Application Form and Planning Survey Report

To Comply With and Receive Permit Coverage Under The East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan

Please complete this application to apply for take authorization under the state and federal East Contra Costa County HCP/NCCP incidental take permits. The East Contra Costa County Habitat Conservancy ("Conservancy") or local jurisdiction (City of Brentwood, City of Clayton, City of Oakley, City of Pittsburg, and Contra Costa County) may request more information in order to deem the application complete.

I. PROJECT OVERVIEW

PROJECT INFORMATION	
PROJECT NAME: Bay Point Storage Yard	
PROJECT TYPE: ☐ Residential ☒ Commercial ☐ Transportation ☐ Utility ☐ Other	
PROJECT DESCRIPTION (BRIEF): The Bay Point Storage Yard Project proposes to develop an 11.48-acre parcel (APN 098-250-019) on Port Chicago Highway just south of the McAvoy Road intersection and adjacent to the railroad tracks. Redwood Property Investors is the owner of 44.72 acres inclusive of the project parcel and an adjacent parcel (APN 098-250-020; 33.24 acres). The project plan includes a lot line adjustment to expand parcel APN 098-250-019 eastward into APN 098-250-020, thereby increasing the parcel size of APN 098-250-019 from 9.69 acres to 11.48 acres. All project activities will be performed within APN 098-250-019; APN 098-250-020 will be developed separately at a later date. APN 098-250-019 is entirely in the 100-year floodplain, thus preventing any vertical development. Redwood Properties is proposing to lease the property to Bigge Crane to use as a storage yard for their equipment. Development is limited to site grading, graveling interior travel paths, placement of a temporary (movable) trailer to be used as a yard office, and installing a 6-foot perimeter fence including a slatted fence and landscaped trees on the Port Chicago Highway frontage. There will be a 25-foot setback from the perennial drainage running parallel to the southern parcel boundary, and no activities will occur south or east of the drainage within the project parcel; however, the development fee is calculated based on the full parcel acreage of 11.48 acres. No tree removals will be performed. Site improvements include a 16,350 square-foot storm water detention basin to be developed at the east end of the parcel.	
PROJECT ADDRESS/LOCATION: 11.48-acre parcel (APN 098-250-019) on Port Chicago Highway just south of the McAvoy Road intersection and adjacent to the railroad tracks	
PARCEL/PROJECT SIZE (ACRES): 11.48 acres	
PROJECT APN(S): 098-250-019	
APPLICATION SUBMITTAL DATE:	**FINAL PSR DATE:** (City/County/Conservancy use)
LEAD PLANNER: Dominique Vogelpohl	
JURISDICTION: ☐ City of Brentwood ☐ City of Clayton ☐ City of Oakley ☐ City of Pittsburg ☒ Contra Costa County ☐ Participating Special Entity* *Participating Special Entities are organizations not subject to the authority of a local jurisdiction. Such organizations may include school districts, irrigation districts, transportation agencies, local park districts, geological hazard abatement districts, or other utilities or special districts that own land or provide public services.	
DEVELOPMENT FEE ZONE: ☒ Zone I ☐ Zone II ☐ Zone III ☐ Zone IV See figure 9-1 of the HCP/NCCP at www.cocohcp.org for a generalized development fee zone map. Detailed development fee zone maps by jurisdiction are available from the jurisdiction.	

PROJECT APPLICANT INFORMATION	
APPLICANT'S NAME: Redwood Property Investors, LLC	
AUTHORIZED AGENT'S NAME AND TITLE: Reid Settlemier	
PHONE NO.: 510-520-9325	**APPLICANT'S E-MAIL:** reid@redwood-property.com
MAILING ADDRESS: 360 Grand Ave. #340, Oakland CA 94610	

BIOLOGIST INFORMATION[1]	
BIOLOGICAL/ENVIRONMENTAL FIRM: Sapere Environmental LLC	
CONTACT NAME AND TITLE: Jerry Roe, Principal	
PHONE NO.: 415-365-0010	**CONTACT'S E-MAIL:** jroe@sapereenv.com
MAILING ADDRESS: 5616 Geary Blvd. Suite 211, San Francisco CA 94121	

[1] A USFWS/CDFW-approved biologist (project-specific) is required to conduct the surveys. Please submit biologist(s) approval request to the Conservancy.

