July 12, 2024

City Ventures
444 Spear Street, Suite 200
San Francisco, California 94105

Attention: Mr. Kian Malek

RE: Response to Pierce Co. Properties (Auburn Grove) Housing Compliance Review
Woodland Avenue and Auburn Street Project
San Rafael, California
APNs: 1807416, 1807528, 1808104, 1808210, 1808212, 1808213, 1808301, 1808309, 1808412, 1808523, 1808617, 1808618 (~11.0 Acres)

Dear Mr. Malek:

Per your request, Monk & Associates, Inc. (M&A) has prepared this memorandum for the Pierce Co. Properties' Project (herein, the "project") located at the intersection of Woodland Avenue and Auburn Street, in San Rafael, Marin County, California (herein, the "project site") to respond to the following item from the Pierce Co. Properties (Auburn Grove) Housing Compliance Review letter issued by the County of Marin to the applicant on May 16, 2024:

17. *In conformance with submittal checklist item 37 (BSA), data on file with the County of Marin indicates the potential presence of habitat for the western bumble bee, Marin western flax, and the white-rayed pentachaeta species. The Form Based Code (FBC) states that development based on the FBC shall not take place in locations with habitat for protected species identified as candidate, sensitive, or species of special status by state or federal agencies, fully protected species, or species protected by the Federal Endangered Species Act of 1973 (16 U.S.C. Sec. 1531 et seq.), the California Endangered Species Act (Chapter 1.5 (commencing with Section 2050) of Division 3 of the Fish and Game Code), or the Native Plant Protection Act (Chapter 10 (commencing with Section 1900) of Division 2 of the Fish and Game Code). Please provide an updated Biological Site Assessment that also demonstrates conformance with the Environmental Protection Standards provided in the Form-Based Code*.

M&A reviewed the **Pierce Co. Properties' Woodland Avenue, *Marin County: Rare Plant Survey Report*** (attached) prepared by WRA Environmental Consultants, Inc. on January 3, 2024. M&A also conducted a reconnaissance site visit on February 28, 2024, to assess the vegetation communities, topography, and hydrology of the project site. M&A is in agreement with WRA's determination that there are no special status plant species or sensitive natural communities currently on the project site or expected to occur on the project site. There is no habitat on the project site for protected species identified as candidate, sensitive, or species of special status by state or federal agencies, fully protected species, or species protected by the Federal Endangered Species Act of 1973 (16 U.S.C. Sec. 1531 et seq.), the California Endangered Species Act (Chapter 1.5 (commencing with Section 2050) of Division 3 of the Fish and Game Code), or the Native Plant Protection Act (Chapter 10 (commencing with Section 1900) of Division 2 of the Fish and Game Code).

If you have any questions, please do not hesitate to contact me at (925) 947-4867, ext. 223 or at mark@monkassociates.com. Thank you.

Sincerely,

Mark Jasper
Project Biologist II

Attachment: Pierce Co. Properties' Woodland Avenue, *Marin County: Rare Plant Survey Report* prepared by WRA Environmental Consultants, Inc. on January 3, 2024

MEMORANDUM

TO:	Roger Pierce rogerbiz@comcast.net	**FROM:**	Kevin Schwartz, WRA, Inc. Kevin.schwartz@wra-ca.com
CC:		Hope Kingma, WRA, Inc. Hope.Kingma@wra-ca.com	
DATE:	January 3, 2024		
SUBJECT:	Pierce Co. Properties Woodland Avenue, Marin County: Rare Plant Survey Report		

1.0 INTRODUCTION

On August 10, 2022, April 13, 2023, June 14, 2023, and August 22, 2023, WRA, Inc. (WRA) performed special-status plant surveys within the 11.05-acre properties owned by Pierce Co. Properties (Project) located at Woodland Avenue and Auburn Street, in San Rafael, Marin County (County), California (APNs 1807416, 1807528, 1808104, 1808210, 1808212, 1808213, 1808301, 1808309, 1808412, 1808523, 1808617, 1808618) (Study Area; Attachment A – Figure 1).

The purpose of the rare plant surveys was to determine the presence or absence of special-status plants and sensitive natural communities that have potential to occur within the Study Area. This assessment was based on the availability of suitable habitat, the presence of associated plant species, and the proximity of documented occurrences. The protocol-level surveys were conducted at the appropriate times of the year to identify all special-status plant species with the potential to occur within the Study Area.

2.0 STUDY AREA DESCRIPTION

The approximately 11.05-acre Study Area is located in San Rafael, Marin County, California (Attachment A – Figure 1). The Study Area can be reached from Interstate 580 and heading south on Bellam Blvd until it hits and turns into the intersection of Auburn Street and Woodland Avenue which surround the Study Area. The Study Area is bounded by residential buildings to the east, south, and west along Auburn Street; the SMART rail lines to the northeast; Highway 101 to the east; and commercial development on the other side of the SMART line and Highway 101. The Study Area had aerial photographic evidence of streets criss-crossing the property back to 1946 (NETR 2022[1]). Residences surrounding the property on Auburn Street are evident since the 1940s. The Study Area has remained largely undeveloped since the mid-1950s, but the ground has been manipulated to some degree and the evidence of the criss-crossing streets has

[1] Nationwide Environmental Title Research (NETR). 2022. Historic Aerials. Online at: http://www.historicaerials.com/; most recently accessed: December 2022.

disappeared with time. Land uses within the Study Area include a single-family residence, undeveloped ruderal lots, and open space.

Habitat conditions within the Study Area are generally ruderal, annual grassland, oak woodland, mixed riparian forest, and seasonal and perennial wetlands. Up until 1950, USGS topographic maps showed the area as marsh. The Study Area is characterized by a topographic depressional basin that receives stormwater runoff from the surrounding watershed via culverts that discharge into created channels that flow to the central basin area.

2.1 Vegetation

Vegetation within the Study Area consists of ruderal, annual grassland, coast live oak (*Quercus agrifolia,* UPL) woodland, mixed riparian forest, and seasonal and perennial wetland communities. Dominant vegetation within ruderal areas include Himalayan blackberry (*Rubus armeniacus,* FAC), yellow starthistle (*Centaurea solstitialis,* UPL), Italian ryegrass (*Festuca perennis,* FAC), pampas grass (*Cortaderia selloana,* FACU), French broom (*Genista monspessulana,* UPL), and smallflower tamarisk (*Tamarix parviflora,* FAC).

The upland annual grassland vegetation consists largely of wild oats (*Avena barbata* and *A. fatua,* UPL), barley (*Hordeum murinum*, FACU), Italian ryegrass, Harding grass (*Phalaris aquatica,* FACU), and ripgut brome (*Bromus diandrus,* UPL) with scattered non-native forbs like black mustard (*Brassica nigra,* UPL), but some natives like coyote bush (*Baccharis pilularis,* UPL) and hayfield tarweed (*Hemizonia congesta* ssp. *lutescens,* UPL).

The coast live oak woodland consists mostly of scattered coast live oaks growing over the annual grassland. The mixed riparian forest is dominated by the native arroyo willow (*Salix lasiolepis,* FACW), red willow (*Salix laevigata,* FACW), Northern California black walnut (*Juglans hindsii,* FAC), Western sycamore (*Platanus racemose,* FAC) trees, Persian silk trees (*Albizia julibrissin,* UPL), and Himalayan blackberry.

There are three wetland vegetation communities within the Study Area; channels, Himalayan blackberry dominated wetlands, and cattail marsh. The channels flowing into and out of the central basin and on the perimeters of the cattail marsh contain one vegetation type dominated by Italian ryegrass with other species like tall flatsedge (*Cyperus eragrostis*, FACW), curly dock (*Rumex crispus,* FAC), bristly ox-tongue (*Helmanthotheca echioides,* FAC), rabbit's foot grass (*Polypogon monspeliensis,* FACW), cocklebur (*Xanthium strumarium,* FAC), and Arundo (*Arundo donax,* FACW) interspersed. Other seasonal wetlands onsite are dominated by a near monoculture of Himalayan blackberry. Narrowleaf cattail (*Typha angustifolia,* OBL) and yellowflag iris (*Iris pseudacorus,* OBL) form a near monoculture in the perennial cattail-dominated wetland in the southern portion of the Study Area. This community is also characterized by an area of open water that remains ponded for prolonged periods of time.

The National Wetlands Inventory (NWI) shows seasonally flooded Freshwater Emergent Wetland (PEM1C) habitats and semi-permanently flooded Freshwater Emergent Wetland (PEM1F) habitats connected to and surrounding one temporarily flooded intermittent Riverine (R4SBA) habitat within the Study Area (USFWS 2022[2]).

[2] U.S. Fish and Wildlife Service (USFWS). 2022. National Wetlands Inventory. Online at: http://www.fws.gov/nwi; most recently accessed: December 2022.

2.2 Soils

The Soil Survey of Marin County (USDA 1985[3]) and SoilWeb (CSRL 2022[4]) list three soil mapping units within the Study Area: *Xerorthents, fill* (#203), *Urban land-Xerothents* complex (#202), and *Tocaloma-McMullin-Urban Land* complex (#182). None of the soil mapping units are considered hydric soils. Descriptions of the soil series that comprise the soil mapping units are provided below. The distribution of these soil mapping units within the Study Area is depicted in Attachment A – Figure 2.

***Xerorthents-fill* (#203):** Xerorthents, fill soil map unit occurs mostly in urban areas and consists of soil material that has been moved mechanically and mixed. The fill consists of varying amounts of soil material, gravel, and other solid material. Fill may consist of varying amounts of rock, concrete, asphalt, and other materials. The man-modified materials are derived from igneous, metamorphic, and sedimentary rock found on valley floors and in tidal flats. Xerorthents are typically loamy and well drained with very rapid runoff, although the soils found on site were mainly clays and clayey loams. The soils are found from 0 to 480 feet of elevation on 0 to 5 percent slopes. The mean annual precipitation is about 32 inches with the mean annual air temperature of 58 degrees F. The depth to the restrictive layer is typically greater than 80 inches. The soils do not support prime farmland.

***Urban land-Xerothents* complex (#202)**: Urban land-Xerothents complex map unit is similar in description to the Xerothents-fill soil described above; however, contains a much larger percentage of urban land (70%), while containing only 20% Xerothents and 9% minor components. Urban landscape with roads, buildings, sidewalks, pavement, etc. is built on top of compacted fill material and Xerorthents soil on valley floor.

***Tocaloma-McMullin-Urban Land* complex (#182)**: The Tocaloma-McMullin-Urban Land complex is the main soil series and unit found in the surrounding hillsides and around the perimeter of the Study Area. The Tocaloma series consists of moderately deep, well drained soils that formed in material weathered from sandstone and shale. Tocaloma soils are on hills and have slopes of 2 to 75 percent. The mean annual precipitation is about 35 inches and the mean annual temperature is 58 degrees F. A representative profile for the Tocaloma series consists of an A horizon from 0 to 19 inches of grayish brown (10YR 5/2) to brown (10YR 5/3) loam, a B horizon from 19 to 39 inches of light yellowish brown (10YR 6/4) very gravelly loam, and a C horizon from 39 to 45 inches of strongly weathered, highly fractured sandstone.

