



ATTACHMENT D

ENVIRONMENTAL IMPACT REPORT

APPENDIX D2

RARE PLANT SURVEY

June 8, 2023

14776

Jon Rilling
Capalina SMA, LLC
179 Calle Magdalena #201
Encinitas, California 92024

Subject: *Updated Focused Rare Plant Survey Report for the Capalina Apartments Project, City of San Marcos, San Diego County, California*

Dear Mr. Rilling:

At the request of the California Department of Fish and Wildlife (CDFW), Dudek conducted an additional updated focused rare plant survey, with an emphasis on thread-leaved brodiaea (*Brodiaea filifolia*; CRPR 1B.1, CE, FT) and Orcutt's brodiaea (*Brodiaea orcuttii*; CRPR 1B.1) on the proposed site of the Capalina Apartments Project (Project). Dudek Botanist, Charles Adams conducted surveys for the Project on May 31, 2023. The initial rare Plant Survey was conducted in 2021, and resulted in a negative presence for Brodiaea. The Project area is a 2.5 acre parcel (Figure 1, Project Location) within the City of San Marcos, California (City). This letter report provides the methods and results of the updated focused survey.

1 Introduction

1.1 Project Location

The Project site consists of one parcel within the City, encompassed by development. The Project site is surrounded by commercial lots, paved roads, residential lots, and transportation corridors. The Project site is accessible from Capalina Road or West Mission Road in the City. Central coordinates for the Project parcel are 33.1516 North and 117.1952 West. The Project site has relatively flat topography. The Project site is at an elevation of approximately 595 feet above mean sea level.

Per the Phase I ESA completed for the project site, the project site appeared to be vacant pastureland from prior to 1939 until approximately 1974, when the northwestern perimeter of the property appeared to be vacant, rough-graded land. By 1980, the project site appeared to be vacant, rough-graded land with what appeared to be an area graded for uses as a vehicle parking area on the southeastern portion of the property. By 1996, the property appeared to be vacant, weed-abated land. By 2005, a vehicle parking area appears to be located on the southeastern perimeter of the subject property. By 2012, the vehicle parking area was removed, and the property appeared to be vacant, weed-abated land.

2 Rare Plants

2.1 Reference Population Checks

Plant species bloom at slightly different times each year depending on temperature, rainfall patterns, elevation, and other environmental factors. Reference population checks involve locating populations of target species during a timeframe when they are known to be blooming or exhibiting other phenological characteristics that allow for species identification. Observations of reference populations during peak phenology provide assurance that these species would be identifiable if they were present in a Project area, and the 2022-2023 season was an above average season for rainfall, recording over 9-inches of rain from January 2023 – March 15, 2023 (according to local weather sources).

2.2 Spring Rare Plants

Two rare *Brodiaea* have high potential to occur in the vicinity of the Project site during the spring season. Orcutt's brodiaea (*Brodiaea orcuttii*) and thread-leaved brodiaea (*Brodiaea filifolia*) have been documented as occurring throughout the City of San Marcos. These species are members of the *Brodiaea* (Themidaceae) family. Thread-leaved brodiaea and Orcutt's brodiaea bloom from March through July in grasslands, freshwater wetlands, wetland/riparian, vernal pools, foothill woodland, and coastal scrub habitats. Orcutt's brodiaea and thread-leaved brodiaea are perennial herbs (bulbs). Thread-leaved brodiaea occur at elevations between 25 feet and 860 feet above mean sea level. Orcutt's brodiaea occur at elevations between 25 feet and 5,249 feet above mean sea level. Both species have been recorded near the Project site (CNPS 2021; Reiser 2001). The Jepson bioregional range for thread-leaved brodiaea is based on the elevation range restrictions (Jepson 2021), which shows its potential range throughout north coastal San Diego County, western Riverside County, southern Orange County, southeast Los Angeles County, and southwestern San Bernardino County. The Jepson bioregional range for Orcutt's brodiaea shows possibility for occurrence throughout most of San Diego County (excluding the very eastern portion), southwestern Riverside County, Orange County, and the southwestern section of San Bernardino County.