II. PROJECT DETAILS

Please complete and/or provide the following attachments:

1) **Project Description**
Attach as **Attachment A: Project Description**. Provide a detailed written description that concisely and completely describes the project and location. Include the following information:
   - All activities proposed for the site or project, including roads utilized, construction staging areas, and the installation of underground facilities, to ensure the entire project is covered by the HCP/NCCP permit
   - Proposed construction dates, including details on construction phases, if applicable
   - Reference a City/County application number for the project, if applicable
   - General Best Management Practices, if applicable
   - If the project will have temporary impacts, please provide a restoration plan describing how the site will be restored to pre-project conditions, including revegetation seed mixes or plantings and timing

2) **Project Vicinity Map**
Provide a project vicinity map. Attach as **Figure 1** in **Attachment B: Figures**.

3) **Project Site Plans**
Provide any project site plans for the project. Attach as **Figure 2** in **Attachment B: Figures**.

4) **CEQA Document**
Indicate the status of CEQA documents prepared for the project. Provide additional comments below table if necessary.

Type of Document	Status	Date Completed
☐ Initial Study		
☐ Notice of Preparation		
☐ Draft EIR		
☐ Final EIR		
☐ Notice of Categorical Exemption		
☐ Notice of Statutory Exemption		
☐ Other (describe)		

III. EXISTING CONDITIONS AND IMPACTS

Please complete and/or provide the following attachments:

1) **Field-Verified Land Cover Map**[2]
Attach a field-verified land cover map in **Attachment B: Figures** and label as **Figure 3**. The map should contain all land cover types present on-site overlaid on aerial/satellite imagery. Map colors for the land cover types should conform to the HCP/NCCP (see *Figure 3-3: Landcover in the Inventory Area* for land cover type legend).

2) **Photographs of the Project Site**
Attach representative photos of the project site in **Attachment B: Figures** and label as **Figure 4**. Please provide captions for each photo.

[2] For PSEs and city or county public works projects, please also identify permanent and temporary impact areas by overlaying crosshatching (permanent impacts) and hatching (temporary impacts) on the land cover map.

3) Land Cover Types and Impacts and Supplemental Tables

- For all terrestrial land cover types please provide calculations to the nearest **hundredth of an acre (0.01)**. For aquatic land cover types please provide calculations to the nearest **thousandth of an acre (0.001)**.
- **Permanent Impacts** are broadly defined in the ECCC HCP/NCCP to include all areas removed from an undeveloped or habitat-providing state and includes land in the same parcel or project that is not developed, graded, physically altered, or directly affected in any way but is isolated from natural areas by the covered activity. Unless such undeveloped land is dedicated to the Preserve System or is a deed-restricted creek setback, the development mitigation fee will apply (if proposed, would require Conservancy approval).
- **Temporary Impacts** are broadly defined in the ECCC HCP/NCCP as any impact on vegetation or habitat that does not result in permanent habitat removal (i.e. vegetation can eventually recover).
- If **wetland (riparian woodland/scrub, wetland, or aquatic)** land cover types are present on the parcel but will not be impacted please discuss in the following section 4) Jurisdictional Wetlands and Waters. Wetland impact fees will only be charged if wetland features are impacted. However, development fees will apply to the entire parcel.
- **Stream** land cover type is considered a linear feature where impacts are calculated based on length impacted. The acreage within a stream, below Top of Bank (TOB), must be assigned to the adjacent land cover type(s). Insert area of impact to stream below TOB in parentheses after the Land Cover acreage number (e.g., Riparian Woodland/Scrub: 10 (0.036) – where 10 is the total impacted acreage including 0.036 acre, which is the acreage within stream TOB). Complete following supplemental **Stream Feature Detail** table to provide information for linear feet.
- **Total Impacts** acreage should be the total parcel acreage (development project) or project footprint acreage (rural infrastructure or utility project).