The McMullin series consists of shallow, well and somewhat excessively drained soils that formed in material weathered from shale, sandstone, basic igneous and metamorphic rocks. McMullin soils are on uplands north-facing slopes in California formed in material weathered from shale, sandstone. Slopes are 1 to 75 percent. The mean annual precipitation is about 35 inches and the mean annual temperature is about 50 degrees F. The McMullin series consists of an A horizon between 0 to 7 inches ranging from dark brown (10YR 3/3) to grayish brown (10YR 5/2) gravelly loam, a Bw horizon from 7 to 14 inches of dark yellowish brown (10YR 3/4) to

[3] U.S. Department of Agriculture (USDA). 1985. Soil Survey of Marin County, California. Soil Conservation Service and Forest Service. In cooperation with the University of California Agricultural Experiment Station. December 2022.

[4] California Soil Resource Lab (CSRL). 2022. SoilWeb: An online soil resource browser. Online at: http://casoilresource.lawr.ucdavis.edu/gmap; most recently accessed: December 2022.

yellowish brown (10YR 5/4) gravelly clay loam, and an R horizon at 14 inches of fractured hard bedrock.

2.3 Hydrology

The Study Area is located in the San Francisco Bay (HUC-10: 1805000210), within the San Pablo Bay Hydrologic Unit Code (HUC-8: 18050002) watershed (NRCS 2022[5]). Annual rainfall within this watershed averages 29 to 35 inches, with most rain falling between December and March. Hydrologic sources within the Study Area include direct precipitation, high groundwater tables, and water runoff from the hills north, west, and south of the Study Area. Water from the Study Area drains to the north via a City-owned underground storm drain system to San Rafael Creek, and then to San Pablo Bay, a traditional navigable water of the U.S.

The natural hydrology of the Study Area has been highly modified with channels evident paralleling the paper streets that bisect the site since at least 1950 based on aerial photography (NETR 2022). Between 1897 and 1950, 12 different San Rafael 7.5-minute USGS quadrangles show the area as marsh, connected to other marshes around the perimeter of San Pablo Bay (USGS 1897, 1900, 1907, 1910, 1913, 1922, 1928, 1932, 1940, 1945, 1950[6]). These areas are now buried under fill and urban commercial development as depicted in the San Rafael USGS 7.5-minute quadrangles since 1954. The USGS 7.5-minute quadrangle from 1941 shows the Study Area with a grid of streets, as is also depicted in the 1946 aerial (NETR 2022).

3.0 METHODS

3.1 Database Review

The term “special-status plant species” is defined here to include: (1) all plants that are federal- or state-listed as rare, threatened or endangered, (2) all federal and state candidates for listing, (3) all plants included in Lists 1 through 4 of the California Native Plant Society Rare Plant Inventory and (4) plants that qualify under the definition of "rare" in the California Environmental Quality Act, Section 15380.

A background information search was conducted in July 2022 and February 2023 to identify potential special-status plant species and sensitive natural communities that may occur in the vicinity of the Study Area. A table of these species, along with their protection status, habitat requirements, and results of the surveys are provided in Attachment B. Sources for this search included the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) database (CDFW 2023[7]) and the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPS 2023[8]). Searches included the San Geronio, Novato, Petaluma Point, San Rafael, Bolinas, San Quentin,

[5] Natural Resources Conservation Service (NRCS). 2022. Watershed Boundary Dataset. Online: https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/water/watersheds/dataset/; most recently accessed: December 2022.

[6] U.S. Geological Survey (USGS). USGS 1897, 1900, 1907, 1910, 1913, 1922, 1928, 1932, 1940, 1945, 1950, 2022. San Rafael Quadrangle, California. 7.5-minute topographic maps.

[7] California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Database (CNDDB), Wildlife and Habitat Data Analysis Branch. Sacramento. https://wildlife.ca.gov/Data/CNDDB; most recently accessed: December 2023.

[8] California Native Plant Society (CNPS). 2023. Electronic Inventory of Rare and Endangered Vascular Plants of California. California Native Plant Society, Sacramento, California. Available at: http://www.cnps.org/inventory; most recently accessed: December 2023.

San Francisco North, and Point Bonita USGS 7.5-minute quadrangles. The database search results were later cross-referenced with the Calflora database for all species with potential to occur in the Study Area.[9]

3.2 Field Survey

Following the background search, WRA Plant Biologist/Wetland Ecologist, Kevin Schwartz, conducted focused special-status plants and sensitive natural communities' surveys on August 10, 2022, April 13, 2023, June 14, 2023, and August 22, 2023. The Project Area and the additional 10-foot buffer around the Project Area were traversed on foot and all plant species observed were recorded (Attachment C). The surveys were performed in accordance with the approved methods outlined by resource experts and agencies (CNPS 2001[10], CDFW 2018b[11], USFWS 1996[12]). Plants were identified using *The Jepson Manual, 2nd Edition*[13] and the Jepson Flora Project[14] to the taxonomic level necessary to determine whether or not they were rare. Additionally, the known blooming periods of the special-status species and known site conditions were used to determine the appropriate timing for the surveys. Therefore, the surveys were conducted in a period sufficient to identify all special-status wetland plant species known in the general area.

4.0 RESULTS AND CONCLUSIONS

Based upon a review of CNDDB (CDFW 2023), CNPS Electronic Inventory (CNPS 2023), USFWS Species List (USFWS 2023), and Calflora (Calflora 2023) databases, 117 special-status plant species and 3 special-status sensitive natural communities have been documented within the greater vicinity of the Study Area. A table of all 117 special-status plant species and 3 special-status sensitive natural communities, including their habitat requirements, blooming periods, elevation ranges, and status, is provided in Attachment B.

Of the 117 special-status plant species and 3 sensitive natural communities, no special status species and no sensitive natural communities had been documented previously within the Study Area. Ninety-three (93) of these special status species or sensitive natural communities had no potential to occur within the Study Area due to one or more of the following reasons:

- The Study Area does not contain hydrologic conditions (e.g., salt water and brackish marshes and swamps) necessary to support the special-status plant(s);
- The Study Area does not contain edaphic (soil) conditions (e.g., serpentine or volcanic substrate) necessary to support the special-status plant(s);

[9] Calflora: Information on California plants for education, research and conservation. [web application]. 2023. Berkeley, California: The Calflora Database [a non-profit organization]. Available: https://www.calflora.org/; most recently accessed: December 2023.

[10] California Native Plant Society (CNPS). 2001. CNPS Botanical Survey Guidelines. June 2, 2001.

[11] California Department of Fish and Wildlife (CDFW). 2018b. Protocols for Surveying and Evaluating Impacts to Special-status Native Plant Populations and Natural Communities. California Natural Resources Agency, California Department of Fish and Game. March 20, 2018.

[12] U.S. Fish and Wildlife Service (USFWS). 1996. Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed Plants.. Sacramento Fish and Wildlife Office, Sacramento, CA. September.

[13] Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken (eds.). 2012. The Jepson Manual: Vascular Plants of California, 2nd Edition. University of California Press, Berkeley, CA. 1568 pp.

[14] Jepson Herbarium. Jepson Flora Project (eFlora). 2023. Jepson eFlora Online at: http://ucjeps.berkeley.edu/IJM.html; most recently accessed: December 2023.

- The Study Area does not contain vegetation communities (e.g., chaparral, coastal scrub, vernal pools) associated with the special-status plant(s);
- The Study Area does not contain the topographic conditions (e.g., higher elevations, montane) necessary to support the special-status plant;
- The Study Area does not contain unique pH conditions (e.g., alkali scalds, acidic bogs) necessary to support the special-status plant species;
- The Study Area is geographically isolated (e.g. below elevation, coastal environ) from the documented range of the special-status plant species;
- Land use history and contemporary management (e.g., grading, intensive grazing) has degraded the localized habitat necessary to support the special-status plant species.

Twenty-six (26) special-status species had low potential to occur within the Study Area. Although the project site may have potentially suitable habitat, the habitat within the Study Area is heavily disturbed. The nearest extant occurrences of these low potential species in many cases are separated by 4 miles or more of hills and extensive urban development. The annual grassland that occurs on site is heavily disturbed, ruderal, and grows on top of fill material which is not a naturally occurring valley and foothill grassland necessary for many of the special-status species found in the area. Additional species may have low potential to occur on site because while suitable habitat may exist, the Study Area is below the known elevation range of the species. Some occurrences were found to have low potential because only 1 record exists for the species, it is old (e.g. over 100 years old), and/or the record was very general (e.g. the species was listed as occurring somewhere in the San Quentin USGS topographic map.

Only 1 species, Congested-headed hayfield tarplant (*Hemizonia congesta ssp. congesta, Rank 1B.2*), had a Moderate Potential to occur within the Study Area due to the presence of potential habitat within the Study Area. In addition, a known population exists less than 1.5 miles away on a hillside above Fallkirk Manor in San Rafael.

Congested-headed hayfield tarplant is typically found in valley and foothill grassland at elevation ranges from 65 to 1835 feet (20 to 560 meters). It blooms between April and November. The annual grassland that occurs within the Study Area is heavily disturbed, ruderal, and grows on top of fill material. Thus, the Study Area does not contain a naturally occurring valley and foothill grassland. However, congested-headed hayfield tarplant can be found in fallow fields and sometimes along roadsides, habitats which exist within the Study Area. During initial surveys, hayfield tarplant (*Hemizonia congesta* ssp. *lutescens*), a more common species which utilizes similar habitats, was found onsite. Congested-headed hayfield tarplant was not found during the appropriately timed field surveys.

A total of 104 species of plants were identified within the Study Area (Attachment C). No special-status plant species or sensitive natural communities were observed within the Study Area during the four surveys conducted on August 10, 2022, April 13, 2023, June 14, 2023, and August 22, 2023. Therefore, no impacts to state or federally listed species, or any special-status plant species, are expected to occur within the Study Area.

Should you have any questions or concerns regarding the findings of this survey, please feel free to contact me.

