County.

The Project site is located at the northeast corner of Everett Street and Walnut Canyon Road (Assessor's Parcel Number (APN) 512-006-131, 512-006-132, 512-006-106, 512-006-105, and 512-006-121). Walnut Canyon Road becomes Moorpark Avenue as it passes south of Everett Street and the Project site is bounded by Wicks Road to the north and Walnut Canyon Road to the west, which becomes Moorpark Avenue as it passes south of Everett Street. The Project site is approximately 0.60 mile north of Los Angeles Avenue which becomes California State Route 118 going east, and approximately 1 mile west of State Route 23/Moorpark Freeway. The Project site is approximately 45 miles east of the Pacific Ocean.

The Project site was formerly developed with six single-family homes. These six homes had been removed prior to 2009 and no structures remain. There are existing residences north, south, east and west of the Project site with one commercial building north of Charles Street (dental office), and a public facility, the City Hall, west of Walnut Canyon Road. The elevation range at the Project site ranges from 516 to 571 feet above mean sea level (amsl). Maps of the Project Location and Project Vicinity are provided in Attachment 1 (Figure 1 – Project Location and Vicinity Map).

Methods

Literature Review

Chambers Group staff conducted a literature review for soils, jurisdictional water features that contribute to hydrology, and special status species known to occur within the vicinity of the Project. Chambers Group senior biologist, Heather Clayton, visited the site on August 26, 2020 to verify the site conditions and assess potential for special status species.

This biological literature review included a review of the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) and the California Native Plant Society's (CNPS) Electronic Inventory for records of reported occurrences of federal- and/or state-listed endangered or threatened species, California Species of Concern (SSC), or otherwise special status species or habitats that may occur within or in the immediate vicinity (within 5 miles) of the Project site. A Trust Resource Report was generated through the United States Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) process for critical habitat within the Project area or within the immediate Project vicinity (within 5 miles) and federally listed species identified as potentially occurring in or near the Project site. The USFWS National Wetlands Inventory (NWI) and U.S. Department of Agriculture (USDA) Soil Conservation Service and Web Soil Survey have also been reviewed. In addition, biological information included in reports previously prepared for this Project or adjacent projects has been reviewed.

Soils

Soil maps for the Project site were reviewed and soils determined in accordance with categories set forth by the USDA Soil Conservation Service and by referencing the USDA Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2021).

Hydrology

A general assessment of waters potentially regulated by the U.S. Army Corps of Engineers (USACE), California Regional Water Quality Control Board (RWQCB), and CDFW was conducted for the Project site. Pursuant to Section 404 of the Clean Water Act, USACE regulates the discharge of dredged and/or fill material into waters of the United States. The State of California (State) regulates discharge of material into waters of the State pursuant to Section 401 of the Clean Water Act and the California Porter-Cologne Water Quality Control Act (California Water Code, Division 7, §13000 et seq.). Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife. A desktop assessment was conducted with available data from the NWI to assess the potential for waters to be present on site (Figure 2). A visual inspection of the site was also performed during the site visit to determine if any waters or potential waters were present.

Special Status Habitats and Species

The most recent records of the CNDDB managed by the CDFW (CDFW 2021) and the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPS 2021) were reviewed for the following quadrangles containing and surrounding the Project: Moorpark, Santa Paula, Santa Paula Peak, Fillmore, Piru, Simi, Thousand Oaks, Newbury Park, and Camarillo, California U.S. Geological Survey (USGS) 7.5-minute quadrangles. These databases contain records of reported occurrences of federal- or state-listed endangered or threatened species, California Species of Concern (SSC), or otherwise special status species or habitats that may occur within or in the immediate vicinity of the Project site (Figure 3 – CNDDB and USFWS Occurrences Map).

Biological Literature Review Results

Biological Site Conditions

Soils

According to the results from the USDA NRCS Web Soil Survey (USDA 2021), the Project site is located in the Ventura area, CA674 (Figure 4). Two soil types are known to occur within and/or adjacent to the site. These soil types are described below.