Table 1: Land Cover Types and Impacts

Land Cover Type	Permanent Impacts	Temporary Impacts	*Proposed for HCP/NCCP Dedication on the Parcel (Requires Conservancy Approval)* *Stream Setback*	*Preserve System Dedication*
Grassland				
Annual Grassland	10.79	0	N/A	N/A
Alkali Grassland	N/A	N/A	N/A	N/A
Ruderal	0.09	0	N/A	N/A
Shrubland				
Chaparral and Scrub	N/A	N/A	N/A	N/A
Woodland				
Oak Savannah	N/A	N/A	N/A	N/A
Oak Woodland	N/A	N/A	N/A	N/A
Riparian				
Riparian Woodland/Scrub	N/A	N/A	N/A	N/A
Wetland				
Permanent Wetland	0.500	0	25’	N/A
Seasonal Wetland	0.007	0	N/A	N/A
Alkali Wetland	N/A	N/A	N/A	N/A
Aquatic				
Aquatic (Reservoir/Open Water)	N/A	N/A	N/A	N/A
Slough/Channel	N/A	N/A	N/A	N/A
Pond	N/A	N/A	N/A	N/A
Stream (in linear feet)	N/A	N/A	N/A	N/A
Irrigated Agriculture				
Pasture	N/A	N/A	N/A	N/A
Cropland	N/A	N/A	N/A	N/A
Orchard	N/A	N/A	N/A	N/A
Vineyard	N/A	N/A	N/A	N/A
Other				
Nonnative woodland	N/A	N/A	N/A	N/A
Wind turbines	N/A	N/A	N/A	N/A
Developed (not counted toward Fees)				
Urban	0.09	0	N/A	N/A
Aqueduct	N/A	N/A	N/A	N/A
Turf	N/A	N/A	N/A	N/A
Landfill	N/A	N/A	N/A	N/A
TOTAL IMPACTS	11.48	0	0	0

Identify any uncommon vegetation and uncommon landscape features[3]:

Supplemental to Table 1: Uncommon Vegetation and Landscape Features

	Permanent Impacts	Temporary Impacts
Uncommon Grassland Alliances		
Purple Needlegrass Grassland	N/A	N/A
Blue Wildrye Grassland	N/A	N/A
Creeping Ryegrass Grassland	N/A	N/A
Wildflower Fields	N/A	N/A
Squirreltail Grassland	N/A	N/A
One-sided Bluegrass Grassland	N/A	N/A
Serpentine Bunchgrass Grassland	N/A	N/A
Saltgrass Grassland	N/A	N/A
Alkali Sacaton Bunchgrass Grassland	N/A	N/A
☐ Other	N/A	N/A
Uncommon Landscape Features		
Rock Outcrops	N/A	N/A
Caves	N/A	N/A
Springs and seeps	N/A	N/A
Scalds	N/A	N/A
Sand Deposits	N/A	N/A
☐ Mines[4]	N/A	N/A
☐ Buildings (bat roosts)[3]	N/A	N/A
☒ Potential nest sites (trees or cliffs)[3]	0	2*

*Refers to the number of trees in the project footprint subject to temporary impacts (see Figure 5).

Please provide details of impacts to stream features:

Stream Name: N/A

Watershed: N/A

Supplemental to Table 1: Stream Feature Detail[5]

Stream Width	Stream Type[6]	Permanent Impacts (linear feet)[7]	Temporary Impacts (linear feet)[7]
☐ ≤ 25 feet wide ☐ > 25 feet wide	☐ Perennial ☐ Intermittent ☐ Ephemeral, 3rd or higher order ☐ Ephemeral, 1st or 2nd order	N/A	N/A
☐ ≤ 25 feet wide ☐ > 25 feet wide	☐ Perennial ☐ Intermittent ☐ Ephemeral, 3rd or higher order ☐ Ephemeral, 1st or 2nd order	N/A	N/A
☐ ≤ 25 feet wide ☐ > 25 feet wide	☐ Perennial ☐ Intermittent ☐ Ephemeral, 3rd or higher order ☐ Ephemeral, 1st or 2nd order	N/A	N/A

[3] These acreages are for Conservancy tracking purposes. Impacts to these uncommon vegetation and landscape features should be accounted for within the land cover types in Table 1 (e.g., x acres of purple needlegrass in this supplemental table should be accounted for within annual grassland in Table 1).
[4] Insert amount/number, not acreage. Provide additional information on these features in Attachment A: Project Description.
[5] Use more than 1 row as necessary to describe impacts to streams on site.
[6] See glossary (Appendix A) for definition of stream type and order.
[7] Stream length is measured along stream centerline, based on length of impact to any part of the stream channel, TOB to TOB.

4) Summary of Land Cover Types

Please provide a written summary of descriptions for land cover types found on site including characteristic vegetation.