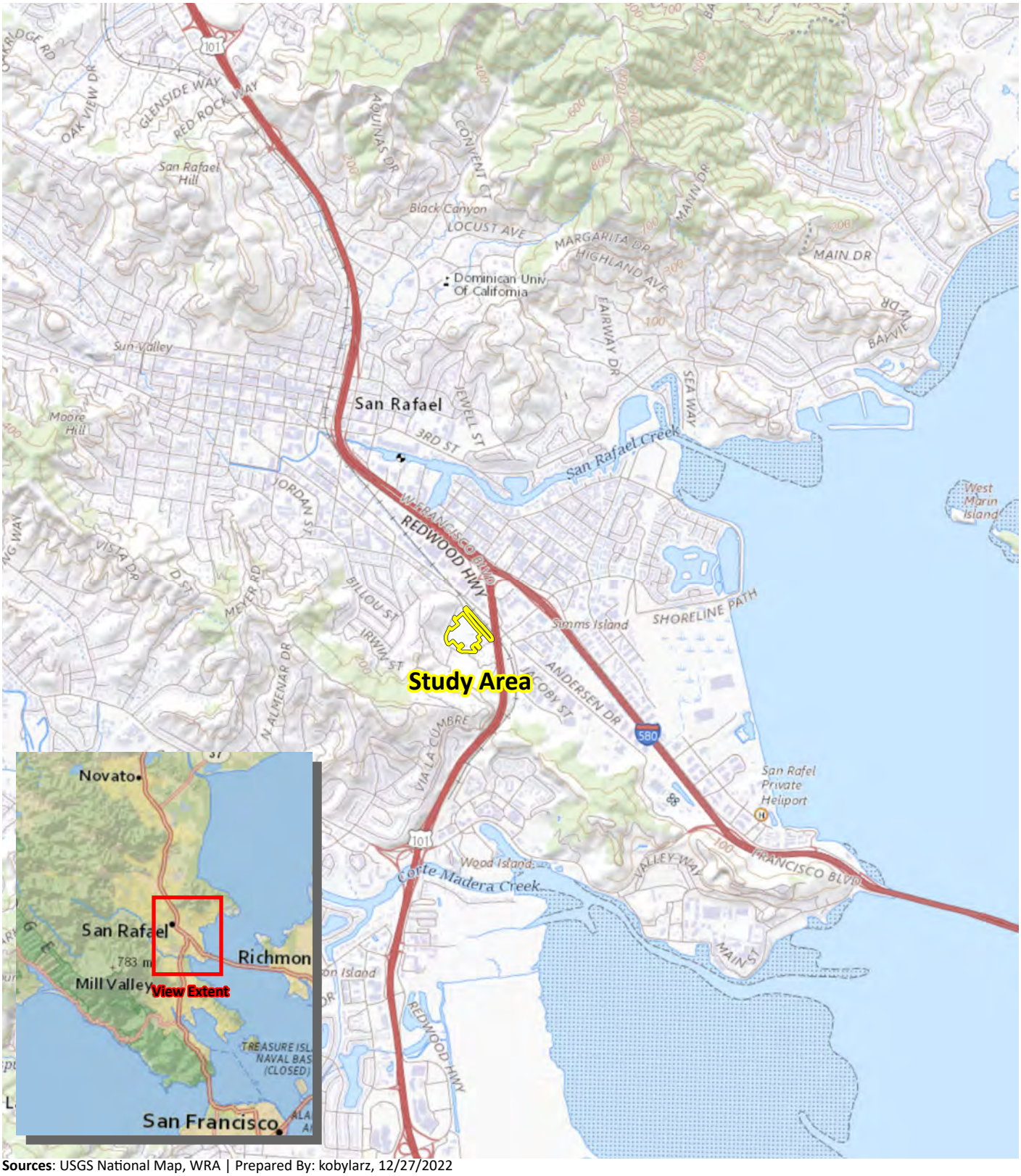
Sincerely,

Kevin Schwartz, PhD
Plant Biologist/Wetland Ecologist
Kevin.Schwartz@wra-ca.com

ATTACHMENTS

Attachment A: Figure 1 – Study Area Regional Location Map,
Figure 2 – Soils Map
Attachment B: Special-Status Plant Species Potentials Table
Attachment C: Plant Species Observed in the Study Area

ATTACHMENT A
FIGURE 1 – STUDY AREA REGIONAL LOCATION MAP



Path: L:\Acad 2000 Files\320000\320182\GIS\ArcMap\320182Base.aprx Layout Name:Location

Sources: USGS National Map, WRA | Prepared By: kobylarz, 12/27/2022

Figure 1. Study Area Regional Location Map

Scheutzen Park
San Rafael, California

0 0.5 1 Miles

N

wra Environmental Consultants

ATTACHMENT A
FIGURE 2 - SOILS MAP

Figure 2. Soils Map—Pierce Property, Marin County, California (Project #-320182)

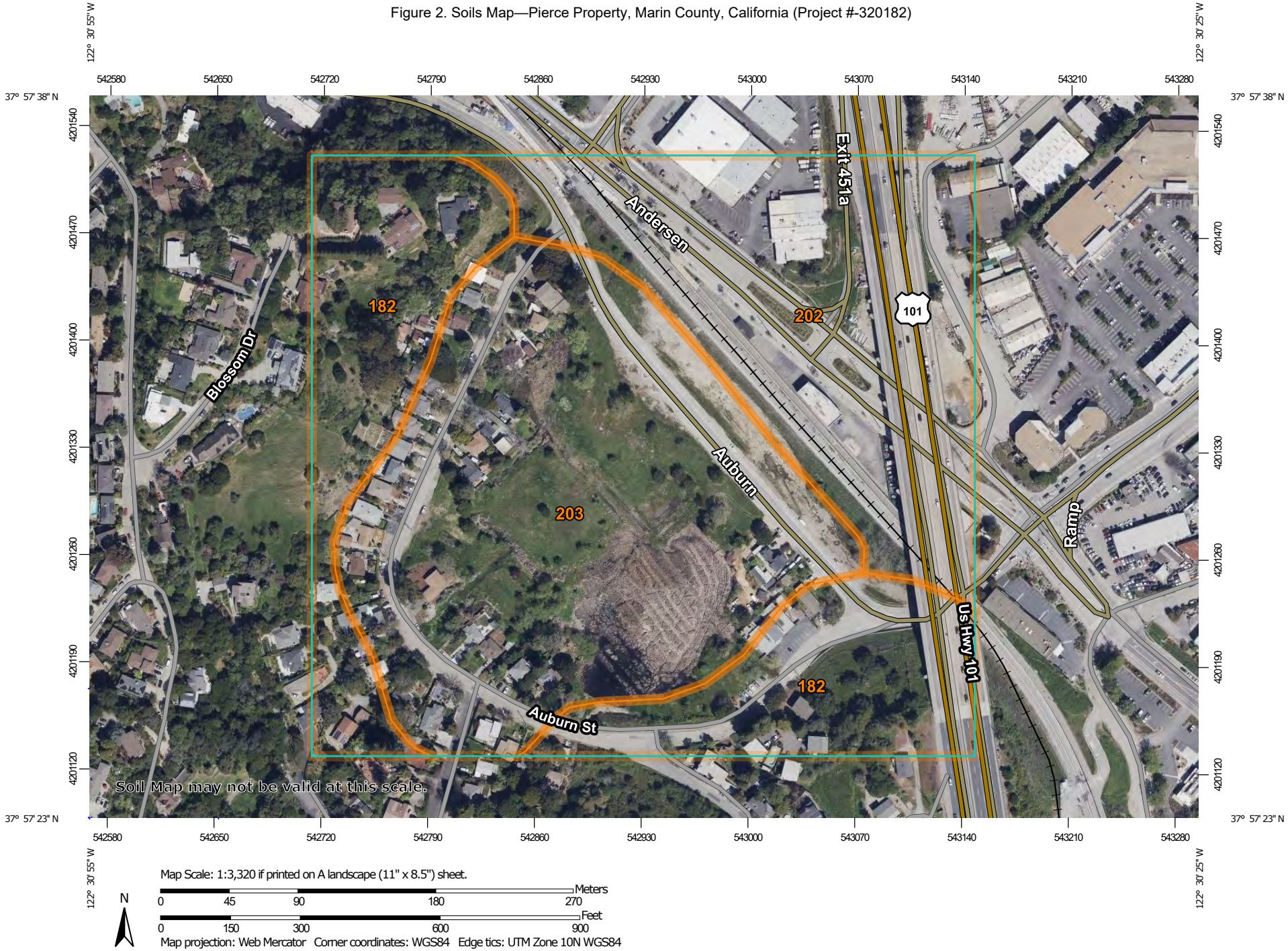


Figure 2. Soils Map—Pierce Property, Marin County, California (Project #-320182)

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: Marin County, California
Survey Area Data: Version 16, Sep 13, 2022

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

Date(s) aerial images were photographed: Mar 7, 2021—Mar 31, 2021

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.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
182	Tocaloma-McMullin-Urban land complex, 30 to 50 percent slopes	11.5	27.3%
202	Urban land-Xerorthents complex, 0 to 9 percent slopes	12.6	29.9%
203	Xerorthents, fill	18.1	42.8%
Totals for Area of Interest		**42.3**	**100.0%**

ATTACHMENT B
SPECIAL-STATUS PLANT SPECIES POTENTIALS TABLE

Table 1. Special-status Plant Species with Potential to Occur within the Project Site

NAME	STATUS	HABITAT	OCCURRENCE POTENTIAL
Franciscan onion Allium peninsulare var. franciscanum	Rank 1B.2	Cismontane woodland, valley and foothill grassland. Elevation ranges from 170 to 1000 feet (52 to 305 meters). Blooms (Apr)May-Jun.	**No Potential.** Although the project site has cismontane woodland habitat, the habitat has been heavily disturbed and is below the elevation range for this species. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland. The species is often found on serpentine soils and dry hillsides, neither of which occur on the site.
Sonoma alopecurus *Alopecurus aequalis var. sonomensis*	FE, Rank 1B.1	Marshes and swamps, riparian scrub. Elevation ranges from 15 to 1200 feet (5 to 365 meters). Blooms May-Jul.	**Low Potential.** While the project site does contain suitable habitat for this species, all known occurrences within Marin County are in Point Reyes National Sea Shore or near Bolinas Lagoon over 12 kilometers to the west.
Napa false indigo *Amorpha californica var. napensis*	Rank 1B.2	Broadleafed upland forest, chaparral, cismontane woodland. Elevation ranges from 165 to 6560 feet (50 to 2000 meters). Blooms Apr-Jul.	**Low Potential.** Although the project site has cismontane woodland habitat, the habitat has been heavily disturbed. The nearest extant CNDDB occurrence is 2 miles southwest and is separated by extensive urban development. The project site is below the known elevation range for this species.
bent-flowered fiddleneck *Amsinckia lunaris*	Rank 1B.2	Cismontane woodland, coastal bluff scrub, valley and foothill grassland. Elevation ranges from 10 to 1640 feet (3 to 500 meters). Blooms Mar-Jun.	**Low Potential.** Although the project site has cismontane woodland habitat, the habitat has been repeatedly heavily disturbed. The nearest extant CNDDB occurrence is 4 miles west and is separated by extensive urban development.
coast rockcress *Arabis blepharophylla*	Rank 4.3	Broadleafed upland forest, coastal bluff scrub, coastal prairie, coastal scrub. Elevation ranges from 10 to 3610 feet (3 to 1100 meters). Blooms Feb-May.	**No Potential.** The project site does not contain suitable habitat for this species.
Franciscan manzanita *Arctostaphylos franciscana*	FE, Rank 1B.1	Coastal scrub. Elevation ranges from 195 to 985 feet (60 to 300 meters). Blooms Feb-Apr.	**No Potential.** The project site does not contain suitable habitat for this species and is below the elevation range for this species.