3 Methods

3.1 Reference Check Methods

Dudek botanist Charles Adams conducted a reference check for thread-leaved brodiaea and Orcutt's brodiaea on the afternoon of May 30, 2023, one day prior to conducting the rare plant survey. This reference check was based on known populations within a 5-mile radius of the Project site. Mr. Adams observed both species in full bloom (in high densities) before going to the site to perform the field surveys (Attachment A, Reference Site Photos). On May 30, 2023, temperatures for the reference check were between 63°F and 70°F, winds were 0 to 4 miles per hour, and skies were overcast.

3.2 Focused Special-Status Plant Survey

Mr. Adams conducted a focused rare plant survey within the Project site on May 31, 2023. Conditions for the survey were the same as those for the reference check—temperatures were between 63°F and 70°F, winds were 0 to 4 miles per hour, and skies were moderately overcast. Surveys for special-status species were conducted within the Project site by walking transects. Mr. Adams used both the Collector mobile application and Dudek forms mobile application to record data and map any rare plant species. Transects were included in the Collector mobile application as guidance. These transects were spread at a distance of 10 feet to cover every section of the Project site, including areas with high-density vegetation. Mr. Adams followed these 10-foot transect lines across the Project site. Focused special-status plant surveys conformed to the California Native Plant Society Botanical Survey Guidelines (CNPS 2001), Protocols for Surveying and Evaluating Impacts to Special Status Native Populations and Natural Communities (CDFG 2009), and U.S. Fish and Wildlife Services General Rare Plant Survey Guidelines (Cypher 2002).

3.3 Survey Limitations

There were no factors that limited the results of the focused rare plant survey.

Due to above average rainfall, the weather conditions were conducive enough that thread-leaved brodiaea and Orcutt's brodiaea were observed less than five miles from the Project site in very high densities. Therefore, these species would have been observed if present.

All surveys were conducted during daylight hours under weather conditions that did not preclude observation of plant species (e.g., surveys were not conducted during heavy fog or rain).

4 Results

4.1 Rare Plant Location Results

No rare plants were observed within the Project site.

5 Discussion

The focused rare plant survey found no rare plants during the spring bloom period within the Project site, which is consistent with the negative rare plant survey results in 2021.

Both brodiaea species were blooming within the City of San Marcos and City of Oceanside on two nearby parcels. Reference checks found Brodiaea blooming with relatively high density less than five miles from this site (May 30, 2023). If thread-leaved brodiaea, Orcutt's brodiaea, or other rare spring species were present, they would have been observed during the rare plant survey.

It should be noted that rare plants can be found on disturbed sites. However, this site was extraordinarily disturbed with European grasses and broadleaf mustards. The non-natives occurred at such a high density that few native plant species were present. Due to the density and success of non-native species on-site, monotypic stands of non-

Jon Rilling

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San Diego County, California

native grasses and mustard have formed. The Project site has limited plant species diversity, likely due to the extensive site history of disturbance and regular mowing.

Additional rare species had low potential to occur like San Diego thorn-mint (*Acanthomintha ilicifolia*) and small-flowered morning glory (*Convolvulus simulans*). However, due to the levels of disturbance within the Project site and sensitivity of these species, these rare plant species are not expected to occur. In addition, spreading navarretia (*Navarretia fossalis*) had low potential to occur but due to the absence of vernal wetlands, vernal pools, wetlands, and the sensitivity of this species to non-natives, spreading navarretia is not expected to occur.

Overall, the site is exceptionally disturbed, lacks rare spring plant species, and is encompassed by development.

If you have any questions regarding this letter report, please feel free to contact me at cadams@dudek.com.