The project footprint is entirely comprised of non-native annual grassland. The following land cover types are present within the "core" Biological Study Area, defined as a 500-foot buffer extending from the project footprint to include the survey buffers for all HCP species excluding Swainson's hawks and golden eagles (Figure 3a). The Biological Study Area expands to 1,000 feet for Swainson's hawks and ½-mile for golden eagles (Figure 3b).

Non-native Annual Grassland

Non-native grasslands are generally found in open areas in valleys and foothills throughout coastal and interior California[18]. They typically occur on soils consisting of fine-textured loams or clays that are somewhat poorly drained. This vegetation type is dominated by non-native annual grasses and weedy annual and perennial forbs, primarily of Mediterranean origin, that have replaced native perennial grasslands, scrub and woodland habitats as a result of human disturbance. Scattered native wildflowers and grasses, representing remnants of the original vegetation may also be common.

Within the BSA, non-native annual grassland is the dominant plant association in terms of area (see Figure 3a). The entire proposed project site is non-native annual grassland, as well as most of the undeveloped surrounding areas. The surrounding areas, including the railroad right of way to the north, and portions of the Angleboard facility to the south, are un-grazed, and provide indication of the natural condition of the non-native annual grassland land cover type. The dominant plant species consist of the non-native grasses ripgut brome (*Bromus diandrus*), Italian ryegrass (*Festuca perennis*), and hare barley (*Hordeum murinum* ssp*. leporinum*). Because the project site is heavily grazed by livestock, these palatable grasses have been removed, and the remaining vegetation is predominantly saltgrass (*Distichlis spicata*) and alkali mallow (*Malvella leprosa*). Associated herbaceous species include black mustard (*Brassica nigra*), fennel (*Foeniculum vulgare*), American licorice (*Glycyrrhiza lepidota*), and English plantain (*Plantago lanceolata*), among others. Elsewhere within the Habitat Plan inventory area, saltgrass and alkali mallow are considered indicators of the alkali grassland land cover type, which also is a type of wetland. In this circumstance, however, there are no other indicators of either alkali grasslands or wetlands, *i.e.*, no apparent source of wetland hydrology, absence of hydric soils[8], and presence of associated herbaceous plant species that are not generally viewed as indicators of alkali soils or wetlands. In addition to selective grazing, the site is located in the historic transition zone between tidal marsh and uplands that existed before the railroad and other developments were built, The soil likely retains residual alkalinity that is tolerated by salt grass and alkali mallow. For these reasons, the site is considered to be non-native annual grassland modified by grazing livestock.

Within the BSA, areas of non-native annual grassland conform to natural community Annual Brome Grasslands (*Bromus[diandrus, hordeaceus*]-*Brachypodium distachyon* Semi-Natural Herbaceous Stands., as described in Sawyer, et al[9]. This is also described as Non-native Grassland by Holland[10] (Holland code 42200) and the CDFW (CA vegetation code 42.026.00[11]) and are characterized as an Annual Grassland land cover type under the HCP/NCCP[12]. Non-native annual grasslands as found on site would be classified as an upland[15]. As a common, widespread and

[8] Soils on the site are mapped as Antioch Loam, which is no classified as hydric (National Resource Conservation Service. 2020b. National Hydric Soils List. Accessed April 2020 from http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/).

[9] Sawyer, J.O., T. Keeler-Wolf, and J.M. Evans. 2009. A Manual of California Vegetation (2nd edition). California Native Plant Society, Sacramento. 1300 pp.

[10] Holland, R. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California.* California Department of Fish and Game, The Resources Agency. 156 pp. Available on line at http://www.cal-ipc.org/ip/inventory/pdf/HollandReport.pdf

[11] California Department of Fish and Wildlife (CDFW). 2021. *California Natural Community List*. Biogeographic Data Branch, Natural Diversity Database. August 8. 92 pp. Available online at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline

[12] Jones & Stokes. 2006. East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan. (J&S 01478.01.) San Jose, CA. October. Prepared for the East Contra Costa County Habitat Conservation Plan Association.

non-natural plant association, non-native annual grassland has no global or State rarity ranking[911]. Unless found to harbor special-status species, impacts to non-native annual grassland would not typically meet the significance criteria pursuant to CEQA guidelines.