NAME	STATUS	HABITAT	OCCURRENCE POTENTIAL
Mt. Tamalpais manzanita *Arctostaphylos montana ssp. montana*	Rank 1B.3	Chaparral, valley and foothill grassland. Elevation ranges from 525 to 2495 feet (160 to 760 meters). Blooms Feb-Apr.	**No Potential.** The project site does not contain suitable habitat for this species and is below the elevation range for this species.
Presidio manzanita *Arctostaphylos montana ssp. ravenii*	FE, SE, Rank 1B.1	Chaparral, coastal prairie, coastal scrub. Elevation ranges from 150 to 705 feet (45 to 215 meters). Blooms Feb-Mar.	**No Potential.** The project site does not contain suitable habitat for this species and is below the elevation range for this species.
Marin manzanita *Arctostaphylos virgata*	Rank 1B.2	Broadleafed upland forest, chaparral, closed-cone coniferous forest, north coast coniferous forest. Elevation ranges from 195 to 2295 feet (60 to 700 meters). Blooms Jan-Mar.	**No Potential.** The project site does not contain suitable habitat for this species and is below the elevation range for this species.
marsh sandwort *Arenaria paludicola*	FE, SE, Rank 1B.1	Marshes and swamps. Elevation ranges from 10 to 560 feet (3 to 170 meters). Blooms May-Aug.	**Low Potential.** While the project site may contain suitable habitat for this species, the project site has been repeatedly heavily disturbed and the nearest known occurrence is at Rodeo Lagoon 13 kilometers southwest of the project site.
Carlotta Hall's lace fern *Aspidotis carlotta-halliae*	Rank 4.2	Chaparral, cismontane woodland. Elevation ranges from 330 to 4595 feet (100 to 1400 meters). Blooms Jan-Dec.	**No Potential.** Although the project site has cismontane woodland habitat, the habitat on site has been repeatedly disturbed, lacks serpentine substrate, and is well below the known elevation range for this species. The nearest extant Consortium of California Herbaria 2 (CCH2) occurrence is 4 miles southwest and is separated by extensive urban development.
Brewer's milk-vetch *Astragalus breweri*	Rank 4.2	Chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland. Elevation ranges from 295 to 2395 feet (90 to 730 meters). Blooms Apr-Jun.	**No Potential.** Although the project site has cismontane woodland habitat, the habitat on site has been repeatedly disturbed, lacks serpentine substrate, and is well below the known elevation range for this species. The nearest extant Consortium of California Herbaria 2 (CCH2) occurrence is 4 miles southwest and is separated by extensive urban development.
ocean bluff milk-vetch *Astragalus nuttallii var. nuttallii*	Rank 4.2	Coastal bluff scrub, coastal dunes. Elevation ranges from 10 to 395 feet (3 to 120 meters). Blooms Jan-Nov.	**No Potential.** The project site does not contain suitable habitat for this species.

NAME	STATUS	HABITAT	OCCURRENCE POTENTIAL
coastal marsh milk-vetch *Astragalus pycnostachyus var. pycnostachyus*	Rank 1B.2	Coastal dunes, coastal scrub, marshes and swamps. Elevation ranges from 0 to 100 feet (0 to 30 meters). Blooms (Apr)Jun-Oct.	**Low Potential.** While the project site may contain suitable habitat (marsh) for this species, the project site has been repeatedly heavily disturbed and the nearest known occurrence is near Bolinas Lagoon, 13 kilometers southwest of the project site.
alkali milk-vetch *Astragalus tener var. tener*	Rank 1B.2	Playas, valley and foothill grassland, vernal pools. Elevation ranges from 5 to 195 feet (1 to 60 meters). Blooms Mar-Jun.	**No Potential.** The project site does not contain suitable habitat for this species. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland.
Thurber's reed grass *Calamagrostis crassiglumis*	Rank 2B.1	Coastal scrub, marshes and swamps. Elevation ranges from 35 to 195 feet (10 to 60 meters). Blooms May-Aug.	**No Potential.** The only source of information for the CNDDB occurrence is a 1910 chase collection from Mount Tamalpais with no exact location and from a rocky slope. The specimen was determined as C. stricta ssp. inexpansa; thus, the identification is also in question and should be reviewed. The CNPS inventory only records a specimen within an undefined location within the San Rafael USGS quad. The project site has been repeatedly heavily disturbed and the project site doesn't contain any rocky slopes.
serpentine reed grass *Calamagrostis ophitidis*	Rank 4.3	Chaparral, lower montane coniferous forest, meadows and seeps, valley and foothill grassland. Elevation ranges from 295 to 3495 feet (90 to 1065 meters). Blooms Apr-Jul.	**No Potential.** The project site is out of the known elevation range and does not contain suitable habitat (serpentine) for this species.
Brewer's calandrinia *Calandrinia breweri*	Rank 4.2	Chaparral, coastal scrub. Elevation ranges from 35 to 4005 feet (10 to 1220 meters). Blooms (Jan)Mar-Jun.	**No Potential.** The project site does not contain suitable habitat for this species.
Tiburon mariposa-lily *Calochortus tiburonensis*	FT, ST, Rank 1B.1	Valley and foothill grassland. Elevation ranges from 165 to 490 feet (50 to 150 meters). Blooms Mar-Jun.	**No Potential.** The project site does not contain suitable habitat for this species. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland. The project site is also below the known elevation range for this species.

NAME	STATUS	HABITAT	OCCURRENCE POTENTIAL
Oakland star-tulip *Calochortus umbellatus*	Rank 4.2	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Elevation ranges from 330 to 2295 feet (100 to 700 meters). Blooms Mar-May.	**Low Potential.** Although the project site has cismontane woodland habitat, the habitat is heavily disturbed, in addition to lacking serpentine substrate. The nearest extant CCH2 occurrence is 1.5 miles south and is separated by extensive urban development.
pink star-tulip *Calochortus uniflorus*	Rank 4.2	Coastal prairie, coastal scrub, meadows and seeps, north coast coniferous forest. Elevation ranges from 35 to 3510 feet (10 to 1070 meters). Blooms Apr-Jun.	**No Potential.** The project site does not contain suitable habitat for this species.
Mt. Saint Helena morning-glory *Calystegia collina ssp. oxyphylla*	Rank 4.2	Chaparral, lower montane coniferous forest, valley and foothill grassland. Elevation ranges from 915 to 3315 feet (279 to 1010 meters). Blooms Apr-Jun.	**No Potential.** The project site does not contain suitable habitat for this species and is below the known elevation range for this species. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland.
coastal bluff morning-glory *Calystegia purpurata ssp. saxicola*	Rank 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, north coast coniferous forest. Elevation ranges from 0 to 345 feet (0 to 105 meters). Blooms (Mar)Apr-Sep.	**No Potential.** The project site does not contain suitable habitat for this species.
seaside bittercress *Cardamine angulata*	Rank 2B.2	Lower montane coniferous forest, north coast coniferous forest. Elevation ranges from 50 to 3000 feet (15 to 915 meters). Blooms (Jan)Mar-Jul.	**No Potential.** The project site does not contain suitable habitat for this species.
bristly sedge *Carex comosa*	Rank 2B.1	Coastal prairie, marshes and swamps, valley and foothill grassland. Elevation ranges from 0 to 2050 feet (0 to 625 meters). Blooms May-Sep.	**No Potential.** While the project site may contain suitable habitat (marsh) for this species, the project site has been repeatedly heavily disturbed and the nearest recorded occurrence for this species is from an unknown swamp site collection in San Francisco in 1866 collection by Bolander. The site is presumed extirpated by development.
Lyngbye's sedge *Carex lyngbyei*	Rank 2B.2	Marshes and swamps. Elevation ranges from 0 to 35 feet (0 to 10 meters). Blooms Apr-Aug.	**Low Potential.** While the project site may contain suitable habitat (marsh) for this species, the project site has been repeatedly heavily disturbed and the nearest known occurrence is 13 kilometers away near

NAME	STATUS	HABITAT	OCCURRENCE POTENTIAL
			Bolinas Lagoon. Site based on a 1927 collection by Wolf. Tidally influenced marsh habitat was surveyed on the west and east shores of Bolinas Lagoon but no *Carex lyngbyei* individuals were observed in 2016.
northern meadow sedge *Carex praticola*	Rank 2B.2	Meadows and seeps. Elevation ranges from 0 to 10500 feet (0 to 3200 meters). Blooms May-Jul.	**Low Potential.** While the project site may contain suitable habitat (marsh) for this species, the project site has been repeatedly heavily disturbed and the nearest known occurrences are 10 kilometers away in the Marin Municipal Water District and 13 kilometers away near Bolinas Lagoon. The only source of information for this site is a 1967 Raven collection that was identified by Joy Mastrogiuseppe in 2000.
Tiburon paintbrush *Castilleja affinis var. neglecta*	FE, ST, Rank 1B.2	Valley and foothill grassland. Elevation ranges from 195 to 1310 feet (60 to 400 meters). Blooms Apr-Jun.	**No Potential.** The project site does not contain suitable habitat for this species and is below the known elevation range for this species. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland.
johnny-nip *Castilleja ambigua var. ambigua*	Rank 4.2	Coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, valley and foothill grassland, vernal pools. Elevation ranges from 0 to 1425 feet (0 to 435 meters). Blooms Mar-Aug.	**Low Potential.** While the project site may contain suitable habitat (marsh) for this species, the project site has been repeatedly heavily disturbed. The closest known occurrence is 6.5 km west in the Marin Water District lands. A historic record from 1947 exists 2 km southwest in the Greenbrae Marshes.
Nicasio ceanothus *Ceanothus decornutus*	Rank 1B.2	Chaparral. Elevation ranges from 770 to 950 feet (235 to 290 meters). Blooms Mar-May.	**No Potential.** The project site does not contain suitable habitat for this species.
glory brush *Ceanothus gloriosus var. exaltatus*	Rank 4.3	Chaparral. Elevation ranges from 100 to 2000 feet (30 to 610 meters). Blooms Mar-Jun (Aug).	**No Potential.** The project site does not contain suitable habitat for this species.

NAME	STATUS	HABITAT	OCCURRENCE POTENTIAL
Point Reyes ceanothus *Ceanothus gloriosus var. gloriosus*	Rank 4.3	Closed-cone coniferous forest, coastal bluff scrub, coastal dunes, coastal scrub. Elevation ranges from 15 to 1705 feet (5 to 520 meters). Blooms Mar-May.	**No Potential.** The project site does not contain suitable habitat for this species.
Mason's ceanothus *Ceanothus masonii*	SR, Rank 1B.2	Chaparral. Elevation ranges from 755 to 1640 feet (230 to 500 meters). Blooms Mar-Apr.	**No Potential.** The project site does not contain suitable habitat for this species.
Kern ceanothus *Ceanothus pinetorum*	Rank 4.3	Lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest. Elevation ranges from 3410 to 9005 feet (1040 to 2745 meters). Blooms May-Jul.	**No Potential.** The project site does not contain suitable habitat for this species.
Point Reyes salty bird's-beak *Chloropyron maritimum ssp. palustre*	Rank 1B.2	Marshes and swamps. Elevation ranges from 0 to 35 feet (0 to 10 meters). Blooms Jun-Oct.	**Low Potential.** While the project site may contain suitable habitat (marsh) for this species, the project site has been repeatedly heavily disturbed. The closest known occurrence is 6.5 km west in the Marin Water District lands. One historic record from 1947 exists 2 km southwest in the Greenbrae Marshes.
San Francisco Bay spineflower *Chorizanthe cuspidata var. cuspidata*	Rank 1B.2	Coastal bluff scrub, coastal dunes, coastal prairie, coastal scrub. Elevation ranges from 10 to 705 feet (3 to 215 meters). Blooms Apr-Jul (Aug).	**No Potential.** The project site does not contain suitable habitat for this species.
Franciscan thistle *Cirsium andrewsii*	Rank 1B.2	Broadleafed upland forest, coastal bluff scrub, coastal prairie, coastal scrub. Elevation ranges from 0 to 490 feet (0 to 150 meters). Blooms Mar-Jul.	**No Potential.** The project site does not contain suitable habitat for this species.
Mt. Tamalpais thistle *Cirsium hydrophilum var. vaseyi*	Rank 1B.2	Broadleafed upland forest, chaparral, meadows and seeps. Elevation ranges from 785 to 2035 feet (240 to 620 meters). Blooms May-Aug.	**No Potential.** The project site does not contain suitable habitat for this species.
seaside cistanthe *Cistanthe maritima*	Rank 4.2	Coastal bluff scrub, coastal scrub, valley and foothill grassland. Elevation ranges from 15 to 985 feet (5 to 300 meters). Blooms (Feb)Mar-Jun (Aug).	**No Potential.** The project site does not contain suitable habitat for this species.
Presidio clarkia *Clarkia franciscana*	FE, SE, Rank 1B.1	Coastal scrub, valley and foothill grassland. Elevation ranges from 80 to 1100 feet (25 to 335 meters). Blooms May-Jul.	**No Potential.** The project site does not contain suitable habitat for this species and is below the known elevation range for this species. Presidio clarkia occurs in serpentine outcrops in grassland or scrub which doesn't occur on site.

