

Appendix C

Biological Resources

January 14, 2021

12620

Emily Mandrup, Vice President of Development
LBA Logistics
3347 Michelson Drive
Irvine, California 92612

Subject: *Biological Resources Constraints Assessment for the 14800 W. Schulte Road Logistics Center Project, San Joaquin County, California*

Dear Ms. Mandrup:

Dudek has prepared this biological resources constraints assessment to describe the existing conditions at the 14800 W. Schulte Road Logistics Center Project (project) site located in an unincorporated area of San Joaquin County, California just southwest of the City of Tracy. A Dudek biologist performed a field survey to identify and characterize biological resources within and adjacent to the proposed project site, with particular focus on the potential of the site to support special-status plant and wildlife species and other sensitive resources, such as riparian habitat and aquatic resources (i.e., wetlands and other waters of the United States or state). This report also evaluates and provides recommendations for avoiding potential impacts on biological resources from eventual implementation of the proposed project.

1 Project Location

The approximately 37.7-acre project site is located at 14800 Schulte Road, less than a quarter of a mile southeast of the Tracy city limits in San Joaquin County, California (Figure 1, Project Location). The incorporated city limits of Tracy are located north, east, and south of the project site. The site is located in Section 36, Township 2 South, and Range 4 East of the Tracy and Midway, California U.S. Geological Survey (USGS) 7.5-minute quadrangles. The approximate center of the site corresponds to 37° 43'11.76" North latitude and 121° 29'24.67" West longitude.

The project site is currently vacant but was formerly used since 1990 as a biomass electrical generation facility, which was decommissioned and demolished in 2019. The project site is bounded by Schulte Road and agricultural uses to the north, Quality Road and agricultural uses to the east, manufacturing/warehouse use to the south, and warehouse/distribution use to the west (Figure 2, Project Site).

2 Project Description

The project would include construction and operation of three single-story industrial warehouse buildings totaling approximately 678,913 square feet. Building A would be located within the northwestern third of the project site and would include approximately 228,313 square feet of warehouse space and 2,968 square feet of office space (231,281 square feet of building area in total). Building B would be located within the southwestern third of the project site and would include approximately 278,650 square feet of warehouse space and 3,006 square feet of office space (281,656 square feet of building area in total). Building C would be located within the eastern third of the project site and would include approximately 163,012 square feet of warehouse space and 2,964 square feet of office space (165,976 square feet of building area in total).

Single-loaded truck bays would be located on the southern and northern sides of Buildings A and B and on the west side of Building 3 such that all loading areas face the interior of the site and are not visible from adjacent public streets. Building A would provide 42 loading docks, Building B would provide 43 loading docks, and Building C would provide 30 loading docks. Paved passenger vehicle parking areas would be provided along the northern and southeastern portions of the project site near the frontage of Schulte Road and Quality Road. Truck/trailer parking would be provided in between Buildings A and B. In total, the project site would include 111 stalls for trailers and 522 standard parking spaces for passenger vehicles and trailers.

To facilitate adequate on-site circulation, sufficient site access for both passenger vehicles and trucks, and to ensure efficient off-site circulation on nearby roadway facilities, the project would involve street improvements on Schulte Road, including adding a right-turn lane on eastbound Schulte Road and widening a portion of westbound Schulte Road. These improvements would be constructed to accommodate the future build-out condition of Schulte Road. In addition, the project would include internal drive aisles to facilitate on-site circulation.

Construction is expected to commence in 2021 and would last through 2022.

3 Methods

3.1 Preliminary Site Evaluation

Special-status plant and wildlife species present or potentially present on the site were identified through a literature search using the following sources: U.S. Fish and Wildlife Service (USFWS) IPaC Trust Resource Report, California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB), and the California Native Plant Society (CNPS) online Inventory of Rare and Endangered Vascular Plants. Following review of these resources, Dudek determined the potential for each species to occur within the site based on a review of vegetation communities and available land cover types, habitat types, soils, and elevation preferences, as well as the known geographic range of each species (Attachment A, Special-Status Plant Species Potential to Occur within the Project Area, and Attachment B, Special-Status Wildlife Species Potential to Occur within the Project Area). Dudek also reviewed current and historical aerial photography to identify any potentially jurisdictional aquatic resources based on aerial and topographic signatures.

For the purposes of this analysis, special-status plant species are those plants listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the Endangered Species Act (ESA) (16 USC 1531 et seq.); those listed or proposed for listing as rare, threatened, or endangered by the CDFW under the California Endangered Species Act (CESA) (California Fish and Game Code, Section 2050 et seq.); and plants that have a California Rare Plant Rank (CRPR) of 1 or 2 in the CNPS online Inventory of Rare and Endangered Plants (CNPS 2020). Special-status wildlife species are those that are designated as either rare, threatened, or endangered (or candidates for designation) by CDFW or the USFWS; are protected under either the CESA or the ESA; meet the California Environmental Quality Act (CEQA) definition for endangered, rare, or threatened (14 CCR 15380[b],[d]); are considered fully protected under the California Fish and Game Code, Sections 3511, 4700, 5050, and 5515; or that are on the CDFW Special Animals List (CDFW 2020) and determined by CDFW to be a Species of Special Concern.

3.2 Field Survey

Dudek biologist/botanist Allie Sennett performed a field survey of the project site on October 8, 2020. The field survey included documenting any vegetation communities or land cover types present, a preliminary evaluation of potentially jurisdictional aquatic resources, and assessing the potential for special-status species to occur within the project site and adjacent areas.

The survey was conducted on foot to visually cover the entire site. Field notes and an aerial photograph (Google Earth 2020) with an overlay of the property boundary were used to map vegetation communities and potential aquatic resources, and record any special-status or sensitive biological resources while in the field. Wildlife species detected during the field survey by sight, calls, tracks, scat, or other signs were recorded in a field notebook. All plant species encountered during the field surveys were identified to the lowest taxonomic group possible to determine rarity and recorded directly into a field notebook.

4 Results

4.1 Site Description

The project site is located within an area containing a mix of agricultural and industrial uses. Elevations on the project site range from roughly 110 to 175 feet above mean sea level. The region surrounding the project site receives approximately 10 inches of precipitation annually, all as rainfall. Average temperatures range from approximately 37°F to 94°F (WCC 2020).

4.2 Soils

According to the Natural Resources Conservation Service (USDA 2020a), one soil type is mapped on the project site: Capay clay, 0% to 1% slopes, MLRA 17 (Figure 3, Soils Map). The Capay series are typically found on basin or valley floors and consist of very deep, moderately well or sometimes poorly drained soils formed from clay alluvium that is derived from sedimentary rock such as sandstone or shale. The soil type mapped on the site is considered a hydric soil, which are commonly associated with wetlands (USDA 2020b). However, no aquatic resources or areas dominated by hydrophytic vegetation¹ were identified on the project site during the site visit. The extensive historic site disturbance including grading and soil compaction have likely altered the hydric characteristics of this soil type.