The GaC—Garretson Loam, 2 to 9 Percent Slopes

The GaC—Garretson loam with 2 to 9 percent slopes composes the southern portion of the Project site. The parent material is alluvium derived from sedimentary rock and is typically composed of loam at the first and second horizons to a depth of 60 inches. The available water capacity is moderate at approximately 9 inches. This is a well-drained soil with a water table approximately 80 inches below the surface (USDA 2021).

SvF2—Soper Gravelly Loam, 30 to 50 Percent Slopes, Eroded, MLRA 20

SvF2—Soper gravelly loam, 30 to 50 percent slopes, eroded, MLRA 20 composes the northern portion of the Project site. The parent material is residuum weathered from conglomerate and/or residuum weathered from sandstone and is typically composed of gravely loam to a depth of 11 inches at the A horizon, very gravelly clay loam at a depth of 11 to 57 inches at the Bt horizon, and bedrock at a depth of 57 to 79 inches at the Cr horizon. The available water capacity is moderate at approximately 7.1 inches. This is a well-drained soil with a water table approximately 80 inches or more below the surface (USDA 2021).

Hydrology

No jurisdictional features such as drainages or swales were observed within the Project site. Therefore, no impacts to waters of the United States and waters of the State are anticipated to occur as a result of this Project.

Special Status Species

Special Status Species Ranking Criteria

The following information is a list of abbreviations used to help determine special status biological resources potentially occurring in the Project site.

CNPS California Rare Plant Rank (CRPR)

1A = Plants presumed extinct in California.
1B = Plants rare and endangered in California and throughout their range.
2 = Plants rare, threatened or endangered in California but more common elsewhere in their range.
3 = Plants about which we need more information, a review list.
4 = Plants of limited distribution; a watch list.

CRPR Extensions

0.1 = Seriously endangered in California (greater than 80 percent of occurrences threatened/high degree and immediacy of threat).
0.2 = Fairly endangered in California (20 to 80 percent occurrences threatened).
0.3 = Not very endangered in California (less than 20 percent of occurrences threatened).

Federal

FE = Federally listed; Endangered
FT = Federally listed; Threatened

State

CT = State listed; Threatened
CE = State listed; Endangered
RARE = State listed; Rare (Listed "Rare" animals have been re-designated as Threatened, but Rare plants have retained the Rare designation.)
SSC = State Species of Special Concern
WL = CDFW Watch List
FP = CDFW Fully Protected

The following information was used to determine biological resources potentially occurring within the Project site. The criteria used to evaluate the potential for special status species to occur within the Project site are outlined in Table 1.

Table 1: Criteria for Evaluating Special Status Species Potential for Occurrence

PFO*	CRITERIA
Absent:	Species is restricted to habitats or environmental conditions that do not occur within the Project site.
Low:	Historical records for this species do not exist within the immediate vicinity (approximately 5 miles) of the Project site, and/or habitats or environmental conditions needed to support the species are of poor quality.

PFO*	CRITERIA
Moderate:	Either a historical record exists of the species within the immediate vicinity of the Project site (approximately 3 miles) and marginal habitat exists on the Project site, or the habitat requirements or environmental conditions associated with the species occur within the Project site, but no historical records exist within 5 miles of the Project site.
High:	Both a historical record exists of the species within the Project site or its immediate vicinity (approximately 1 mile), and the habitat requirements and environmental conditions associated with the species occur within the Project site.

*PFO: Potential for Occurrence

Special Status Plant Species

Database searches (CDFW 2021; CNPS 2021) resulted in a list of nine federally and/or state listed threatened and endangered or otherwise special status plant species documented to historically occur within the vicinity of the Project site. Of the nine plant species that resulted from the database search, all are considered Absent from the Project site.