Ruderal Habitat

Ruderal habitat occurs where native vegetation has been completely removed by grading, cultivation, or other surface disturbances. Left undeveloped, such areas typically become recolonized by invasive exotic species. Scattered native species might recolonize such sites after disturbances have ceased. Ruderal sites are typically dominated by herbaceous species, although scattered woody shrubs and trees may also begin to appear if left undisturbed long enough. Ruderal sites are characteristic of road sides, fallow agricultural fields, vacant lots, and landslides.

Within the BSA, ruderal habitat coincides with areas subjected to the repeated disturbance, such as roadsides, unpaved roads and parking areas, corrals for livestock, and the railroad right of way (see Figure 3a). These areas support a sparse cover of primarily non-native annual grasses and forbs, including slender oat (*Avena barbata*), burclover (*Medicago polymorpha*), wild lettuce (*Lactuca serriola*), stinkwort (*Dittrichia graveolens*), and Italian thistle (*Carduus pycnocephalus*), among others.

Developed

Developed lands are those from which all natural and non-natural plant assemblages have been removed and replaced by structures and hardscapes such as road paving, walkways, and patios. Unpaved areas regularly utilized for the storage of equipment, vehicles, construction materials and refuse are also characterized as developed. With the exception of minor amounts of herbs and shrubs, developed lands within the BSA are primarily unvegetated (see Figure 3a).

Wetland

Wetlands are dominated by herbaceous species that grow in perennially flooded, ponded or saturated soil conditions. The vegetation consists of perennial obligate wetland indicator plants, which persist year-round with a continuous water source or saturation to near the soil surface. Perennial flow in the creek is assumed based on observations of low-volume flow persisting into September of the current extreme drought year. The water source is likely from year-round urban runoff, or "nuisance" runoff, which may originate in the San Marco subdivision south of State Route 4. All runoff from the subdivision is collected in settling and detention basins near West Leland Avenue and San Marco Boulevard, which is typically inundated all year, and discharges continuously through its outlet standpipe[13]. The outlet is culverted to the north side of State Route 4, where it daylights near a siphon for the Contra Costa Canal, and combines with a second tributary from the west. The canal siphon, if it leaks, also may provide a source of year-round flow.

Wetlands are present within the project parcel, comprising the perennial drainage channel running roughly parallel to the southern parcel boundary (see Figure 3a). The wetland is a nearly continuous narrow band from the cross culvert at Port Chicago Highway to just east of the project site, where it passes under the railroad tracks and continues north to the marsh at Stake Point. The wetland vegetation is dominated by emergent aquatic species, including narrow-leaved cattail (*Typha angustifolia*) and tule (*Schoenoplectus acutus* var. *occidentalis*), with small patches of watercress (*Nasturtium officinale*) and Himalayan blackberry (*Rubus armeniacus*). All project activities will occur outside of a 25-foot setback from the wetland; no activities will occur south or east of the wetland.

The wetland in the perennial drainage channel conforms most closely to the cattail marshes (*Typha angustifolia)* and Hardstem bulrush marshes (*Schoenoplectus acutus*) herbaceous alliances[14]; it would be classified as palustrine emergent wetland, persistent, permanently flooded, following Cowardin, *et al*[15].

[13] C. Rogers (Wood Biological Consulting), personal observation.

[14] Sawyer, *et al*. *ibid.*

[15] Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. 131 pp.

Seasonal Wetland

Seasonal wetlands consist of annual and perennial native and non-native wetland herbaceous plants growing in seasonally flooded, ponded or saturated soil conditions. Wetland indicators are readily apparent during the wet season, but may appear similar to annual grassland or ruderal habitats during the dry season, with upland grasses and forbs becoming dominant.

Seasonal wetlands are located at, and just beyond, the east boundary of the project parcel, and include two small, shallow drainage channels located southeast of the Angleboard facility and of the abandoned railroad siding that enters that project parcel (see Figure 3a). The drainages were excavated in upland grassland, and connect two seasonal wetlands (both indicated on land cover map Figure 3-3 of the HCP/NCCP) to the perennial wetland drainage just east of the project site. Vegetation in the seasonal wetland is dominated by such non-native wetland indicator species as perennial ryegrass (*Festuca perennis*) with lesser amounts of Mediterranean barley (*Hordeum marinum*), rabbitsfoot grass (*Polypogon monspeliensis*), curly dock (*Rumex crispus*), and cocklebur (*Xanthium strumarium*), among others. All project activities will occur outside of the seasonal wetlands.