4.3 Hydrology

The project site is located in the Old River watershed (Hydrologic Unit Code 1804000306) within the larger San Joaquin Delta (CDFW 2020a). No aquatic resources were observed on the project site during the field survey. The National Wetlands Inventory (NWI) does not identify any previously mapped wetlands or other waters within the project site (USFWS 2020b). There are three retention basins mapped as freshwater ponds within the property to the south of the project site. The closest of these basins is approximately 0.03 mile south of the project site, and

¹ Vegetation typically adapted for life in saturated soil conditions.

these are the nearest mapped waters to the project area (USFWS 2020b). The Delta Mendota Canal passes within 0.5 mile south of the site, and an unnamed channel mapped as riverine habitat flows approximately 0.25 mile northeast of the site (USFWS 2020b).

Surface runoff on the project site likely sheet flows to the excavated basins within the project site. Runoff may pool within these basins, but the basins do not appear to pool for a duration sufficient to support wetland plant species. These basins are dominated by upland plants as discussed below.

4.4 Vegetation Communities and Land Cover Types

One terrestrial land cover type was mapped on the 37.7-acre project site: disturbed/developed land (Figure 4, Land Cover). The project site is also mapped as 'Agricultural Habitat' (SJCOG 2020). There are no natural vegetation communities, including those considered sensitive by CDFW, within or adjacent to the project site. Representative site photographs are presented in Attachment C.

Disturbed/developed is a land cover type which represents the entire project site and includes dirt or gravel access roads and staging or laydown areas, and remaining land including dry basins and other areas which no longer support natural vegetation. Much of this cover type is either barren of vegetation or dominated by non-native plant species indicative of disturbed sites, such as Russian thistle (*Salsola tragus*), shortpod mustard (*Hirschfeldia incana*), five horn bassia (*Bassia hyssopifolia*), and invasive annual grasses.

4.5 Jurisdictional Aquatic Resources

A formal jurisdiction delineation of the project site was not conducted during the field survey. However, no potentially jurisdictional aquatic resources were identified during the field survey. According to the NWI and USGS topographic quad map containing the project site, there are no wetlands or other waters previously mapped within the project site (USFWS 2020b). Dominant plant species observed on the project site during the field survey consisted of upland species not associated with wetland or stream features. Constructed basins on the project site were investigated for wetland plants and evidence of wetland soil and hydrology. These basins were primarily dominated by non-native plants normally associated with upland environments, including Russian thistle, five horn bassia, mouse barley (*Hordeum murinum*), and annual dogtails (*Cynosurus echinatus*). The basin in the northeast corner of the project site receives run-off from the adjacent gravel roadways and other disturbed areas via two culvert outfalls located along the southern perimeter of the basin. Without these culverts the basin would not pond water on occasion.

4.6 Special-Status Plants

Results of the CNDDDB and CNPS searches revealed 37 special-status plant species that have potential to occur in the project site region, which includes the "Tracy and Midway, California" USGS 7.5-minute quadrangle and the eight surrounding quadrangles. Of these special-status plants, all 37 species were removed from consideration and are not expected to occur on the site due to the lack of suitable habitat within or adjacent to the project site, the extensively disturbed condition of the site and lack of natural vegetation communities, or due to the site being outside of the species' known elevation range. No special-status plants were identified during the October 2020 field survey.

4.7 Special-Status Wildlife

Results of the CNDDDB and USFWS searches revealed 42 special-status wildlife species as having a potential to occur in the project site region. Of these special-status wildlife, 41 species were removed from consideration due to lack of suitable habitat within or adjacent to the project area, the level of disturbance from frequent human activity surrounding the project site, or due to the project site being outside of the species' known range. Burrowing owl (*Athene cunicularia*) and nesting birds have a potential to occur in or adjacent to the project site and are discussed further below. No special-status wildlife species, apart from native and migratory birds, were detected during the October 2020 field survey.

Burrowing Owl (*Athene cunicularia*). Burrowing owl is a CDFW Species of Special Concern with a low potential to occur on the project site. In California, burrowing owls are yearlong residents of open, dry grassland and desert habitats, and in grass, forb, and open shrub stages of pinyon-juniper and ponderosa pine habitats (CDFW 2020b). Preferred habitat is generally typified by short, sparse vegetation with few shrubs, level to gentle topography, and well-drained soils (Haug et al. 1993). Burrowing owls may occur in human-altered landscapes, such as agricultural areas, ruderal grassy fields, vacant lots, and pastures, if the vegetation structure is suitable (i.e., open and sparse), useable burrows are available, and foraging habitat occurs in close proximity (Gervais et al. 2008).

The presence of burrows is the most essential component of burrowing owl habitat and burrows are used for nesting, roosting, cover, and caching prey (Haug et al. 1993). Since burrowing owls do not normally dig their own burrows, they primarily select their habitat based on the presence of burrowing animals such as prairie dogs, ground squirrels, badgers, marmots, coyotes, and tortoise (Haug et al. 1993). In California, burrowing owls most commonly live in burrows created by California ground squirrels (*Spermophilus beecheyi*).

Burrowing owl has a low potential to occur on the project site. While the disturbed open habitat with sparse, low vegetation on the project site that would be potentially suitable for burrowing owls, no suitable burrows were identified on site. Small mammal burrows identified on site during the field survey appeared inactive (i.e., had cobwebs covering the burrow opening or were collapsed). Additionally, there was a lack of small mammal activity on the project site.

The nearest documented occurrence of burrowing owl is located approximately 0.3 mile southwest of the project site in grassland habitat. In 1992 burrowing owls were excluded from this site and are considered extirpated (CDFW 2020a). The next nearest documented occurrence is from 2005 and includes multiple owls observed approximately one mile east of the project site (CDFW 2020a).

Nesting and Migratory Birds. Shrubs, bare ground, abandoned equipment, and manmade structures in or adjacent to the project site and surrounding areas provide suitable nesting habitat for several local and migratory bird species. Native birds of prey are protected by California Fish and Game Code Section 3503.5, and migratory bird species are protected by the federal Migratory Bird Treaty Act (MBTA). Multiple common and migratory birds were observed during the October 2020 field survey, including killdeer (*Charadrius vociferus*), black phoebe (*Sayornis nigricans*), and mourning dove (*Zenaidura macroura*). No active nests or nesting behavior were observed, as would be expected for a field survey conducted outside of the typical nesting season for most birds in this region (February 1 through September 15). A focused survey for nesting birds was not conducted during the field survey.