The following six plant species are considered **Absent** from the Project site due to lack of suitable soil conditions or because they grow outside the elevation range of the Survey Area:

- marcescent dudleya (Dudleya cymosa subsp. marcescens) – CRPR 1B.2, FT
- California Orcutt grass (Orcuttia californica) – CRPR 1B.1, FE, CE
- Lyon's pentachaeta (Pentachaeta lyonii) – CRPR 1B.1, FE, CE
- Plummer's mariposa-lily (Calochortus plummerae) – CRPR 4.2
- Payne's bush lupine (Lupinus paynei) – CRPR 1B.1
- Gerry's curly-leaved monardella (*Monardella sinuata* subsp. *gerryi*) – CRPR 1B.1

The following three plant species are considered **Absent** from the Project site due to lack of habitat requirements or environmental conditions associated with the species. Although suitable soil conditions exist, there is no suitable habitat due to the previously developed nature of the site, the high non-native vegetation cover, and mowing that is performed on a regular basis for fire suppression. The habitat type on site deemed incompatible to these species' specific requirements was disturbed non-native grassland with non-native trees present (26 tree species, predominantly *Eucalyptus* spp.).

- mesa horkelia (*Horkelia cuneata* var. *puberula*) - CRPR 1B.1
- Conejo dudleya (*Dudleya parva*) – CRPR 1B.2, FT
- chaparral ragwort (*Senecio aphanactis*) – CRPR 2B.2

Special Status Wildlife Species

Database searches (CDFW 2021; USFWS 2021) resulted in a list of 15 federally and/or state listed endangered or threatened, SSC, or otherwise special status wildlife species documented to occur within the Project site. After a literature review and the assessment of the various habitat types within the Project site (Figure 3), it was determined that eleven of the special status wildlife species are considered absent, and four species have a low potential for occurrence at the Project site.

The following eleven wildlife species are considered **Absent** from the Survey Area due to the absence of suitable habitat present within the site:

- southern California rufous-crowned sparrow (Aimophila ruficeps canescens) – WL
- western pond turtle (Emys marmorata) – SSC
- arroyo chub (Gila orcuttii) – SSC
- San Diego desert woodrat (Neotoma lepida intermedia) – SSC
- coast horned lizard (Phrynosoma blainvillii) – SSC
- coastal California gnatcatcher (Polioptila californica californica) – FT, SSC
- western spadefoot (Spea hammondii) – SSC
- Riverside fairy shrimp (Streptocephalus woottoni) – FE
- American badger (Taxidea taxus) – SSC
- two-striped gartersnake (Thamnophis hammondii) – SSC
- least Bell's vireo (*Vireo bellii pusillus*) – **FE**, **CE**

The following four wildlife species are considered to have a **Low** potential for occurrence due to historical records of the species within five miles of the Project site and the presence of poor quality habitat within the Project site.

- California legless lizard (Anniella spp.) – SSC
- California glossy snake (Arizona elegans occidentalis) – SSC
- coastal whiptail (Aspidoscelis tigris stejnegeri) – SSC
- white-tailed kite (*Elanus leucurus*) – FP

Critical Habitat

Within 5 miles of the Project site four types of critical habitat are present: Southern Coast Live Oak Riparian Forest, Southern Riparian Scrub, Southern Willow Scrub, and Southern Sycamore Alder Riparian Woodland (USFWS 2021) (Figure 3). None of these were found on site and therefore no mitigation for any critical habitat is necessary.

Conclusions and Recommendations

Hydrology

No jurisdictional features were observed within the Project site. No impacts to waters are anticipated; therefore, a USACE 404 permit, State 401 certification, or State Streambed Alteration Agreement will not be required for Project authorization.

Special Status Plant Species

Following the literature review it was determined that of the nine special status plant species known to historically occur within 5 miles of the Survey Area, all nine plant species are considered absent from the Project site.

Everett Street Tree Report: Peer Review Recommendations

Chambers Group recommends removing trees outside of the nesting bird season for raptors to remain in compliance with the Migratory Bird Treaty Act. Signs of raptor use were present within and beneath many of the larger trees on site. Nesting season for raptors is between January 1 and August 31 each year. If tree removal needs to occur between January and August, a nesting bird survey may be conducted prior to removal and if a qualified biologist determines no raptor nests are present within 500 feet of the tree, the removal of that tree may occur during nesting season. Consultation with CDFW may be necessary.