NAME	STATUS	HABITAT	OCCURRENCE POTENTIAL
round-headed Chinese-houses *Collinsia corymbosa*	Rank 1B.2	Coastal dunes. Elevation ranges from 0 to 65 feet (0 to 20 meters). Blooms Apr-Jun.	**No Potential.** The project site does not contain suitable habitat for this species.
San Francisco collinsia *Collinsia multicolor*	Rank 1B.2	Closed-cone coniferous forest, coastal scrub. Elevation ranges from 100 to 900 feet (30 to 275 meters). Blooms (Feb)Mar-May.	**No Potential.** The project site does not contain suitable habitat for this species.
serpentine collomia *Collomia diversifolia*	Rank 4.3	Chaparral, cismontane woodland. Elevation ranges from 655 to 1970 feet (200 to 600 meters). Blooms May-Jun.	**Low Potential**. Although the project site has cismontane woodland habitat, the habitat is heavily disturbed, in addition to lacking serpentine substrate. The nearest extant CCH2 occurrence is 4.8 miles southwest and is separated by extensive urban development.
California lady's-slipper *Cypripedium californicum*	Rank 4.2	Bogs and fens, lower montane coniferous forest. Elevation ranges from 100 to 9025 feet (30 to 2750 meters). Blooms Apr-Aug (Sep).	**No Potential.** The project site does not contain suitable habitat for this species.
western dichondra *Dichondra occidentalis*	Rank 4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Elevation ranges from 165 to 1640 feet (50 to 500 meters). Blooms (Jan)Mar-Jul.	**No Potential.** There are no documented occurrences within 10 miles of the project site and the project site is below the known elevation range for this species.
western leatherwood *Dirca occidentalis*	Rank 1B.2	Broadleafed upland forest, chaparral, cismontane woodland, closed-cone coniferous forest, north coast coniferous forest, riparian forest, riparian woodland. Elevation ranges from 80 to 1395 feet (25 to 425 meters). Blooms Jan-Mar (Apr).	**Low Potential**. Although the project site has cismontane woodland and riparian woodland habitats, the habitat is heavily disturbed. The nearest extant CNDDB occurrence is 5.9 miles southwest and is separated by extensive urban development. This species was not found during the site surveys.
small spikerush *Eleocharis parvula*	Rank 4.3	Marshes and swamps. Elevation ranges from 5 to 9910 feet (1 to 3020 meters). Blooms (Apr)Jun-Aug (Sep).	**No Potential.** The project site does not contain suitable habitat for this species. The closest occurrence of this species is over 20 km to the north in Sonoma County in a brackish marsh. The marsh in the project site is a freshwater marsh.
California bottle-brush grass *Elymus californicus*	Rank 4.3	Broadleafed upland forest, cismontane woodland, north coast coniferous forest, riparian woodland. Elevation ranges from 50 to 1540 feet (15 to 470 meters). Blooms May-Aug (Nov).	**Low Potential.** Although the project site has cismontane woodland and riparian woodland habitats, the habitats are heavily disturbed due to surrounding development.

NAME	STATUS	HABITAT	OCCURRENCE POTENTIAL
			The nearest extant CCH2 occurrence is 2 miles southwest and is separated by extensive urban development.
Koch's cord moss *Entosthodon kochii*	Rank 1B.3	Cismontane woodland. Elevation ranges from 590 to 3280 feet (180 to 1000 meters).	**No potential**. Although the project site has cismontane woodland habitat, the habitat is heavily disturbed. The nearest extant CNDDB occurrence is 8.6 miles northwest and is separated by extensive urban development. The Project Site is below the known elevation range for this species.
marsh horsetail *Equisetum palustre*	Rank 3	Marshes and swamps. Elevation ranges from 150 to 3280 feet (45 to 1000 meters). Blooms Unk.	**No Potential.** The project site does not contain suitable habitat for this species.
Tiburon buckwheat *Eriogonum luteolum var. caninum*	Rank 1B.2	Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland. Elevation ranges from 0 to 2295 feet (0 to 700 meters). Blooms May-Sep.	**Low Potential**. Although the project site has cismontane woodland habitat, the habitat is heavily disturbed and lacks serpentine substrate. The nearest extant CNDDB occurrence is 1.5 miles northeast and is separated by extensive urban development.
San Francisco wallflower *Erysimum franciscanum*	Rank 4.2	Chaparral, coastal dunes, coastal scrub, valley and foothill grassland. Elevation ranges from 0 to 1805 feet (0 to 550 meters). Blooms Mar-Jun.	**No Potential.** The project site does not contain suitable habitat for this species. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland.
bare monkeyflower *Erythranthe nudata*	Rank 4.3	Chaparral, cismontane woodland. Elevation ranges from 655 to 2295 feet (200 to 700 meters). Blooms May-Jun.	**No Potential**. Although the project site has cismontane woodland habitat, the habitat is heavily disturbed and lacks serpentine substrate. The nearest extant CCH2 occurrence over 40 miles northeast and is separated by extensive urban development.
minute pocket moss *Fissidens pauperculus*	Rank 1B.2	North coast coniferous forest. Elevation ranges from 35 to 3360 feet (10 to 1024 meters).	**No Potential.** The project site does not contain suitable habitat for this species.
Marin checker lily *Fritillaria lanceolata var. tristulis*	Rank 1B.1	Coastal bluff scrub, coastal prairie, coastal scrub. Elevation ranges from 50 to 490 feet (15 to 150 meters). Blooms Feb-May.	**No Potential.** The project site does not contain suitable habitat for this species.
fragrant fritillary *Fritillaria liliacea*	Rank 1B.2	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 10 to 1345 feet (3 to 410 meters). Blooms Feb-Apr.	**Low Potential**. Although the project site has cismontane woodland habitat, the habitat is heavily disturbed and lacks serpentine

NAME	STATUS	HABITAT	OCCURRENCE POTENTIAL
			substrate usually required by this species. The nearest extant CNDDB occurrence is 10.5 miles and is separated by extensive urban development. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland.
blue coast gilia *Gilia capitata ssp. chamissonis*	Rank 1B.1	Coastal dunes, coastal scrub. Elevation ranges from 5 to 655 feet (2 to 200 meters). Blooms Apr-Jul.	**No Potential.** The project site does not contain suitable habitat for this species.
woolly-headed gilia *Gilia capitata ssp. tomentosa*	Rank 1B.1	Coastal bluff scrub, valley and foothill grassland. Elevation ranges from 35 to 720 feet (10 to 220 meters). Blooms May-Jul.	**No Potential.** The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland.
dark-eyed gilia *Gilia millefoliata*	Rank 1B.2	Coastal dunes. Elevation ranges from 5 to 100 feet (2 to 30 meters). Blooms Apr-Jul.	**No Potential.** The project site does not contain suitable habitat for this species.
San Francisco gumplant *Grindelia hirsutula var. maritima*	Rank 3.2	Coastal bluff scrub, coastal scrub, valley and foothill grassland. Elevation ranges from 50 to 1310 feet (15 to 400 meters). Blooms Jun-Sep.	**No Potential.** The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland.
Diablo helianthella *Helianthella castanea*	Rank 1B.2	Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Elevation ranges from 195 to 4265 feet (60 to 1300 meters). Blooms Mar-Jun.	**Low Potential**. Although the project site has cismontane woodland and riparian woodland habitats, the habitat is heavily disturbed and below the known elevation range for this species. The nearest extant CNDDB occurrence is 4.6 miles south and is separated by extensive urban development.
congested-headed hayfield tarplant *Hemizonia congesta ssp. congesta*	Rank 1B.2	Valley and foothill grassland. Elevation ranges from 65 to 1835 feet (20 to 560 meters). Blooms Apr-Nov.	**Moderate Potential.** The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland. However, this species is often in fallow fields and sometimes along roadsides. During initial surveys Hemizonia congesta ssp. lutescens which utilizes

NAME	STATUS	HABITAT	OCCURRENCE POTENTIAL
			similar habitat was found. A known population exists 2 km away on a hillside above Fallkirk Manor in San Rafael.
Marin western flax *Hesperolinon congestum*	FT, ST, Rank 1B.1	Chaparral, valley and foothill grassland. Elevation ranges from 15 to 1215 feet (5 to 370 meters). Blooms Apr-Jul.	**No Potential.** This species occurs on serpentine barrens and in serpentine grassland and chaparral which don't occur on site. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland.
water star-grass *Heteranthera dubia*	Rank 2B.2	Marshes and swamps. Elevation ranges from 100 to 4905 feet (30 to 1495 meters). Blooms Jul-Oct.	**No Potential.** While the project site may contain suitable habitat (marsh) for this species, the project site has been repeatedly heavily disturbed, and the only source of information for the occurrence is an 1879 collection by Vasey near San Francisco.
Santa Cruz tarplant *Holocarpha macradenia*	FT, SE, Rank 1B.1	Coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 35 to 720 feet (10 to 220 meters). Blooms Jun-Oct.	**No Potential.** The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland. One occurrence from the 1800s is presumed extirpated from the town of Ross. The other occurrence is from near the top of Mt. Tamalpais also from the 1800s and was not seen during a 1977 survey of the area.
Kellogg's horkelia *Horkelia cuneata var. sericea*	Rank 1B.1	Chaparral, closed-cone coniferous forest, coastal dunes, coastal scrub. Elevation ranges from 35 to 655 feet (10 to 200 meters). Blooms Apr-Sep.	**No Potential.** The project site does not contain suitable habitat for this species.
Point Reyes horkelia *Horkelia marinensis*	Rank 1B.2	Coastal dunes, coastal prairie, coastal scrub. Elevation ranges from 15 to 2475 feet (5 to 755 meters). Blooms May-Sep.	**No Potential.** The project site does not contain suitable habitat for this species.
thin-lobed horkelia *Horkelia tenuiloba*	Rank 1B.2	Broadleafed upland forest, chaparral, valley and foothill grassland. Elevation ranges from 165 to 1640 feet (50 to 500 meters). Blooms May-Jul (Aug).	**No Potential.** The project site does not contain suitable habitat for this species and is below the known elevation range for this species. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a