5 Recommendations and Conclusions

A San Joaquin County Multi-Species Habitat Conservation & Open Space Plan (SJMSCP) Incidental Take Minimization Measures (ITMM) document was prepared by the San Joaquin Council of Governments (SJCOG) for the proposed project (SJCOG 2020). Measures described in this document are sufficient to avoid and minimize any impacts to biological resources that could result from implementation of the project to a level below significance. Relevant measures for impact avoidance and mitigation pertaining to sensitive biological resources such as special-status plants and wildlife are discussed below, with consideration for the specific existing conditions of the proposed project site. Refer to the ITMM document (SJCOG 2020) for a full and detailed list of ITMMs for the project.

5.1 Special-Status Plants

No plant species with federal or state listing status pursuant to FESA or CESA, or with a CRPR status of 1 or 2 have a potential to occur on or adjacent to the project site. As discussed in Section 4.6, the project site is highly disturbed from its natural state and does not support native vegetation communities and is therefore not likely to support any special-status plants. No special-status plants were detected on site or in the surrounding area during the October 2020 field survey conducted by Dudek. While no focused surveys were conducted, focused surveys for special-status plant species are not necessary due to the highly disturbed condition of the site.

5.2 Special-Status Wildlife

Native and Migratory Nesting Birds. The proposed project includes ground disturbance and removal of vegetation, which has the potential to impact native and migratory birds, should they be nesting in or adjacent to the project site prior to project construction. Nesting birds are protected by the MBTA and California Fish and Game Code. Mitigation Measures identified in the ITMM document (SJCOG 2020) call for preconstruction nesting bird surveys to be conducted within five days prior to commencement of construction activities (including ground disturbance or vegetation removal), if project activities must commence during the nesting bird season (February 1 to September 15). The ITMM document (SJCOG 2020) for the proposed project also identifies measures to protect any active bird nests detected during surveys, including establishment of appropriate disturbance avoidance buffers which are a minimum of 100 feet surrounding an active nest, but vary depending on species and site-specific circumstances. Construction activities would not be permitted within any established nest buffer until the nest is determined by qualified personnel to be inactive.

Burrowing Owl. There is low potential for burrowing owl to occur on the project site due to the lack of small mammal activity and the lack of suitable burrows present on the site. Implementation of measures identified in the ITMM document (SJCOG 2020) would ensure that project-related impacts to this species would be avoided or minimized. These include implementing measures to discourage ground squirrel presence, which would limit habitat suitability for burrowing owls. If burrowing owls were to occupy the site prior to project construction, pre-construction surveys for burrowing owls would be conducted no less than 14 days, and again within 24-hours, prior to commencement of ground disturbance. Any burrowing owl pre-construction surveys would be conducted following the protocol within the Staff Report on Burrowing Owl Mitigation (CDFW 2012). Measures for impact avoidance if burrowing owls are detected, including measures and steps for appropriate exclusion of the species from the project site, are included in the ITMM document (SJCOG 2020).

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Unintentional Wildlife Entrapment. The ITMM document (SJCOG 2020) identifies measures to prevent protected wildlife from becoming trapped in project equipment or materials, and to prevent birds from perching or nesting on the project site where they would be unsafe or vulnerable to potential disturbance. These measures include, prior to the nesting bird season, installing anti-perching devices on equipment or structures within the project site which present a suitable place for birds to nest or perch. Alternatively, enclose or otherwise prevent access to potentially suitable nesting surfaces until construction activities are complete or until the structure is removed. Additionally, cap or otherwise seal off pipes and all entrances to small, dark spaces where birds may enter and become trapped.

5.3 Invasive Plants

Prevent Introduction and Further Establishment of Invasive Plants. In its existing condition, the project site already supports invasive plants and does not support native vegetation communities. Based on the existing disturbance level of the project site and the fact that the project would fully develop the project site, the standard measures included in the ITMM are likely not required for this project.

If the recommended avoidance and mitigation measures identified in the ITMM document for the project are implemented, no significant impacts to protected biological resources are expected to occur as a result of the proposed project.

If you have any questions or concerns regarding the content of this report, please contact me at 760.936.7969 or asennett@duek.com.

Sincerely,



Allie Sennett, MS
Biologist

Att.: *Figures 1-4*
Attachment A: Special-Status Plant Species Potential to Occur within the Project Area
Attachment B: Special-Status Wildlife Species Potential to Occur within the Project Area
Attachment C: Photo Log
cc: *Mike Henry, Dudek*

6 References Cited

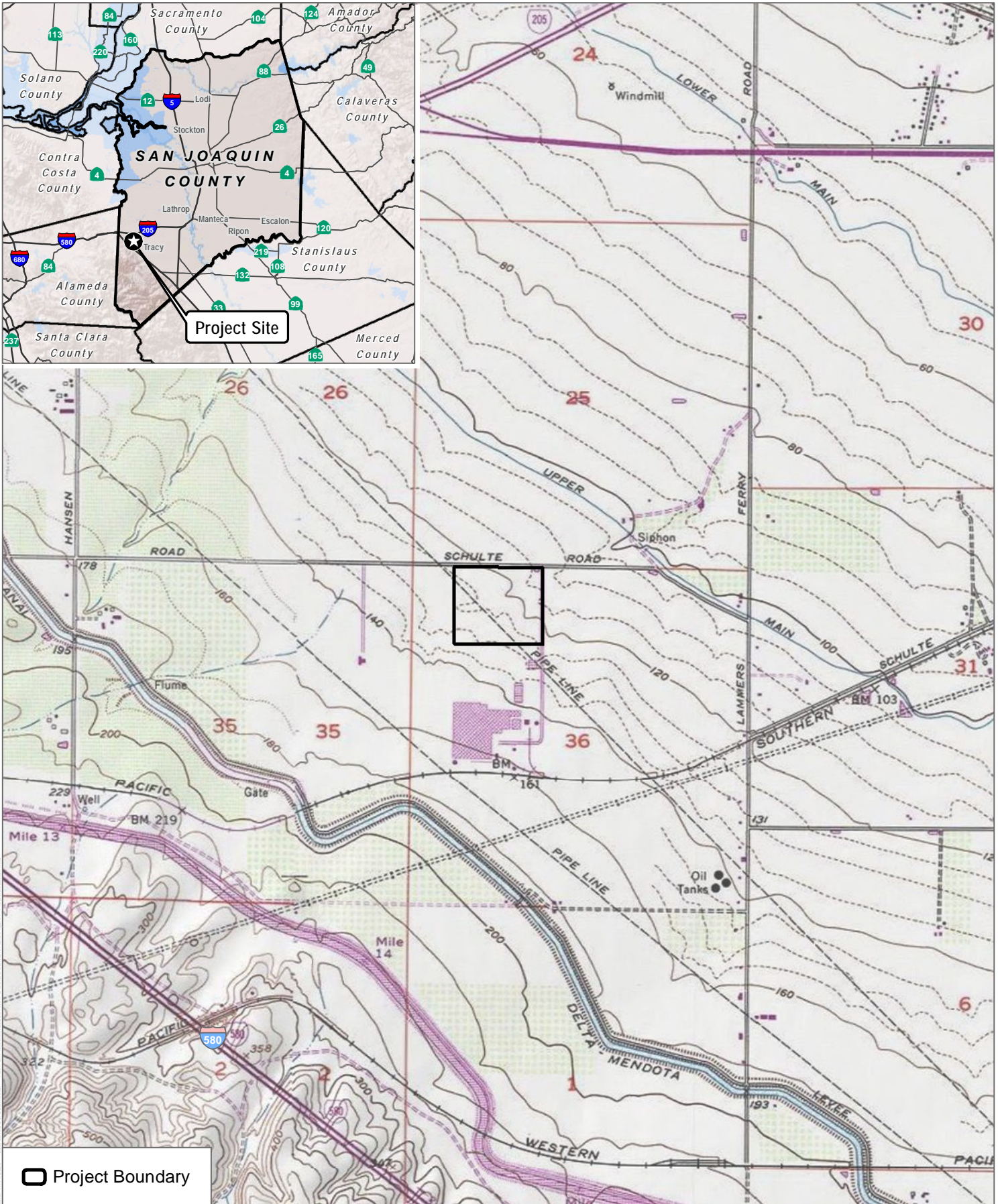
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SOURCE: USGS 7.5-Minute Series Tracy Quadrangle