Special Status Wildlife Species

Following the literature review it was determined that of the 15 special status wildlife species known to occur within 5 miles of the Project Area, 11 species are considered absent, and four species have a low potential for occurrence. To minimize potential impacts to nesting birds protected under the Migratory Bird Treaty Act (MBTA), construction activities should take place outside nesting season (February 1 to August 31), to the greatest extent practicable. If construction activities occur during nesting season, preconstruction surveys and biological monitoring should be conducted if an active nest is found within the work area. A qualified biologist should conduct and submit a migratory nesting bird and raptor survey report. The survey should occur no more than three days prior to initiation of Project activities, and any occupied passerine and/or raptor nests occurring within or adjacent to the impact area should be delineated. Additional follow-up surveys may be required by the resource agencies. To the maximum extent practicable, a minimum buffer zone around occupied nests should be maintained during physical ground-disturbing activities. The buffer zone should be sufficient in size to prevent impacts to the nest. Once nesting has ceased, the buffer may be removed.

Please contact me at (949) 261-5414 ext. 7241 if you have any questions or concerns regarding this letter report.

Sincerely,

CHAMBERS GROUP, INC.

Heather Clayton

Heather Clayton
Senior Biologist
hlayton@chambersgroupinc.com
(949) 261-5414 ext. 7241

Attachments

Figure 1 – Project Location and Vicinity Map
Figure 2 – NWI Map
Figure 3 – CNDDB and USFWS Occurrences Map
Figure 4 – Soil Report

References

California Department of Fish and Wildlife (CDFW)

2021 California Natural Diversity Database (CNDDB). RareFind Version 5.2.14. Database Query for the *Moorpark, Santa Paula, Santa Paula Peak, Fillmore, Piru, Simi, Thousand Oaks, Newbury Park, Camarillo,* California USGS 7.5-minute quadrangles. Wildlife and Habitat Data Analysis Branch.

California Native Plant Society (CNPS)

2021 Inventory of Rare and Endangered Plants (online edition). Rare Plant Scientific Advisory Committee, California Native Plant Society, Sacramento, California. Accessed October 2021 from http://www.cnps.org/inventory for the *Moorpark, Santa Paula, Santa Paula Peak, Fillmore, Piru, Simi, Thousand Oaks, Newbury Park, Camarillo,* California USGS 7.5-minute quadrangles.

United States Department of Agriculture (USDA)

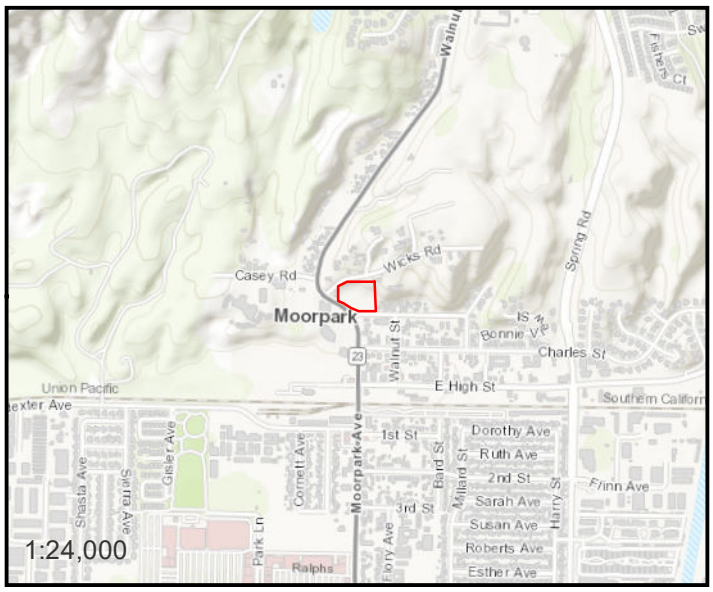
2021 Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Official Soil Series Descriptions Accessed October 2021 from https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