NAME	STATUS	HABITAT	OCCURRENCE POTENTIAL
			naturally occurring valley and foothill grassland.
harlequin lotus *Hosackia gracilis*	Rank 4.2	Broadleafed upland forest, cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, meadows and seeps, north coast coniferous forest, valley and foothill grassland. Elevation ranges from 0 to 2295 feet (0 to 700 meters). Blooms Mar-Jul.	**Low Potential.** Although the project site has cismontane woodland habitat, the habitat is heavily disturbed. This species can be found near roadsides and wetlands, but the nearest extant CCH2 occurrence is 3.5 miles southwest and is separated from the project site by extensive urban development.
island tube lichen *Hypogymnia schizidiata*	Rank 1B.3	Chaparral, closed-cone coniferous forest. Elevation ranges from 1180 to 1330 feet (360 to 405 meters).	**No Potential.** The project site does not contain suitable habitat for this species.
coast iris *Iris longipetala*	Rank 4.2	Coastal prairie, lower montane coniferous forest, meadows and seeps. Elevation ranges from 0 to 1970 feet (0 to 600 meters). Blooms Mar-May (Jun).	**No Potential.** The project site does not contain suitable habitat for this species.
southwestern spiny rush *Juncus acutus ssp. leopoldii*	Rank 4.2	Coastal dunes, marshes and swamps, meadows and seeps. Elevation ranges from 10 to 2955 feet (3 to 900 meters). Blooms (Mar)May-Jun.	**Low Potential.** While the project site may contain suitable habitat (marsh) for this species, the project site has been repeatedly heavily disturbed, and this species usually prefers moist saline conditions which do not occur on the site. There is an occurrence from 2010 near Davidson School in San Rafael.
small groundcone *Kopsiopsis hookeri*	Rank 2B.3	North coast coniferous forest. Elevation ranges from 295 to 2905 feet (90 to 885 meters). Blooms Apr-Aug.	**No Potential.** The project site does not contain suitable habitat for this species.
beach layia *Layia carnosa*	FT, SE, Rank 1B.1	Coastal dunes, coastal scrub. Elevation ranges from 0 to 195 feet (0 to 60 meters). Blooms Mar-Jul.	**No Potential.** The project site does not contain suitable habitat for this species.
bristly leptosiphon *Leptosiphon acicularis*	Rank 4.2	Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland. Elevation ranges from 180 to 4920 feet (55 to 1500 meters). Blooms Apr-Jul.	**No Potential.** Although the project site has cismontane woodland habitat, the habitat is heavily disturbed and is below the known elevation range for this species. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland.
large-flowered leptosiphon *Leptosiphon grandiflorus*	Rank 4.2	Cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal dunes, coastal prairie, coastal scrub, valley and foothill grassland. Elevation	**Low Potential.** Although the project site has cismontane woodland habitat, the habitat is heavily disturbed. The annual grassland that occurs on site is heavily disturbed, ruderal,

NAME	STATUS	HABITAT	OCCURRENCE POTENTIAL
		ranges from 15 to 4005 feet (5 to 1220 meters). Blooms Apr-Aug.	and growing on top of fill material which is not a naturally occurring valley and foothill grassland. The nearest extant CCH2 occurrence is more than 20 miles northwest and is separated by extensive urban development. The populations that existed in the San Rafael quad have been extirpated.
broad-lobed leptosiphon *Leptosiphon latisectus*	Rank 4.3	Broadleafed upland forest, cismontane woodland. Elevation ranges from 560 to 4920 feet (170 to 1500 meters). Blooms Apr-Jun.	**No Potential.** Although the project site has cismontane woodland habitat, the habitat is heavily disturbed and is below the known elevation range for this species. The nearest extant CCH2 occurrence is more than 20 miles northwest and is separated by extensive urban development.
rose leptosiphon *Leptosiphon rosaceus*	Rank 1B.1	Coastal bluff scrub. Elevation ranges from 0 to 330 feet (0 to 100 meters). Blooms Apr-Jul.	**No Potential.** The project site does not contain suitable habitat for this species.
San Francisco lessingia *Lessingia germanorum*	FE, SE, Rank 1B.1	Coastal scrub. Elevation ranges from 80 to 360 feet (25 to 110 meters). Blooms (Jun)Jul-Nov.	**No Potential.** The project site does not contain suitable habitat for this species.
woolly-headed lessingia *Lessingia hololeuca*	Rank 3	Broadleafed upland forest, coastal scrub, lower montane coniferous forest, valley and foothill grassland. Elevation ranges from 50 to 1000 feet (15 to 305 meters). Blooms Jun-Oct.	**No Potential**. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland.
Tamalpais lessingia *Lessingia micradenia var. micradenia*	Rank 1B.2	Chaparral, valley and foothill grassland. Elevation ranges from 330 to 1640 feet (100 to 500 meters). Blooms (Jun)Jul-Oct.	**No Potential.** The project site does not contain suitable habitat for this species and is below the known elevation range for this species. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland.
Mt. Diablo cottonweed *Micropus amphibolus*	Rank 3.2	Broadleafed upland forest, chaparral, cismontane woodland, valley and foothill grassland. Bare Elevation ranges from 150 to 2705 feet (45 to 825 meters). Blooms Mar-May.	**No Potential.** Although the project site has cismontane woodland habitat, the habitat is heavily disturbed and the site is below the known elevation range for this species. The species is found on bare, grassy, or rocky slopes, none of which occur on the site. The

NAME	STATUS	HABITAT	OCCURRENCE POTENTIAL
			annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland. The nearest extant CCH2 occurrence is 2 miles northeast.
marsh microseris *Microseris paludosa*	Rank 1B.2	Cismontane woodland, closed-cone coniferous forest, coastal scrub, valley and foothill grassland. Elevation ranges from 15 to 1165 feet (5 to 355 meters). Blooms Apr-Jun (Jul).	**Low Potential.** Although the project site has cismontane woodland habitat, the habitat is heavily disturbed. The nearest extant CNDDB occurrence is 3.5 miles southeast and is separated by extensive urban development. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland.
elongate copper moss *Mielichhoferia elongata*	Rank 4.3	Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, subalpine coniferous forest. Elevation ranges from 0 to 6430 feet (0 to 1960 meters).	**No Potential.** There are no documented occurrences within 10 miles of the project site. The moss grows on very acidic, metamorphic rock or substrate; usually in higher portions in fens, and often on substrates naturally enriched with heavy metals. These conditions do not occur on site.
Baker's navarretia Navarretia leucocephala ssp. bakeri	Rank 1B.1	Cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, vernal pools. Elevation ranges from 15 to 5710 feet (5 to 1740 meters). Blooms Apr-Jul.	**No Potential.** Although the project site has cismontane woodland habitat, this species is found in vernal pools and swales which are not found within the project site.
Marin County navarretia *Navarretia rosulata*	Rank 1B.2	Chaparral, closed-cone coniferous forest. Elevation ranges from 655 to 2085 feet (200 to 635 meters). Blooms May-Jul.	**No Potential.** The project site does not contain suitable habitat for this species.
white-rayed pentachaeta *Pentachaeta bellidiflora*	FE, SE, Rank 1B.1	Cismontane woodland, valley and foothill grassland. Elevation ranges from 115 to 2035 feet (35 to 620 meters). Blooms Mar-May.	**Low Potential.** Although the project site has cismontane woodland habitat, the habitat is heavily disturbed and the site is below the know elevation range of the species. The occurrence in the immediate vicinity has been confirmed extirpated. The nearest extant CNDDB occurrence is over 100 years

NAME	STATUS	HABITAT	OCCURRENCE POTENTIAL
			old, is located 1.8 miles southwest and is separated by extensive urban development. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland.
Gairdner's yampah *Perideridia gairdneri ssp. gairdneri*	Rank 4.2	Broadleafed upland forest, chaparral, coastal prairie, valley and foothill grassland, vernal pools. Elevation ranges from 0 to 2000 feet (0 to 610 meters). Blooms Jun-Oct.	**No Potential.** The project site does not contain suitable habitat for this species. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland.
Michael's rein orchid *Piperia michaelii*	Rank 4.2	Chaparral, cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal scrub, lower montane coniferous forest. Elevation ranges from 10 to 3000 feet (3 to 915 meters). Blooms Apr-Aug.	**Low Potential.** Although the project site has cismontane woodland habitat, the habitat is heavily disturbed. The nearest extant CCH2 occurrence is 6 miles to the east, on the other side of the San Francisco Bay.
Choris' popcornflower *Plagiobothrys chorisianus var. chorisianus*	Rank 1B.2	Chaparral, coastal prairie, coastal scrub. Elevation ranges from 10 to 525 feet (3 to 160 meters). Blooms Mar-Jun.	**No Potential.** The project site does not contain suitable habitat for this species.
San Francisco popcornflower *Plagiobothrys diffusus*	SE, Rank 1B.1	Coastal prairie, valley and foothill grassland. Elevation ranges from 195 to 1180 feet (60 to 360 meters). Blooms Mar-Jun.	**No Potential.** The project site does not contain suitable habitat for this species and is below the known elevation range. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland.
hairless popcornflower *Plagiobothrys glaber*	Rank 1A	Coastal salt marshes and alkaline meadows. Elevation ranges from 50 to 590 feet (15 to 180 meters). Blooms Mar-May.	**No Potential.** The project site does not contain suitable habitat for this species.
North Coast semaphore grass *Pleuropogon hooverianus*	ST, Rank 1B.1	Broadleafed upland forest, meadows and seeps, north coast coniferous forest. Elevation ranges from 35 to 2200 feet (10 to 671 meters). Blooms Apr-Jun.	**No Potential.** The project site does not contain suitable habitat for this species.
nodding semaphore grass *Pleuropogon refractus*	Rank 4.2	Lower montane coniferous forest, meadows and seeps, north coast coniferous forest, riparian forest. Elevation ranges from 0 to 5250 feet (0 to 1600 meters). Blooms (Mar)Apr-Aug.	**Low Potential.** Although the project site has cismontane woodland and riparian habitats, the habitat is heavily disturbed. The nearest extant CCH2 occurrence is 5 miles to the