FIGURE 1

Project Location



SOURCE: Bing Maps 2019, San Joaquin County

FIGURE 2
Project Site



SOURCE: Bing Maps 2019, San Joaquin County, USDA 2020



SOURCE: Bing Maps 2019, San Joaquin County

FIGURE 4

Field-Verified Land Cover

14800 W. Schulte Road Logistics Center Project



Attachment A

Special-Status Plant Species Potential to Occur within the Project Area

ATTACHMENT A

SPECIAL-STATUS PLANT SPECIES POTENTIAL TO OCCUR WITHIN THE PROJECT AREA

| Scientific Name | Common Name | Status (Federal/State/CRPR) | Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet) | Potential to Occur |
|---|---------------------------|-----------------------------|--|---|
| <i>Allium sharsmithiae</i> | Sharsmith's onion | None/None/1B.3 | Chaparral, Cismontane woodland; serpentinite, rocky/perennial bulbiferous herb/Mar–May/1,310–3,935 | Not expected to occur. The project site lacks habitat and is located below the species' known elevation range. There are no documented occurrences of this species within 10 miles of the site (CDFW 2020). |
| <i>Amsinckia grandiflora</i> | large-flowered fiddleneck | FE/SE/1B.1 | Cismontane woodland, Valley and foothill grassland/annual herb/(Mar)Apr–May/885–1,800 | Not expected to occur. The project site lacks habitat and is located below the species' known elevation range. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Astragalus tener</i> var. <i>tener</i> | alkali milk-vetch | None/None/1B.2 | Playas, Valley and foothill grassland (adobe clay), Vernal pools; alkaline/annual herb/Mar–June/0–195 | Not expected to occur. The project site was previously developed and lacks habitat. No grassland or vernal pools are present to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. There are no documented occurrences of this species within 9 miles of the site (CDFW 2020). |
| <i>Atriplex cordulata</i> var. <i>cordulata</i> | heartscale | None/None/1B.2 | Chenopod scrub, Meadows and seeps, Valley and foothill grassland (sandy); saline or alkaline/annual herb/Apr–Oct/0–1,835 | Not expected to occur. The project site was previously developed and lacks habitat. No grassland, scrub, or meadows are present to support this species. There are no documented occurrences of this species within 8 miles of the site (CDFW 2020). |
| <i>Atriplex coronata</i> var. <i>vallicola</i> | Lost Hills crownscale | None/None/1B.2 | Chenopod scrub, Valley and foothill grassland, Vernal pools; alkaline/annual herb/Apr–Sep/160–2,080 | Not expected to occur. The project site was previously developed and lacks habitat. No scrub, grassland, or vernal pools are present to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020; Calflora 2020). |
| <i>Atriplex depressa</i> | brittlescale | None/None/1B.2 | Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland, Vernal pools; alkaline, clay/annual herb/Apr–Oct/0–1,045 | Not expected to occur. The project site was previously developed and lacks habitat. No scrub, grasslands, meadows and seeps, or vernal pools are present to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. There are no documented occurrences of this species within 9 miles of the site (CDFW 2020). |

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| Scientific Name | Common Name | Status (Federal/State/CRPR) | Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet) | Potential to Occur |
|---|--------------------------|-----------------------------|--|---|
| <i>Blepharizonia plumosa</i> | big tarplant | None/None/1B.1 | Valley and foothill grassland; Usually clay/annual herb/ July–Oct/95–1,655 | Not expected to occur. The project site was previously developed and lacks habitat. No valley and foothill grassland is present to support this species. The nearest documented occurrence is for plants observed growing in a field in 2002, roughly 0.5 mile west of the site (CDFW 2020). |
| <i>Campanula exigua</i> | chaparral harebell | None/None/1B.2 | Chaparral (rocky, usually serpentinite)/annual herb/ May–June/900–4,100 | Not expected to occur. The project site lacks habitat and is below the species' known elevation range. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Caulanthus lemmonii</i> | Lemmon's jewelflower | None/None/1B.2 | Pinyon and juniper woodland, Valley and foothill grassland/annual herb/ Feb–May/260–5,180 | Not expected to occur. The project site lacks habitat and is below the species' known elevation range. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Chlorogalum pomeridianum</i> var. <i>minus</i> | dwarf soaproot | None/None/1B.2 | Chaparral (serpentinite)/ perennial bulbiferous herb/ May–Aug/1,000–3,280 | Not expected to occur. The project site lacks habitat and is below the species' known elevation range. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Cirsium crassicaule</i> | slough thistle | None/None/1B.1 | Chenopod scrub, Marshes and swamps (sloughs), Riparian scrub/annual / perennial herb/ May–Aug/5–330 | Not expected to occur. The project site was previously developed and lacks habitat. No scrub, riparian, or marsh habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Cirsium fontinale</i> var. <i>campylon</i> | Mt. Hamilton thistle | None/None/1B.2 | Chaparral, Cismontane woodland, Valley and foothill grassland; serpentinite seeps/perennial herb/ (Feb)Apr–Oct/325–2,915 | Not expected to occur. The project site lacks habitat and is below the species' known elevation range. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Delphinium californicum</i> ssp. <i>interius</i> | Hospital Canyon larkspur | None/None/1B.2 | Chaparral (openings), Cismontane woodland (mesic), Coastal scrub/perennial herb/ Apr–June/635–3,590 | Not expected to occur. The project site lacks habitat and is below the species' known elevation range. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |