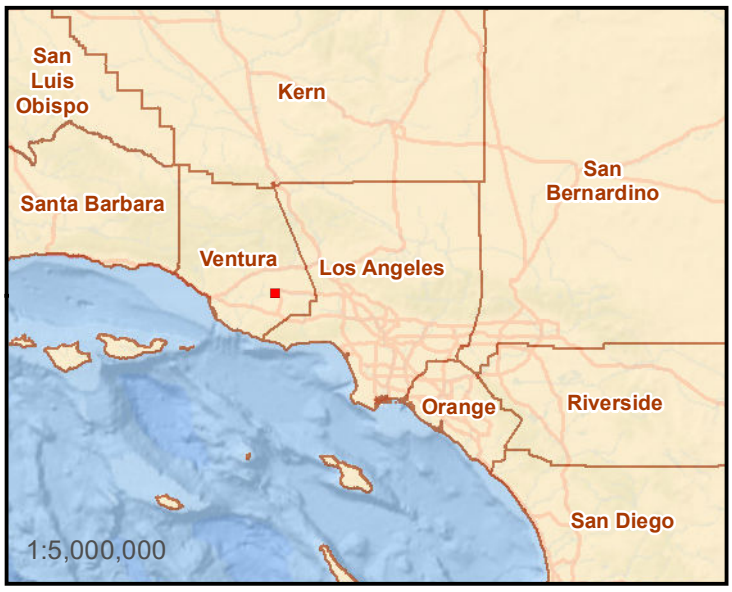
United States Fish and Wildlife Service (USFWS)

2021 National Wetland Inventory (NWI). http://www.fws.gov/wetlands/. Accessed October 2021.

2021 Critical Habitat for Threatened & Endangered Species. https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77 . Accessed October 2021.

ATTACHMENT 1 – FIGURES





Project Location

Figure 1
Everett St.Terraces
Project Location and Vicinity

N

0 50 100 200
Feet

Name: 21257 BIO Fig 1 Project Location and Vicinity.Mxd
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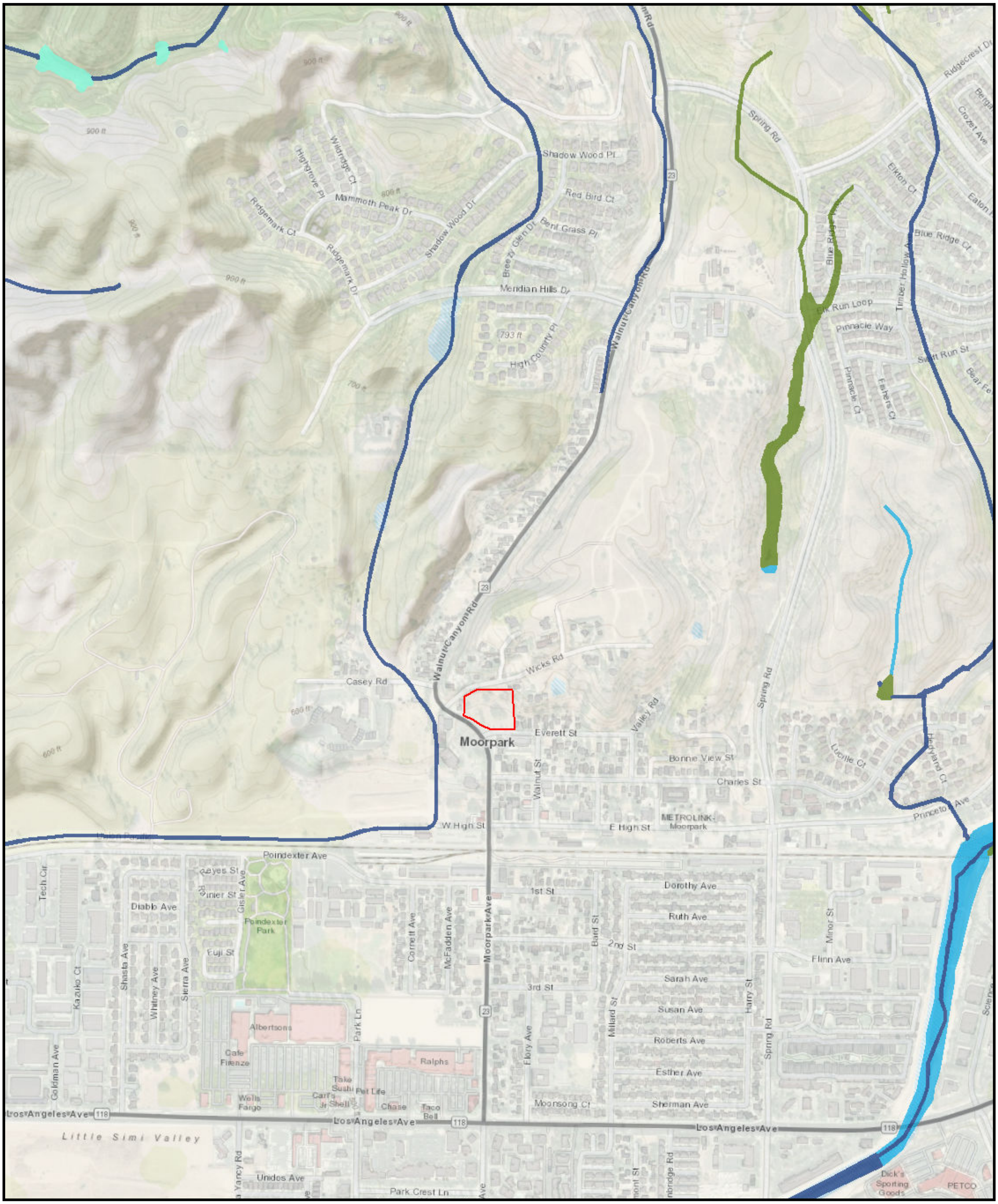