Seasonal wetland habitat does not conform to any specific series[16]; it would be classified as palustrine seasonally flooded wetland[17].

5) Jurisdictional Wetlands and Waters

If wetlands and waters are present on the project site, project proponents must conduct a delineation of jurisdictional wetlands and waters. Jurisdictional wetlands and waters are defined on pages 1-18 and 1-19 of the ECCC HCP/NCCP as the following land cover types: permanent wetland, seasonal wetland, alkali wetland, aquatic, pond, slough/channel, and stream. It should be noted that these features differ for federal and state jurisdictions. If you have identified any of these land cover types in Table 1, complete the section below.

a) Attach the wetland delineation report as **Attachment E: Wetland Delineation.** If a wetland delineation has not been completed, please explain below in section 4c.

b) Please check the following permits the project may require. Please submit copies of these permits to the Conservancy prior to the start of construction:

☐ CWA Section 404 Permit[18] ☐ CWA Section 401 Water Quality Certification

☐ Waste Discharge Requirements ☐ Lake and Streambed Alteration Agreement

c) Provide any additional information on impacts to jurisdictional wetland and waters below, including status of the permit(s):

Wetland and seasonal wetland habitat does not occur on the project site, but occurs adjacent to it. A wetland delineation was not completed because impacts to these areas will be avoided. No features regulated by the U.S. Army Corps of Engineers, Regional Water Quality Control Board, or California Department of Fish and Wildlife are present in the project area. To ensure no impact would result from project implementation, temporary fencing will be installed 25 feet from the channel top of bank. The proposed storm water detention basin will discharge into the existing rail bridge culvert which historically drains into the drainage ditch, and a metering device will be installed to release clean runoff at pre-development rates into the existing culvert; further details are provided in Attachment A.

[16] Sawyer, *et al*. *ibid.*

[17] Cowardin, *et al. ibid.*

[18] The USACE Sacramento District issued a Regional General Permit 1 (RGP) related to ECCC HCP/NCCP covered activities. The RGP is designed to streamline wetland permitting in the entire ECCC HCP/NCCP Plan Area by coordinating the avoidance, minimization, and mitigation measures in the Plan with the Corps' wetland permitting requirement. Applicants seeking authorization under this RGP shall notify the Corps in accordance with RGP general condition number 18 (Notification).

Species-Specific Planning Survey Requirements

Based on the land cover types found on-site and identified in Table 1, check the applicable boxes in Table 2a.

Table 2a. Species –Specific Planning Survey Requirements

Land Cover Type in Project Area	Required Survey Species	Habitat Element in Project Area	Planning Survey Requirement[19]	Info in HCP
☒ Grasslands, oak savannah, agriculture, or ruderal	☒ San Joaquin kit fox	Assumed if within modeled range of species	If within modeled range of species, identify and map potential breeding or denning habitat within the project site and a 250-ft radius around the project footprint.	pp. 6-37 to 6-38
	☒ Western burrowing owl	Assumed	Identify and map potential breeding habitat within the project site and a 500-ft radius around the project footprint. Please note the HCP requires buffers for occupied burrows. Surveys may need to encompass an area larger than the project footprint.	pp. 6-39 to 6-41
☒ Aquatic (ponds, wetlands, streams, sloughs, channels, and marshes)	☐ Giant garter snake	Aquatic habitat accessible from the San Joaquin River	Identify and map potential habitat.	pp. 6-43 to 6-45
	☒ California tiger salamander	Ponds and wetlands Vernal pools Reservoirs Small lakes	Identify and map potential breeding habitat. Document habitat quality and features. Provide the Conservancy with photo-documentation and report.	pp. 6-45
	☒ California red-legged frog	Slow-moving streams, ponds and wetlands	Identify and map potential breeding habitat. Document habitat quality and features. Provide the Conservancy with photo-documentation and report.	p. 6-46
	☒ Covered shrimp	Seasonal wetlands Vernal pools Sandstone rock outcrops Sandstone depressions	Identify and map potential habitat. Please note the HCP requires a 50 foot non-disturbance buffer from seasonal wetlands that may be occupied by covered shrimp. Surveys may need to encompass an area larger than the project footprint.	pp. 6-46 to 6-48
☒ Any	☐ Townsend's big-eared bat	Rock formations with caves Mines Abandoned buildings outside urban area	Map and document potential breeding or roosting habitat.	pp. 6-36 to 6-37
	☒ Swainson's hawk	Potential nest sites within 1,000 feet of project	Inspect large trees for presence of nest sites. Document and map.	pp. 6-41 to 6-43
	☒ Golden Eagle	Potential nest sites with ½ mile of project	Inspect large trees for presence of nest sites. Document and map.	pp. 6-38 to 6-39
Surveys for all covered species must be conducted by a qualified biologist (USFWS/CDFW project-specific approved). Please submit biologist approval request to the East Contra Costa County Habitat Conservancy. Surveys for all covered species must be conducted according to the respective USFWS or CDFW survey protocols, as identified in Chapter 6.4.3 in the HCP/NCCP.				