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| Scientific Name | Common Name | Status (Federal/State/CRPR) | Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet) | Potential to Occur |
|----------------------------------|----------------------------------|-----------------------------|---|--|
| <i>Delphinium recurvatum</i> | recurved larkspur | None/None/1B.2 | Chenopod scrub, Cismontane woodland, Valley and foothill grassland; alkaline/perennial herb/Mar–June/5–2,590 | Not expected to occur. The project site was previously developed and lacks habitat. No scrub, woodland, or grassland habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Eryngium racemosum</i> | Delta button-celery | None/SE/1B.1 | Riparian scrub (vernally mesic clay depressions)/annual / perennial herb/June–Oct/5–100 | Not expected to occur. The project site was previously developed and lacks habitat. No riparian scrub habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Eryngium spinosepalum</i> | spiny-sepaled button-celery | None/None/1B.2 | Valley and foothill grassland, Vernal pools/annual / perennial herb/Apr–June/260–3,195 | Not expected to occur. The project site lacks habitat and is below the species' known elevation range. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Eschscholzia rhombipetala</i> | diamond-petaled California poppy | None/None/1B.1 | Valley and foothill grassland (alkaline, clay)/annual herb/Mar–Apr/0–3,195 | Not expected to occur. The project site was previously developed and lacks habitat. No valley and foothill grassland habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Extriplex joaquinana</i> | San Joaquin spearscale | None/None/1B.2 | Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland; alkaline/annual herb/Apr–Oct/0–2,735 | Not expected to occur. The project site was previously developed and lacks habitat. No scrub, meadows, playas, or other natural habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Fritillaria falcata</i> | talus fritillary | None/None/1B.2 | Chaparral, Cismontane woodland, Lower montane coniferous forest; serpentinite, often talus/perennial bulbiferous herb/Mar–May/980–5,000 | Not expected to occur. The project site lacks habitat and is below the species' known elevation range. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |

ATTACHMENT A
 SPECIAL-STATUS PLANT SPECIES POTENTIAL TO OCCUR WITHIN THE PROJECT AREA

| Scientific Name | Common Name | Status (Federal/State/CRPR) | Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet) | Potential to Occur |
|--|------------------------|-----------------------------|--|--|
| <i>Helianthella castanea</i> | Diablo helianthella | None/None/1B.2 | Broadleaved upland forest, Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland, Valley and foothill grassland; Usually rocky, azonal soils. Often in partial shade/perennial herb/ Mar-June/195-4,265 | Not expected to occur. The project site was previously developed and lacks habitat. No forest, woodland, scrub, or other natural habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Hesperolinon breweri</i> | Brewer's western flax | None/None/1B.2 | Chaparral, Cismontane woodland, Valley and foothill grassland; usually serpentinite/annual herb/ May-July/95-3,100 | Not expected to occur. The project site was previously developed and lacks habitat. No chaparral, woodland, or other natural habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i> | woolly rose-mallow | None/None/1B.2 | Marshes and swamps (freshwater); Often in riprap on sides of levees/perennial rhizomatous herb (emergent)/ June-Sep/0-395 | Not expected to occur. The project site was previously developed and lacks habitat. No marshes, swamps, or other aquatic habitat is present to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Hoita strobilina</i> | Loma Prieta hoita | None/None/1B.1 | Chaparral, Cismontane woodland, Riparian woodland; usually serpentinite, mesic/perennial herb/ May-July(Aug-Oct)/95-2,820 | Not expected to occur. The project site was previously developed and lacks habitat. No chaparral, woodland, or other natural habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Leptosyne hamiltonii</i> | Mt. Hamilton coreopsis | None/None/1B.2 | Cismontane woodland (rocky)/annual herb/ Mar-May/1,800-4,265 | Not expected to occur. The project site lacks habitat and is below the species' known elevation range. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |

ATTACHMENT A

SPECIAL-STATUS PLANT SPECIES POTENTIAL TO OCCUR WITHIN THE PROJECT AREA

| Scientific Name | Common Name | Status (Federal/State/CRPR) | Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet) | Potential to Occur |
|---|--------------------|-----------------------------|--|---|
| <i>Lilaeopsis masonii</i> | Mason's lilaeopsis | None/SR/1B.1 | Marshes and swamps (brackish or freshwater), Riparian scrub/perennial rhizomatous herb/Apr–Nov/0–35 | Not expected to occur. The project site was previously developed and lacks habitat. No marshes, swamps, or riparian scrub habitat is present to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. There is one documented occurrence of this species within 5 miles of the site from 1991, roughly 4.5 miles north of the site near Old River (CDFW 2020). |
| <i>Limosella australis</i> | Delta mudwort | None/None/2B.1 | Marshes and swamps (freshwater or brackish), Riparian scrub; Usually mud banks/perennial stoloniferous herb/May–Aug/0–10 | Not expected to occur. The project site was previously developed and lacks habitat. No marshes, swamps, or riparian scrub habitat is present to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Madia radiata</i> | showy golden madia | None/None/1B.1 | Cismontane woodland, Valley and foothill grassland/annual herb/Mar–May/80–3,985 | Not expected to occur. The project site was previously developed and lacks habitat. No grassland, woodland, or other natural habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Malacothamnus hallii</i> | Hall's bush-mallow | None/None/1B.2 | Chaparral, Coastal scrub/perennial evergreen shrub/(Apr)May–Sep(Oct)/30–2,490 | Not expected to occur. The project site was previously developed and lacks habitat. No chaparral or coastal scrub habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Navarretia nigelliformis</i> ssp. <i>radians</i> | shining navarretia | None/None/1B.2 | Cismontane woodland, Valley and foothill grassland, Vernal pools; Sometimes clay/annual herb/(Mar)Apr–July/210–3,280 | Not expected to occur. The project site was previously developed and lacks habitat. No woodland, grassland, or vernal pool habitat is present to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. There is one documented occurrence of this species within 5 miles of the site from 1997, located within the undeveloped foothills roughly 5 miles southwest of the site (CDFW 2020). |