NAME	STATUS	HABITAT	OCCURRENCE POTENTIAL
			southwest, separated by extensive urban development.
Oregon polemonium *Polemonium carneum*	Rank 2B.2	Coastal prairie, coastal scrub, lower montane coniferous forest. Elevation ranges from 0 to 6005 feet (0 to 1830 meters). Blooms Apr-Sep.	**No Potential.** The project site does not contain suitable habitat for this species.
Marin knotweed *Polygonum marinense*	Rank 3.1	Coastal salt and brackish marshes. Elevation ranges from 0 to 35 feet (0 to 10 meters). Blooms (Apr)May-Aug (Oct).	**No Potential.** The project site does not contain suitable habitat for this species.
Tamalpais oak *Quercus parvula var. tamalpaisensis*	Rank 1B.3	Lower montane coniferous forest. Elevation ranges from 330 to 2460 feet (100 to 750 meters). Blooms Mar-Apr.	**No Potential.** The project site does not contain suitable habitat for this species.
Lobb's aquatic buttercup *Ranunculus lobbii*	Rank 4.2	Cismontane woodland, north coast coniferous forest, valley and foothill grassland, vernal pools. Elevation ranges from 50 to 1540 feet (15 to 470 meters). Blooms Feb-May.	**Low Potential.** Although the project site has cismontane woodland habitat, the habitat is heavily disturbed. The nearest extant CCH2 occurrence is 6 miles to the north, separated by extensive urban development.
adobe sanicle *Sanicula maritima*	SR, Rank 1B.1	Chaparral, coastal prairie, meadows and seeps, valley and foothill grassland in moist clay to ultramafic soils. Elevation ranges from 100 to 785 feet (30 to 240 meters). Blooms Feb-May.	**No Potential.** The project site does not contain suitable habitat and is out of the known elevation range for this species. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland.
Point Reyes checkerbloom *Sidalcea calycosa ssp. rhizomata*	Rank 1B.2	Marshes and swamps. Elevation ranges from 10 to 245 feet (3 to 75 meters). Blooms Apr-Sep.	**Low Potential.** While suitable habitat may exist in the Study Area, the only record for this species was from San Anselmo Canyon in 1922 with a collection by Suttliff. This is over 3.5 miles west of the Study Area.
Marin checkerbloom *Sidalcea hickmanii ssp. viridis*	Rank 1B.1	Chaparral. Elevation ranges from 165 to 1410 feet (50 to 430 meters). Blooms May-Jun.	**No Potential.** The project site does not contain suitable habitat for this species.
Scouler's catchfly *Silene scouleri ssp. scouleri*	Rank 2B.2	Coastal bluff scrub, coastal prairie, valley and foothill grassland. Elevation ranges from 0 to 1970 feet (0 to 600 meters). Blooms (Mar-May) Jun-Aug (Sep).	**No Potential.** The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland. There is only one record of this species within the 9-quad search and it is

NAME	STATUS	HABITAT	OCCURRENCE POTENTIAL
			based on a 1905 and 1921 collection from around Rodeo Lagoon over 10 miles to the south of the Study Area.
San Francisco campion *Silene verecunda ssp. verecunda*	Rank 1B.2	Chaparral, coastal bluff scrub, coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 100 to 2115 feet (30 to 645 meters). Blooms (Feb)Mar-Jul (Aug).	**No Potential.** The project site does not contain suitable habitat and is out of the known elevation range for this species. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland.
long-styled sand-spurrey *Spergularia macrotheca var. longistyla*	Rank 1B.2	Alkaline marshes, mud flats, meadows, hot springs. Elevation ranges from 0 to 835 feet (0 to 255 meters). Blooms Feb-May.	**No Potential.** While the project site may contain wetlands, the Study Area does not contain an alkaline marsh or mud flat required by this species. There was only one record within the 9-quad search and the exact location for the record is unknown. The record was mapped as best guess by CNDDB around San Pablo Marsh & Wildcat Marsh in North Richmond which appears to be the largest salt marsh area and is 10 miles to the East of the Study Area.
Santa Cruz microseris *Stebbinsoseris decipiens*	Rank 1B.2	Broadleafed upland forest, chaparral, closed-cone coniferous forest, coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 35 to 1640 feet (10 to 500 meters). Blooms Apr-May.	**No Potential.** The project site does not contain suitable habitat for this species. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland. The only records of this species are nearly 10 miles to the west on Mt. Tamalpais and in serpentine habitat.
Tamalpais jewelflower *Streptanthus batrachopus*	Rank 1B.3	Chaparral, closed-cone coniferous forest. Elevation ranges from 1000 to 2135 feet (305 to 650 meters). Blooms Apr-Jul.	**No Potential.** The project site does not contain suitable habitat for this species.
Tiburon jewelflower *Streptanthus glandulosus ssp. niger*	FE, SE, Rank 1B.1	Valley and foothill grassland. Elevation ranges from 100 to 490 feet (30 to 150 meters). Blooms May-Jun.	**No Potential.** The project site does not contain suitable habitat and is out of the known elevation range for this species. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on

NAME	STATUS	HABITAT	OCCURRENCE POTENTIAL
			top of fill material which is not a naturally occurring valley and foothill grassland.
Mt. Tamalpais bristly jewelflower *Streptanthus glandulosus ssp. pulchellus*	Rank 1B.2	Chaparral, valley and foothill grassland. Elevation ranges from 490 to 2625 feet (150 to 800 meters). Blooms May-Jul (Aug).	**No Potential.** The project site does not contain suitable habitat and is out of the known elevation range for this species. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland.
Suisun Marsh aster *Symphyotrichum lentum*	Rank 1B.2	Marshes and swamps. Elevation ranges from 0 to 10 feet (0 to 3 meters). Blooms (Apr)May-Nov.	**No Potential.** While the project site may contain wetlands, the project site is not tidally influenced and not a salt or brackish marsh. This species is most often seen along sloughs which do not occur in the Study Area.
marsh zigadenus *Toxicoscordion fontanum*	Rank 4.2	Chaparral, cismontane woodland, lower montane coniferous forest, marshes and swamps, meadows and seeps. Elevation ranges from 50 to 3280 feet (15 to 1000 meters). Blooms Apr-Jul.	**Low Potential.** Although the project site has cismontane woodland habitat, the habitat is heavily disturbed. The nearest extant CCH2 occurrence is 5.5 miles to the southwest, separated by extensive urban development.
two-fork clover *Trifolium amoenum*	FE, Rank 1B.1	Coastal bluff scrub, valley and foothill grassland. Elevation ranges from 15 to 1360 feet (5 to 415 meters). Blooms Apr-Jun.	**No Potential.** The project site does not contain suitable habitat for this species. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland.
saline clover *Trifolium hydrophilum*	Rank 1B.2	Marshes and swamps, valley and foothill grassland, vernal pools. Elevation ranges from 0 to 985 feet (0 to 300 meters). Blooms Apr-Jun.	**No Potential.** The project site does not contain suitable habitat for this species. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring valley and foothill grassland. The wetlands on site are not saline.
San Francisco owl's-clover *Triphysaria floribunda*	Rank 1B.2	Coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 35 to 525 feet (10 to 160 meters). Blooms Apr-Jun.	**No Potential.** The project site does not contain suitable habitat for this species. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on

NAME	STATUS	HABITAT	OCCURRENCE POTENTIAL
			top of fill material which is not a naturally occurring valley and foothill grassland.
coastal triquetrella Triquetrella californica	Rank 1B.2	Coastal bluff scrub, coastal scrub. Elevation ranges from 35 to 330 feet (10 to 100 meters).	**No Potential.** The project site does not contain suitable habitat for this species.
Special-Status Natural Communities			
Coastal Brackish Marsh	G2, S2.1	Marsh & swamp, Wetland	**No Potential.** While the project site may contain wetlands, the project site is not tidally influenced and not a salt or brackish marsh.
Coastal Terrace Prairie	G2, S2.1	Coastal prairie	**No Potential.** The project site does not contain suitable habitat. The annual grassland that occurs on site is heavily disturbed, ruderal, and growing on top of fill material which is not a naturally occurring.
Northern Coastal Salt Marsh	G3, S3.1	Marsh & swamp, Wetland	**No Potential.** While the project site may contain wetlands, the project site is not tidally influenced and not a salt or brackish marsh.

ATTACHMENT C
PLANT SPECIES OBSERVED IN THE STUDY AREA

Attachment C. Plant Species Observed within the Study Area

Family	Scientific Name	Common Name	Origin	Form	Rarity Status	CAL-IPC Status	Wetland Status (AW 2020)	8/10/2022	4/13/2023	6/14/2023	8/23/2023
Alliaceae	*Allium triquetrum*	White flowered onion	non-native	perennial herb (bulb)	-	-	-	x	x	x	x
Amaryllidaceae	*Agapanthus sp.*	Agapanthus	non-native	perennial herb	-	-	-	x	x	x	x
Amaryllidaceae	*Amaryllis belladonna*	Naked lady	non-native	perennial herb	-	-	-	-	-	-	x
Anacardiaceae	*Toxicodendron diversilobum*	Poison oak	native	vine, shrub	-	-	FACU	x	x	x	x
Apiaceae	*Foeniculum vulgare*	Fennel	non-native (invasive)	perennial herb	-	High	-	x	x	x	x
Apocynaceae	*Nerium oleander*	Oleander	non-native	tree	-	-	-	x	x	x	x
Apocynaceae	*Vinca major*	Vinca	non-native (invasive)	perennial herb	-	Moderate	FACU	x	x	x	x
Araliaceae	*Hedera helix*	English ivy	non-native (invasive)	vine, shrub	-	High	FACU	x	x	x	x
Asteraceae	*Baccharis pilularis*	Coyote brush	native	shrub	-	-	-	x	x	x	x
Asteraceae	*Bellis perennis*	English lawn daisy	non-native	perennial herb	-	-	-	x	x	x	x
Asteraceae	*Carduus pycnocephalus*	Italian thistle	non-native (invasive)	annual herb	-	Moderate	-	x	x	x	x
Asteraceae	*Centaurea solstitialis*	Yellow starthistle	non-native (invasive)	annual herb	-	High	-	x	-	x	x
Asteraceae	*Centromadia pungens*	Common tarweed	native	annual herb	-	-	FAC	x	-	-	-
Asteraceae	*Cirsium vulgare*	Bullthistle	non-native (invasive)	perennial herb	-	Moderate	FACU	x	x	x	x
Asteraceae	*Cynara cardunculus*	Artichoke Thistle	non-native (invasive)	perennial herb	-	Moderate	-	x	x	x	x
Asteraceae	*Erigeron canadensis*	Canada horseweed	native	annual herb	-	-	FACU	x	-	-	-
Asteraceae	*Helminthotheca echioides*	Bristly ox-tongue	non-native (invasive)	annual, perennial herb	-	Limited	FAC	x	x	x	x
Asteraceae	*Hemizonia congesta ssp. lutescens*	Hayfield tarweed	native	annual herb	-	-	-	x	-	-	x
Asteraceae	*Hypochaeris radicata*	Hairy cats ear	non-native (invasive)	perennial herb	-	Moderate	FACU	x	x	x	x
Asteraceae	*Lactuca serriola*	Prickly lettuce	non-native	annual herb	-	-	FACU	x	-	x	x
Asteraceae	*Matricaria discoidea*	Pineapple weed	native	annual herb	-	-	FACU	x	x	x	x
Asteraceae	*Pseudognaphalium luteoalbum*	Jersey cudweed	non-native	annual herb	-	-	FAC	-	-	-	x
Asteraceae	*Silybum marianum*	Milk thistle	non-native (invasive)	annual, perennial herb	-	Limited	-	x	x	x	x
Asteraceae	*Sonchus oleraceus*	Common sow thistle	non-native	annual herb	-	-	UPL	x	x	x	x
Asteraceae	*Xanthium strumarium*	Cocklebur	native	annual herb	-	-	FAC	x	x	x	x
Berberidaceae	*Nandina domestica*	Nandina	non-native	perennial herb	-	-	-	x	x	x	x
Brassicaceae	*Brassica nigra*	Black mustard	non-native (invasive)	annual herb	-	Moderate	-	x	-	x	x
Brassicaceae	*Cardamine oligosperma*	Idaho bittercress	native	annual, perennial herb	-	-	FAC	x	x	x	x
Brassicaceae	*Hirschfeldia incana*	Short-podded mustard	non-native (invasive)	perennial herb	-	Moderate	-	x	-	x	x
Brassicaceae	*Raphanus sativus*	Wild radish	non-native (invasive)	annual, biennial herb	-	Limited	-	x	x	x	x
Cactaceae	*Opuntia ficus-indica*	Tuna cactus	non-native	shrub (stem succulent)	-	-	-	x	x	x	x
Convolvulaceae	*Convolvulus arvensis*	Field bindweed	non-native	perennial herb, vine	-	-	-	x	x	x	x
Cupressaceae	*Hesperocyparis macrocarpa*	Monterey cypress	native	tree	ornamental	-	-	x	x	x	x
Cupressaceae	*Sequoia sempervirens*	Coast redwood	native	tree	-	-	-	x	x	x	x
Cyperaceae	*Bolboschoenus maritimus ssp. paludosus*	Saltmarsh bulrush	native	perennial grasslike herb	-	-	OBL	-	-	-	x
Cyperaceae	*Cyperus eragrostis*	Tall cyperus	native	perennial grasslike herb	-	-	FACW	x	x	x	x
Cyperaceae	*Eleocharis macrostachya*	Spike rush	native	perennial grasslike herb	-	-	OBL	x	x	x	x
Cyperaceae	*Eleocharis palustris*	Common spikerush	native	perennial grasslike herb	-	-	OBL	x	x	x	x
Cyperaceae	*Schoenoplectus acutus var. occidentalis*	Tule	native	perennial grasslike herb	-	-	OBL	x	x	x	x
Dipsacaceae	*Dipsacus fullonum*	Wild teasel	non-native (invasive)	perennial herb	-	Moderate	FAC	x	x	x	x
Fabaceae	*Acacia melanoxylon*	Blackwood acacia	non-native (invasive)	tree	-	Limited	-	x	x	x	x
Fabaceae	*Albizia julibrissin*	Silktree	non-native	tree, shrub	-	-	-	x	x	x	x
Fabaceae	*Cytisus scoparius*	Scotch broom	non-native (invasive)	shrub	-	High	-	x	x	x	x
Fabaceae	*Genista monspessulana*	French broom	non-native (invasive)	shrub	-	High	-	x	x	x	x
Fabaceae	*Lotus corniculatus*	Bird's foot trefoil	non-native	perennial herb	-	-	FAC	x	x	x	x
Fabaceae	*Medicago polymorpha*	Bur clover	non-native (invasive)	annual herb	-	Limited	FACU	x	x	x	x
Fabaceae	*Melilotus indicus*	Annual yellow sweetclover	non-native	annual herb	-	-	FACU	x	x	x	x
Fabaceae	*Trifolium tomentosum*	Woolly clover	non-native	annual herb	-	-	-	-	-	x	x
Fabaceae	*Vicia sativa*	Spring vetch	non-native	annual herb, vine	-	-	FACU	x	x	x	x
Fagaceae	*Quercus agrifolia*	Coast live oak	native	tree	-	-	-	x	x	x	x