6) Planning Survey Species Habitat Maps

Provide Planning Survey Species Habitat Maps as required in Table 2a, attach as **Figure 5** in **Attachment B: Figures**.

[19] The planning survey requirements in this table are not comprehensive. Please refer to Chapter 6.4.3 in the ECCC HCP/NCCP for more detail.

7) Results of Species Specific Surveys

Provide a written summary describing the results of the planning surveys. Please discuss the location, quantity, and quality of suitable habitat for specified covered wildlife species on the project site.

Survey Methods

A reconnaissance survey of the project area was performed by qualified biologists Travis McCleary and Andrea Cortes (Sapere Environmental) on September 1, 2021. Transects were walked throughout the project footprint and 500-foot survey buffer, considered the core Biological Study Area, to identify fossorial mammal burrows and thoroughly assess habitat quality. The seasonal and perennial drainages, as well as the railroad embankments, were assessed for suitability for supporting covered shrimp species. All potential raptor nesting habitat within the 1,000-foot and ½-mile survey radii were surveyed from vehicle for Swainson's hawks and golden eagles, respectively.

Survey Results and Discussion

Species with potential to occur onsite due to presence of suitable habitat within the Biological Study Area and/or CNDDB occurrence data include burrowing owl, Swainson's hawk, golden eagle, California tiger salamander, California red-legged frog and covered shrimp species. Habitat quality and occurrence potential are discussed in further detail below.

Burrowing Owl

Based on the Planning Survey Requirements in Table 2a, suitable habitat was identified for burrowing owl in the project footprint. Although heavily grazed, non-native annual grasslands comprising the entire project footprint provide suitable habitat for burrowing owls (see Figure 5). Ground squirrel burrows were observed in small clusters approximately 100-200 feet east of the entrance gate, as well as under the base of the small trees near the west edge of the drainage. Of the burrows observed, less than 5 were of suitable size for burrowing owl habitat (Figure 5); however, no burrowing owls or secondary sign of presence (e.g. prey remains, feathers, whitewash, pellets) were observed during the site visit on September 1, 2021. Potential burrowing owl breeding habitat is shown in Figure 5.

There are three burrowing owl CNDDB occurrences reported within five miles of the project area, all from non-native grazed annual grassland. The nearest occurrence (Occ. #754) is located 1.1 miles south, consisting of observations from three neighboring areas in 2005 that have since then been developed. Occurrences are densely concentrated further east/northeast in agricultural or ruderal parcels and along canals on the outskirts of developed Antioch. If suitable burrows become occupied prior to construction initiation, project activities may result in impacts to burrowing owls.

San Joaquin Kit Fox

Land Cover Types providing suitable habitat for breeding and denning San Joaquin kit fox individuals include non-native annual grassland which comprises the entirety of the project footprint. No burrows of suitable size for kit fox were identified in the project area; however, any ground squirrel burrow can be excavated and utilized by kit fox. No kit foxes or secondary sign of presence were observed during survey on September 1, 2021.

There are no reported CNDDB San Joaquin kit fox occurrences within five miles of the project footprint(s). The nearest occurrence (Occ. #554) is located 6 miles southeast, describing one adult observed in 1992. The project footprint is outside of the Suitable Core Habitat and Suitable Low Use Habitat species distribution model from Appendix D of the HCP/NCCP. Based on the location of the project outside of the mapped core/low-use habitat and lack of observable evidence of kit fox presence during the planning surveys, San Joaquin kit fox were ruled out and will not be impacted by the project.