ATTACHMENT A

SPECIAL-STATUS PLANT SPECIES POTENTIAL TO OCCUR WITHIN THE PROJECT AREA

| Scientific Name | Common Name | Status (Federal/State/CRPR) | Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet) | Potential to Occur |
|--|--------------------------|-----------------------------|---|---|
| <i>Phacelia phacelioides</i> | Mt. Diablo phacelia | None/None/1B.2 | Chaparral, Cismontane woodland; rocky/annual herb/Apr–May/ 1,640–4,490 | Not expected to occur. The project site lacks habitat and is below the species' known elevation range. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Puccinellia simplex</i> | California alkali grass | None/None/1B.2 | Chenopod scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools; Alkaline, vernal mesic; sinks, flats, and lake margins/annual herb/ Mar–May/5–3,050 | Not expected to occur. The project site was previously developed and lacks habitat. No scrub, meadow, seeps, or other natural habitat is present to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Sagittaria sanfordii</i> | Sanford's arrowhead | None/None/1B.2 | Marshes and swamps (assorted shallow freshwater)/perennial rhizomatous herb (emergent)/ May–Oct(Nov)/0–2,130 | Not expected to occur. The project site was previously developed and lacks habitat. No freshwater marshes or swamps are present to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Senecio aphanactis</i> | chaparral ragwort | None/None/2B.2 | Chaparral, Cismontane woodland, Coastal scrub; sometimes alkaline/annual herb/Jan–Apr(May)/45–2,620 | Not expected to occur. The project site was previously developed and lacks habitat. No chaparral, woodland, or scrub habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Spergularia macrotheca</i> var. <i>longistyla</i> | long-styled sand-spurrey | None/None/1B.2 | Meadows and seeps, Marshes and swamps; Alkaline/perennial herb/Feb–May/ 0–835 | Not expected to occur. The project site was previously developed and lacks habitat. No meadows, seeps, or similar habitat is present to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |

ATTACHMENT A
SPECIAL-STATUS PLANT SPECIES POTENTIAL TO OCCUR WITHIN THE PROJECT AREA

| Scientific Name | Common Name | Status (Federal/State/CRPR) | Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet) | Potential to Occur |
|--|-----------------------------|-----------------------------|---|--|
| <i>Symphotrichum lentum</i> | Suisun Marsh aster | None/None/1B.2 | Marshes and swamps (brackish and freshwater)/perennial rhizomatous herb/ (Apr)May–Nov/0–10 | Not expected to occur. The project site was previously developed and lacks habitat. No marshes or swamps are present to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Trichocoronis wrightii</i> var. <i>wrightii</i> | Wright's trichocoronis | None/None/2B.1 | Meadows and seeps, Marshes and swamps, Riparian forest, Vernal pools; alkaline/annual herb/May–Sep/15–1,425 | Not expected to occur. The project site was previously developed and lacks habitat. No meadows, seeps, swamps, or similar habitat is present to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Tropidocarpum capparideum</i> | caper-fruited tropidocarpum | None/None/1B.1 | Valley and foothill grassland (alkaline hills)/annual herb/Mar–Apr/0–1,490 | Not expected to occur. The project site was previously developed and lacks habitat. No valley and foothill grassland habitat is present to support this species. The two nearest documented occurrences of this species are roughly 1 mile to the west and east of the site. One occurrence is from 1932 and the other from 1962, and both occurrences are considered extirpated (CDFW 2020). |

Statuses:

FE: Federally listed as endangered

SE: State listed as endangered

SR: State Rare

CRPR 1A: Plants presumed extirpated in California and either rare or extinct elsewhere

CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere

CRPR 2A: Plants presumed extirpated in California but common elsewhere

CRPR 2B: Plants rare, threatened, or endangered in California but more common elsewhere



Attachment B

Special-Status Wildlife Species Potential to Occur within the Project Area

ATTACHMENT B

SPECIAL-STATUS WILDLIFE SPECIES POTENTIAL TO OCCUR WITHIN THE PROJECT AREA

| Scientific Name | Common Name | Status (Federal/State) | Habitat | Potential to Occur |
|--------------------------------|-----------------------------|------------------------|---|--|
| Amphibians | | | | |
| <i>Ambystoma californiense</i> | California tiger salamander | FT/ST, WL | Annual grassland, valley-foothill hardwood, and valley-foothill riparian habitats; vernal pools, other ephemeral pools, and (uncommonly) along stream courses and man-made pools if predatory fishes are absent | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No grassland, vernal pools, or other natural habitat is present to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. The nearest documented occurrence for this species is roughly 4 miles south of the site within grassland habitat (CDFW 2020). |
| <i>Rana boylei</i> | foothill yellow-legged frog | None/SSC, PST | Rocky streams and rivers with open banks in forest, chaparral, and woodland | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No rocky streams, chaparral, woodland, or other natural habitat is present to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. The nearest documented occurrence for this species is approximately 4.5 miles south of the site within riparian habitat (CDFW 2020). |
| <i>Rana draytonii</i> | California red-legged frog | FT/SSC | Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No aquatic habitat or natural upland habitat is present to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. The nearest documented occurrence is for adults and tadpoles identified in two cattle ponds in 1992, approximately 2.5 miles southwest of the site (CDFW 2020). |
| <i>Spea hammondi</i> | western spadefoot | None/SSC | Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley-foothill woodlands, pastures, and other agriculture | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No grassland, vernal pools, seasonal wetlands, or other natural habitat is present to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. The nearest documented |

ATTACHMENT B

SPECIAL-STATUS WILDLIFE SPECIES POTENTIAL TO OCCUR WITHIN THE PROJECT AREA

| Scientific Name | Common Name | Status (Federal/State) | Habitat | Potential to Occur |
|---------------------------------------|------------------------------------|------------------------|--|--|
| | | | | occurrence is approximately 5 miles south of the site within valley foothill riparian habitat (CDFW 2020). |
| Reptiles | | | | |
| <i>Actinemys marmorata</i> | northwestern pond turtle | None/SSC | Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No streams, ponds, or natural upland habitat is present to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Anniella pulchra</i> | northern California legless lizard | None/SSC | Coastal dunes, stabilized dunes, beaches, dry washes, valley-foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and sandy or loose, loamy soils | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No dunes, dry washes, or natural areas with moist leaf litter or friable soils are present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Arizona elegans occidentalis</i> | California glossy snake | None/SSC | Commonly occurs in desert regions throughout southern California. Prefers open sandy areas with scattered brush. Also found in rocky areas. | Not expected to occur. The project site was previously developed and lacks unaltered habitat. This species typically occurs in desert habitats and is more common further south. The nearest documented occurrence is based on two collections within grassland and valley foothill riparian habitat in 1956 and 1986, approximately 4.25 miles south of the site (CDFW 2020). |
| <i>Masticophis flagellum ruddocki</i> | San Joaquin whipsnake | None/SSC | Open, dry, treeless areas including grassland and saltbush scrub | Not expected to occur. The project site was previously developed and lacks unaltered habitat with little disturbance. The nearest documented occurrence is based on a 1996 collection in the vicinity of grassland and open-canopy shrub habitat, approximately 4 miles west of the project site (CDFW 2020). |