Attachment C. Plant Species Observed within the Study Area

Family	Scientific Name	Common Name	Origin	Form	Rarity Status	CAL-IPC Status	Wetland Status (AW 2020)	8/10/2022	4/13/2023	6/14/2023	8/23/2023
Fagaceae	*Quercus lobata*	Valley oak	native	tree	-	-	FACU	x	x	x	x
Gentianaceae	*Zeltnera muehlenbergii*	Muehlenberg's centaury	native	annual herb	-	-	FAC	-	-	x	-
Geraniaceae	*Erodium botrys*	Big heron bill	non-native	annual herb	-	-	FACU	x	x	x	-
Geraniaceae	*Erodium cicutarium*	Red stemmed filaree	non-native (invasive)	annual herb	-	Limited	-	x	x	x	x
Geraniaceae	*Erodium moschatum*	Whitestem filaree	non-native	annual herb	-	-	-	x	x	x	x
Geraniaceae	*Geranium dissectum*	Wild geranium	non-native (invasive)	annual herb	-	Limited	-	x	x	x	x
Geraniaceae	*Geranium molle*	Crane's bill geranium	non-native	annual, perennial herb	-	-	-	x	x	x	x
Iridaceae	*Chasmanthe floribunda*	Chasmanthe	non-native	perennial herb	-	Watch	-	x	x	x	x
Iridaceae	*Iris pseudacorus*	Horticultural iris	non-native (invasive)	perennial herb	-	Limited	OBL	x	x	x	x
Juglandaceae	*Juglans hindsii*	Northern California black walnut	native	tree	-	-	FAC	x	x	x	x
Juncaceae	*Juncus patens*	Common rush	native	perennial grasslike herb	-	-	FACW	-	-	-	x
Juncaceae	*Juncus occidentalis*	Western rush	native	perennial grasslike herb	-	-	FACW	x	x	x	x
Lamiaceae	*Mentha arvensis*	American wild mint	native	perennial herb	-	-	FACW	-	-	-	x
Lamiaceae	*Mentha pulegium*	Pennyroyal	non-native (invasive)	perennial herb	-	Moderate	OBL	-	-	-	x
Malvaceae	*Malva parviflora*	Cheeseweed	non-native	annual herb	-	-	-	x	x	x	x
Myrsinaceae	*Lysimachia arvensis*	Scarlet pimpernel	non-native	annual herb	-	-	FAC	x	x	x	x
Myrtaceae	*Eucalyptus globulus*	Blue gum	non-native (invasive)	tree	-	Limited	-	x	x	x	x
Myrtaceae	*Eucalyptus sp.*	-	-	-	-	-	-	x	x	x	x
Oxalidaceae	*Oxalis pes-caprae*	Bermuda buttercup	non-native (invasive)	perennial herb	-	Moderate	-	x	x	x	x
Papaveraceae	*Fumaria capreolata*	White ramping fumitory	non-native	perennial herb	-	-	-	x	x	x	x
Pinaceae	*Pinus radiata*	Monterey pine	native	tree	ornamental	-	-	x	x	x	x
Pinaceae	*Pseudotsuga menziesii var. menziesii*	Douglas fir	native	tree	-	-	FACU	x	x	x	x
Plantaginaceae	*Plantago coronopus*	Cut leaf plantain	non-native	annual herb	-	-	FAC	x	x	x	x
Plantaginaceae	*Plantago lanceolata*	Ribwort	non-native (invasive)	perennial herb	-	Limited	FAC	x	x	x	x
Plantaginaceae	*Plantago major*	Common plantain	non-native	perennial herb	-	-	FAC	x	x	x	
Platanaceae	*Platanus racemosa*	California sycamore	native	tree	-	-	FAC	x	x	x	x
Poaceae	*Arundo donax*	Giant reed	non-native (invasive)	perennial grass	-	High	FACW	x	x	x	x
Poaceae	*Avena barbata*	Slim oat	non-native (invasive)	annual, perennial grass	-	Moderate	-	x	x	x	x
Poaceae	*Avena fatua*	Wildoats	non-native (invasive)	annual grass	-	Moderate	-	x	x	x	x
Poaceae	*Bromus catharticus*	Rescue grass	non-native	annual, perennial grass	-	-	-	x	x	x	
Poaceae	*Bromus diandrus*	Ripgut brome	non-native (invasive)	annual grass	-	Moderate	-	x	x	x	x
Poaceae	*Bromus hordeaceus*	Soft chess	non-native (invasive)	annual grass	-	Limited	FACU	x	x	x	x
Poaceae	*Cortaderia selloana*	Pampas grass	non-native (invasive)	perennial grass	-	High	FACU	x	x	x	x
Poaceae	*Cynodon dactylon*	Bermuda grass	non-native (invasive)	perennial grass	-	Moderate	FACU	x	x	x	x
Poaceae	*Distichlis spicata*	Salt grass	native	perennial grass	-	-	FAC	x	x	x	x
Poaceae	*Festuca myuros*	Rattail sixweeks grass	non-native (invasive)	annual grass	-	Moderate	FACU	x	x	x	x
Poaceae	*Festuca perennis*	Italian rye grass	non-native (invasive)	annual, perennial grass	-	Moderate	FAC	x	x	x	x
Poaceae	*Hordeum marinum ssp. gussoneanum*	Mediterranean barley	non-native (invasive)	annual grass	-	Moderate	FAC	x	x	x	x
Poaceae	*Hordeum murinum*	Foxtail barley	non-native (invasive)	annual grass	-	Moderate	FACU	x	x	x	x
Poaceae	*Phalaris aquatica*	Harding grass	non-native (invasive)	perennial grass	-	Moderate	FACU	x	x	x	x
Poaceae	*Polypogon monspeliensis*	Annual beard grass	non-native (invasive)	annual grass	-	Limited	FACW	x	x	x	x
Polygonaceae	*Rumex crispus*	Curly dock	non-native (invasive)	perennial herb	-	Limited	FAC	x	x	x	x
Polygonaceae	*Rumex pulcher*	Fiddleleaf dock	non-native	perennial herb	-	-	FAC	x	x	x	x
Polygonaceae	*Rumex salicifolius*	Willow leaved dock	native	perennial herb	-	-	FACW	x	x	x	x
Rosaceae	*Cotoneaster sp.*	Cotoneaster	non-native (invasive)	tree, shrub	-	Moderate	-	x	x	x	x
Rosaceae	*Prunus sp.*	Plum or Cherry	non-native	tree, shrub	``	-	-	x	x	x	x
Rosaceae	*Rubus armeniacus*	Himalayan blackberry	non-native (invasive)	shrub	-	High	FAC	x	x	x	x
Rosaceae	*Rubus ursinus*	California blackberry	native	vine, shrub	-	-	FAC	-	-	-	x
Rubiaceae	*Galium aparine*	Cleavers	native	annual herb	-	-	FACU	x	x	x	x
Salicaceae	*Salix laevigata*	Red willow	native	tree	-	-	FACW	x	x	x	x
Salicaceae	*Salix lasiolepis*	Arroyo willow	native	tree, shrub	-	-	FACW	x	x	x	x
Sapindaceae	*Aesculus californica*	Buckeye	native	tree	-	-	-	x	x	x	x
Solanaceae	*Solanum nigrum*	Black nightshade	non-native	annual herb	-	-	FACU	-	-	x	x
Tamaricaceae	*Tamarix parviflora*	Tamarisk	non-native (invasive)	tree, shrub	-	High	FAC	x	x	x	x
Typhaceae	*Typha angustifolia*	Narrow leaf cattail	non-native	perennial herb (aquatic)	-	-	OBL	x	x	x	x
Typhaceae	*Typha domingensis*	Cattail	native	perennial herb	-	-	OBL	x	x	x	x
Typhaceae	*Typha latifolia*	Broadleaf cattail	native	perennial herb (aquatic)	-	-	OBL	x	x	x	x
Ulmaceae	*Ulmus alata*	Winged Elm	non-native	perennial	-	-	-	x	x	x	x