Sincerely,



Charles Adams
Botanist

Att.: Figure 1, Project Location
Attachment A, Reference Site Photos
Attachment B, Project Site Photos

cc: Jon Rilling
Patricia Schuyler, Dudek
Vanessa Scheidel, Dudek

6 References

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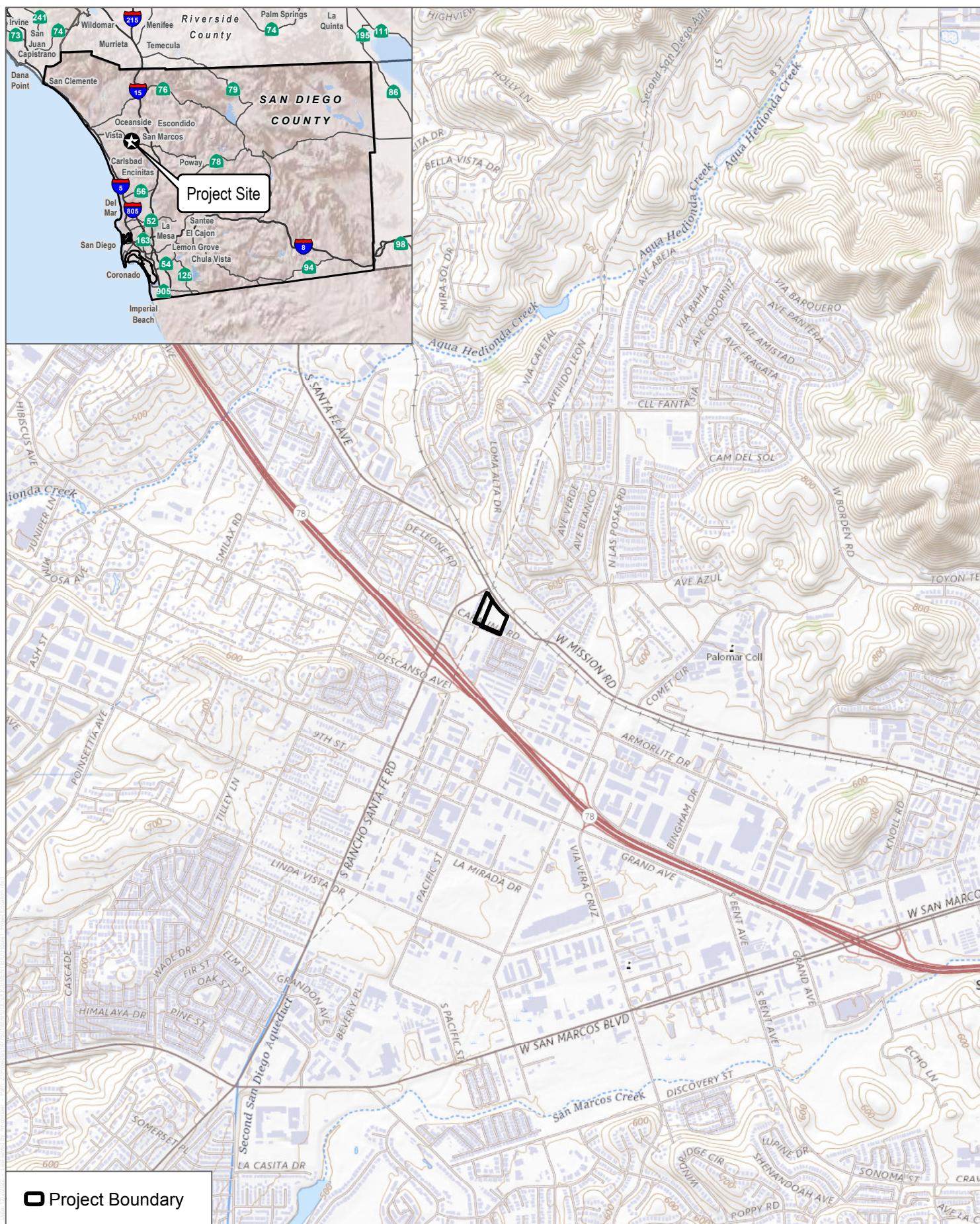
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SOURCE: USGS 7.5-Minute Series San Marcos Quadrangle
Township 12S; Range 3W, Section 9

FIGURE 1

Project Location

Capalina Apartments Project



Attachment A

Reference Site Photos



Orcutt's brodiaea (*Brodiaea orcuttii*)



Threadleaf brodiaea (*Brodiaea filifolia*)

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Attachment B

Project Site Photos

ATTACHMENT B
PROJECT SITE PHOTOS



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