ATTACHMENT B
 SPECIAL-STATUS WILDLIFE SPECIES POTENTIAL TO OCCUR WITHIN THE PROJECT AREA

| Scientific Name | Common Name | Status (Federal/State) | Habitat | Potential to Occur |
|---|----------------------------|------------------------|---|--|
| <i>Masticophis lateralis euryxanthus</i> | Alameda whipsnake | FT/ST | Open areas in chaparral and scrub habitat; also adjacent grassland, oak savanna, and woodland | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No chaparral, scrub, grassland, or other natural habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Phrynosoma blainvillii</i> | Blainville's horned lizard | None/SSC | Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley-foothill hardwood, conifer, riparian, pine-cypress, juniper, and annual grassland habitats | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No chaparral, coastal scrub, grassland, or other natural habitat is present to support this species. The nearest documented occurrence is for one adult observed in 1992, approximately 3 miles west of the site in the vicinity of grazed grassland habitat (CDFW 2020). |
| <i>Thamnophis gigas</i> | giant garter snake | FT/ST | Freshwater marsh habitat and low-gradient streams; also uses canals and irrigation ditches | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No freshwater marsh, low-gradient streams, ditches, or canals are present to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| Birds | | | | |
| <i>Agelaius tricolor</i> (nesting colony) | tricolored blackbird | BCC/SSC, ST | Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No freshwater, emergent wetlands or other preferred nesting habitat is present to support a colony of this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. The nearest documented occurrence is for a nesting colony detected in a dry pasture in 1998, approximately 2.1 miles west of the site (CDFW 2020). |

ATTACHMENT B
SPECIAL-STATUS WILDLIFE SPECIES POTENTIAL TO OCCUR WITHIN THE PROJECT AREA

| Scientific Name | Common Name | Status (Federal/State) | Habitat | Potential to Occur |
|--|---------------------|------------------------|---|--|
| <i>Ammodramus savannarum</i> (nesting) | grasshopper sparrow | None/SSC | Nests and forages in moderately open grassland with tall forbs or scattered shrubs used for perches | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No grassland, scrub, or other preferred nesting habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Aquila chrysaetos</i> (nesting and wintering) | golden eagle | BCC/FP, WL | Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No grassland, scrubland, or other preferred nesting habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Asio flammeus</i> (nesting) | short-eared owl | None/SSC | Grassland, prairies, dunes, meadows, irrigated lands, and saline and freshwater emergent wetlands | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No grassland, dunes, meadows, or other preferred nesting habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Athene cunicularia</i> (burrow sites and some wintering sites) | burrowing owl | BCC/SSC | Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows | Low potential to occur. While open habitat with sparse, low vegetation on site is potentially suitable for this species, no suitable burrows were identified on site. All burrows identified during the field survey appeared inactive (i.e., had cobwebs covering the burrow opening or were collapsed). The nearest documented occurrence is located approximately 0.3 mile southwest of the project site in grassland habitat. In 1992 burrowing owls were excluded from this site and are considered extirpated. The next nearest documented occurrence is from 2005 and includes multiple owls observed approximately 1 mile east of the site (CDFW 2020). |
| <i>Buteo swainsoni</i> (nesting) | Swainson's hawk | BCC/ST | Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby | Not expected to occur. No grassland, riparian woodland, or other preferred nesting habitat is present to support this species. The nearest |

ATTACHMENT B
SPECIAL-STATUS WILDLIFE SPECIES POTENTIAL TO OCCUR WITHIN THE PROJECT AREA

| Scientific Name | Common Name | Status (Federal/State) | Habitat | Potential to Occur |
|--|--|------------------------|--|--|
| | | | grasslands and agricultural areas such as wheat and alfalfa fields and pasture | documented occurrence is for an active nest detected in 2016, approximately 1 mile east of the site near South Lammers Road (CDFW 2020). |
| <i>Circus hudsonius</i> (nesting) | northern harrier | None/SSC | Nests in open wetlands (marshy meadows, wet lightly-grazed pastures, old fields, freshwater and brackish marshes); also in drier habitats (grassland and grain fields); forages in grassland, scrubs, rangelands, emergent wetlands, and other open habitats | Not expected to occur. The project site lacks habitat for this species. There is one documented occurrence for an active nest detected in 2001, approximately 3 miles northwest of the site in the vicinity of the Delta-Mendota Canal (CDFW 2020). |
| <i>Coccyzus americanus occidentalis</i> (nesting) | western yellow-billed cuckoo | FT, BCC/SE | Nests in dense, wide riparian woodlands and forest with well-developed understories | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No riparian woodland, forest, or other preferred nesting habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Elanus leucurus</i> (nesting) | white-tailed kite | None/FP | Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands | Not expected to occur. No woodland, riparian, or other preferred nesting habitat is present to support this species. Small mammal activity on the site is absent to minimal and therefore, foraging habitat for this species is low quality. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Lanius ludovicianus</i> (nesting) | loggerhead shrike | BCC/SSC | Nests and forages in open habitats with scattered shrubs, trees, or other perches | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No grassland, riparian woodland, or other preferred nesting habitat is present to support this species. The nearest documented occurrence is for adults and juveniles observed in ruderal grassland and scattered housing development near Mountain House Creek in 2005, approximately 5 miles northwest of the site (CDFW 2020). |
| <i>Melospiza melodia</i> ("Modesto" population) | song sparrow ("Modesto" population) | None/SSC | Nests and forages in emergent freshwater marsh, riparian forest, vegetated irrigation canals and | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No marshes, irrigation canals, riparian forest, or other |

ATTACHMENT B

SPECIAL-STATUS WILDLIFE SPECIES POTENTIAL TO OCCUR WITHIN THE PROJECT AREA

| Scientific Name | Common Name | Status (Federal/State) | Habitat | Potential to Occur |
|--|--------------------------------|------------------------|---|--|
| | | | levees, and newly planted valley oak (<i>Quercus lobata</i>) restoration sites | preferred nesting habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Vireo bellii pusillus</i> (nesting) | least Bell's vireo | FE/SE | Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No riparian thickets, intermittent streams, or other preferred nesting habitat is present to support this species. There are no recent documented occurrences of this species within 5 miles of the site. There is one occurrence for adults detected within riparian habitat in 1932, approximately 4.5 miles south of the site (CDFW 2020). |
| <i>Xanthocephalus xanthocephalus</i> (nesting) | yellow-headed blackbird | None/SSC | Nests in marshes with tall emergent vegetation, often along borders of lakes and ponds; forages in emergent wetlands, open areas, croplands, and muddy shores of lacustrine habitat | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No marshes, lakes, ponds, or other preferred nesting habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| Fish | | | | |
| <i>Hypomesus transpacificus</i> | Delta smelt | FT/SE | Sacramento-San Joaquin Delta; seasonally in Suisun Bay, Carquinez Strait, and San Pablo Bay | Not expected to occur. The project site lacks aquatic habitat. |
| <i>Oncorhynchus mykiss irideus</i> pop. 11 | steelhead - Central Valley DPS | FT/None | Coastal basins from Redwood Creek south to the Gualala River, inclusive; does not include summer-run steelhead | Not expected to occur. The project site is outside of the species' known geographic range and lacks aquatic habitat. |
| <i>Spirinchus thaleichthys</i> | longfin smelt | FC/ST | Aquatic, estuary | Not expected to occur. The project site lacks aquatic habitat. |
| <i>Thaleichthys pacificus</i> | eulachon | FT/None | Found in Klamath River, Mad River, and Redwood Creek and in small numbers in Smith River and Humboldt Bay tributaries | Not expected to occur. The project site lacks aquatic habitat. |