Project Location

NWI

Lake | Freshwater Pond

Riverine | Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

N

0 400 800 1,600

Feet

Figure 2
Everett St.Terraces
NWI

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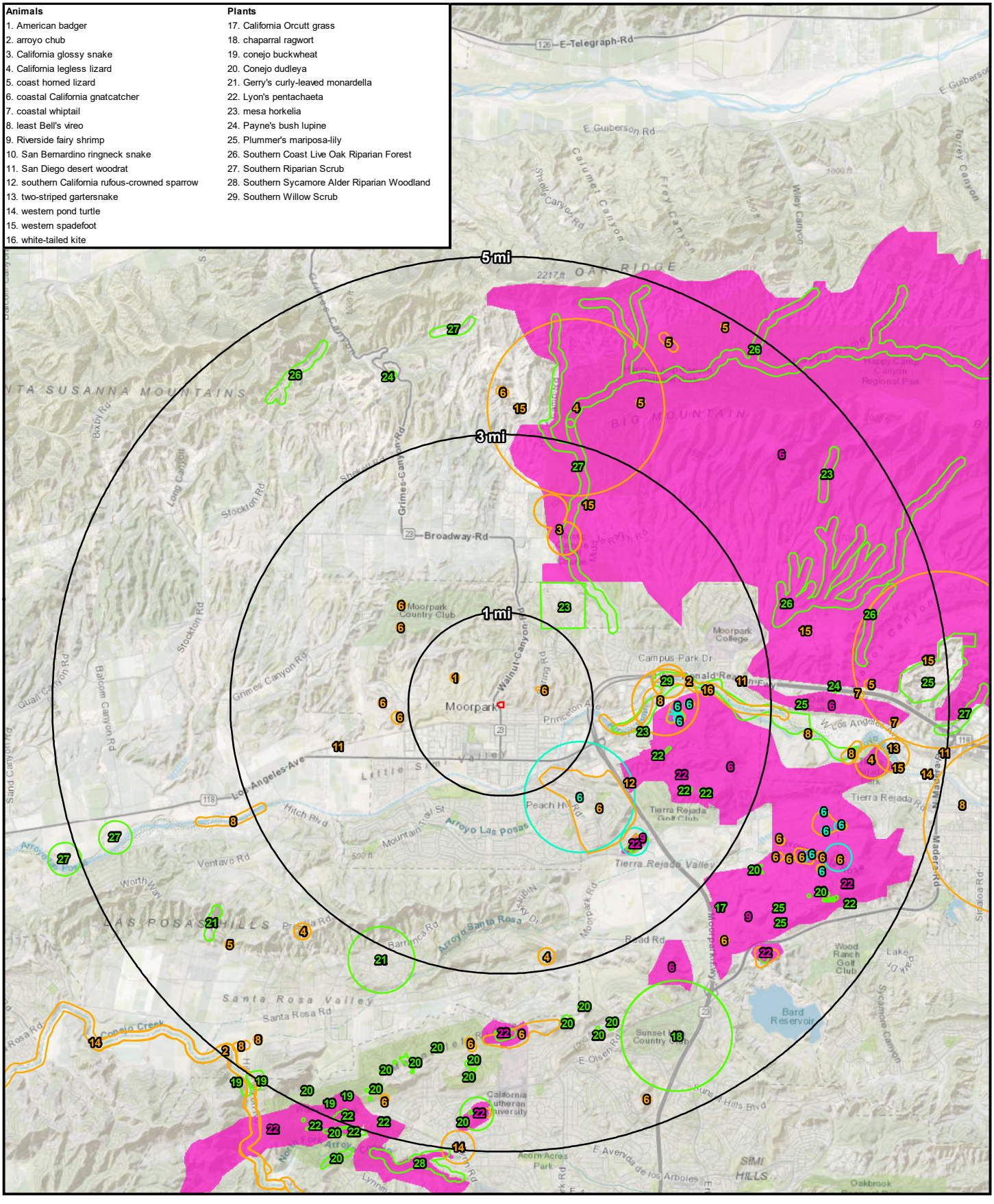
Animals
1. American badger
2. arroyo chub
3. California glossy snake
4. California legless lizard
5. coast horned lizard
6. coastal California gnatcatcher
7. coastal whiptail
8. least Bell's vireo
9. Riverside fairy shrimp
10. San Bernardino ringneck snake
11. San Diego desert woodrat
12. southern California rufous-crowned sparrow
13. two-striped gartersnake
14. western pond turtle
15. western spadefoot
16. white-tailed kite
Plants
17. California Orcutt grass
18. chaparral ragwort
19. conejo buckwheat
20. Conejo dudleya
21. Gerry's curly-leaved monardella
22. Lyon's pentachaeta
23. mesa horkelia
24. Payne's bush lupine
25. Plummer's mariposa-lily
26. Southern Coast Live Oak Riparian Forest
27. Southern Riparian Scrub
28. Southern Sycamore Alder Riparian Woodland
29. Southern Willow Scrub
5 mi
3 mi
1 mi
E-Telegraph-Rd
E Guiberson Rd
Broadway-Rd
Moorpark
Moorpark Country Club
Moorpark College
Campus Park Dr
Los Angeles Ave
Walnut Canyon Rd
Grimes Canyon Rd
Stockton Rd
Bixby Rd
Long Canyon
Balcom Canyon Rd
Sand Canyon Rd
Princeton Ave
Peach Hill Rd
Tierra Rejada Golf Club
Tierra Rejada Valley
Tierra Rejada Rd
Madera Rd
Hitch Blvd
Ventavo Rd
Arroyo Las Posas
Arroyo Santa Rosa
Santa Rosa Valley
Santa Rosa Rd
Conejo Creek
Moorpark Rd
Wood Ranch Golf Club
Bard Reservoir
Sunset Country
California Lutheran University
Acorn Acres Park
E Avenida de los Arboles
Oakbrook
SIMI HILLS
LAS POSAS HILLS
SANTA SUSANNA MOUNTAINS
BIG MOUNTAIN
OAK RIDGE
Project Location
USFWS Occurrences
USFWS Critical Habitat
CNDDB Occurrences
Animals
Plants
N
0 0.5 1 2
Miles
Figure 3
Everett St.Terraces
CNDDB and USFWS Occurrences
Name: 21257 BIO Fig 3 CNDDB and USFWS Occurrences.Mxd
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CHAMBERS GROUP

Custom Soil Resource Report
Soil Map

Map Scale: 1:710 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 10 20 40 60

Feet
0 30 60 120 180

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

Figure 4
Everett St.Terraces
Soil Report

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Ventura Area, California
Survey Area Data: Version 16, Sep 13, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 11, 2020—Nov 14, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.