ATTACHMENT B
SPECIAL-STATUS WILDLIFE SPECIES POTENTIAL TO OCCUR WITHIN THE PROJECT AREA

| Scientific Name | Common Name | Status (Federal/State) | Habitat | Potential to Occur |
|-------------------------------------|--|------------------------|--|--|
| Mammals | | | | |
| <i>Antrozous pallidus</i> | pallid bat | None/SSC | Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees; extremely sensitive to disturbance of their roosting sites | Not expected to occur. The project site is located in an area of regular human disturbance and lacks grassland, shrublands, or other natural habitat to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Corynorhinus townsendii</i> | Townsend's big-eared bat | None/SSC | Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, man-made structures, and tunnels | Not expected to occur. The project site is located in an area of regular human disturbance and lacks forest, riparian, or other natural habitat to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Eumops perotis californicus</i> | western mastiff bat | None/SSC | Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No chaparral, woodland, canyons, or other natural habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Neotoma fuscipes riparia</i> | riparian (=San Joaquin Valley) woodrat | FE/SSC | Dense riparian forest; willow thickets with an oak overstory | Not expected to occur. The project site was previously developed and lacks unaltered habitat. No riparian forest, willow thickets, or other natural habitat is present to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Sylvilagus bachmani riparius</i> | riparian brush rabbit | FE/SE | Dense thickets of wild rose, willows, and blackberries growing along the banks of San Joaquin and Stanislaus Rivers | Not expected to occur. The project site is outside the geographic range of this species and lacks natural habitat to support this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Taxidea taxus</i> | American badger | None/SSC | Dry, open, treeless areas; grasslands, coastal scrub, | Not expected to occur. The project site is highly disturbed and no potential badger dens or other evidence of badger activity were observed on site |

ATTACHMENT B
SPECIAL-STATUS WILDLIFE SPECIES POTENTIAL TO OCCUR WITHIN THE PROJECT AREA

| Scientific Name | Common Name | Status (Federal/State) | Habitat | Potential to Occur |
|-------------------------------|--------------------------|------------------------|---|---|
| | | | agriculture, and pastures, especially with friable soils | during the survey. The nearest documented occurrences are from 1992 and 1993, approximately 3.5 miles southwest of the site within grassland habitat (CDFW 2020). |
| <i>Vulpes macrotis mutica</i> | San Joaquin kit fox | FE/ST | Grasslands and scrublands, including those that have been modified; oak woodland, alkali sink scrubland, vernal pool, and alkali meadow | Not expected to occur. The project site is highly disturbed and no potential kit fox dens or other evidence of kit fox activity were observed on site during the survey. The most recent documented occurrence of this species within 5 miles of the site was over 20 years ago in 1999 along Patterson Run near the California aqueduct, roughly 3 miles west of the site (CDFW 2020). The nearest documented occurrences are between 2 and 3 miles from the site and are mostly located within undeveloped grassland habitat south and west of the site (CDFW 2020). |
| Invertebrates | | | | |
| <i>Bombus crotchii</i> | Crotch bumble bee | None/PSE | Open grassland and scrub communities supporting suitable floral resources. | Not expected to occur. The project site is disturbed, lacks native grassland and scrubland habitat, and provides limited, if any, year-round nectar resources for this species. No potential overwintering or nesting sites were observed during the survey. There nearest documented occurrence is based on a collection from unknown habitat in 1959, approximately 4 miles east of the site (CDFW 2020). |
| <i>Bombus occidentalis</i> | western bumble bee | None/PSE | Once common and widespread, species has declined precipitously from central California to southern British Columbia, perhaps from disease | Not expected to occur. The project site is disturbed, lacks native grassland and scrubland habitat, and provides limited, if any, year-round nectar resources for this species. No potential overwintering or nesting sites were observed during the survey. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Branchinecta lynchi</i> | vernal pool fairy shrimp | FT/None | Vernal pools, seasonally ponded areas within vernal swales, and ephemeral freshwater habitats | Not expected to occur. The project site was previously developed and lacks vernal pool or similar habitat to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. |

ATTACHMENT B
SPECIAL-STATUS WILDLIFE SPECIES POTENTIAL TO OCCUR WITHIN THE PROJECT AREA

| Scientific Name | Common Name | Status (Federal/State) | Habitat | Potential to Occur |
|--|-----------------------------------|------------------------|---|--|
| | | | | There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Branchinecta mesovallensis</i> | midvalley fairy shrimp | None/None | Small, shallow, grass-bottomed, ephemeral vernal pools and swales; also artificial habitats such as railroad toe-drains | Not expected to occur. The project site was previously developed and lacks vernal pool or similar habitat to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Callophrys mossii bayensis</i> | San Bruno elfin butterfly | FE/None | Coastal chaparral, on steep north-facing slopes, and in fog-belt of the mountains near San Francisco Bay | Not expected to occur. The project site is near the eastern extent of the geographic range of this species and lacks coastal chaparral habitat. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |
| <i>Desmocerus californicus dimorphus</i> | valley elderberry longhorn beetle | FT/None | Occurs only in the Central Valley of California, in association with blue elderberry (<i>Sambucus nigra</i> ssp. <i>caerulea</i>) | Not expected to occur. No blue elderberry shrubs are present on the project site. |
| <i>Lepidurus packardii</i> | vernal pool tadpole shrimp | FE/None | Ephemeral freshwater habitats including alkaline pools, clay flats, vernal lakes, vernal pools, and vernal swales | Not expected to occur. The project site was previously developed and lacks vernal pool or similar habitat to support this species. Constructed basins on the project site do not represent aquatic resources that could provide habitat for this species. There are no documented occurrences of this species within 5 miles of the site (CDFW 2020). |

Notes:

FE: Federally Endangered
 FT: Federally Threatened
 FC: Federal Candidate
 FDL: Federally Delisted
 BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern
 SSC: California Species of Special Concern
 FP: California Fully Protected Species
 WL: California Watch List Species
 SE: State Endangered
 ST: State Threatened
 PSE: Proposed State Endangered



Attachment C

Representative Site Photographs

ATTACHMENT C
REPRESENTATIVE SITE PHOTOGRAPHS



Photo 1. View facing south from the northwest portion of the project site. October 8, 2020.



Photo 2. View facing northwest from the northeast portion of the project site. October 8, 2020.

ATTACHMENT C
REPRESENTATIVE SITE PHOTOGRAPHS



Photo 3. View facing west at an access road near the middle of the project site. October 8, 2020.



Photo 4. View facing east at an earthen berm near the middle of the project site. October 8, 2020.