Swainson's Hawk

Suitable nesting habitat for the Swainson's hawk is present in the two large eucalyptus trees located near the northwest corner of the project footprint bordering the neighboring stone yard (see Figure 5). However, no nests or Swainson's hawks were observed during the site visit on September 1, 2021. The entire project area provides suitable foraging habitat for this species. However, due to heavy grazing, there is very little vegetation and low ground squirrel activity, making foraging opportunities minimal.

There are no CNDDB occurrences within 5 miles of the project footprint. The nearest occurrence (Occ. #1942) from 2012 is located approximately 6 miles northeast in Montezuma Slough, documenting a pair nesting in a large eucalyptus tree in 2012. Swainson's hawk occurrences are densely concentrated just beyond the 10-mile radius east of the project footprint. Swainson's hawks establish a nest in the eucalyptus trees within the project footprint prior to construction initiation, project activities may result in impacts to nesting Swainson's hawks.

Golden Eagle

Two large eucalyptus trees located near the northwest corner of the project footprint provide suitable nesting habitat for golden eagles (see Figure 5). The open non-native grasslands comprising the entire project footprint provides suitable foraging habitat. However, due to heavy grazing in the area, foraging opportunities are minimal. During the site visit on September 1, 2021, no large raptor nests or golden eagles were observed.

There is one CNDDB occurrence (Occ. #136) reported within five miles of the project footprint, located three miles southwest in the Concord Naval Weapons Station, describing multiple golden eagles utilizing grassland habitat for wintering and foraging in 2008. Within Contra Costa County, occurrences are almost exclusively located in the Los Vaqueros Watershed greater than 15 miles to the southeast. Based on the planning survey results and CNDDB occurrences, golden eagles are not expected to nest within ½ mile of the project are and will not be impacted by the proposed project.

California Tiger Salamander

There is no aquatic habitat within the project footprint. One unnamed drainage parallels the southern border of the project footprint. To minimize impacts to aquatic resources, a 25-foot setback from the drainage will be maintained. This aquatic habitat provides wetland features and was slowly flowing during the planning survey on September 1, 2021. A deeper pool measuring three feet deep and five feet wide is present at the culvert outlet located at the west end of the drainage. Approximately 10 feet downstream from the culvert outlet, the drainage abruptly transitions to a narrower and shallower channel measuring three to six feet wide with a depth of four to six inches. Trash is present throughout the length of the drainage, particularly at the culvert outlet. Dense emergent vegetation fills the channel throughout the length of the drainage, with exception of a short segment near the west end where livestock have heavily trampled the channel and banks. Emergent vegetation does not extend onto the banks, which are vegetated by non-native grasses and show evidence of livestock grazing/trampling.

During the planning survey on September 1, 2021, no California tiger salamanders of any life stage were observed in upland or aquatic habitats. The perennial drainage provides suitable breeding habitat for California tiger salamanders based on the deeper pool at the culvert outlet, perennial presence of water, and dense emergent vegetation throughout the length of the channel within the proximity of the project footprint. The perennial drainage is characterized as marginal breeding habitat due to degraded water quality as a result of livestock activity and trash; however, this does not preclude salamanders from utilizing the drainage as breeding or non-breeding aquatic habitat or as a movement corridor. The grassland is considered marginal upland habitat due to paucity of subterranean habitat and low fossorial mammal activity.

There are 18 CNDDB occurrences within 5 miles of the project footprint, all located greater than two miles south of the project footprint beyond Highway 4 and developed areas, describing salamanders observed in stock ponds surrounded by grazed grassland hills. There are no occurrences within the 1-mile radius which is comprised primarily of developed land with intermittent and isolated grassland patches. California tiger salamanders are not likely to occur onsite and be impacted by project activities based on planning survey results, project avoidance of the drainage channel, the isolated project location and the significant barriers to movement between the project site and areas of known occupied habitat.

California Red-Legged Frog

The unnamed perennial drainage including the pool at the culvert outlet is characterized as marginal breeding habitat for the California red-legged frog based largely on the shallow nature of the aquatic features. Although significant emergent vegetation is present within the pool and the drainage, the location of the project site is separated from areas of known occupancy by urban development and roads.

There are nine CNDDB occurrences within 5 miles of the project footprint, all located greater than two miles south of the project footprint beyond Highway 4 and developed areas, describing frogs of all life history stages observed in stock ponds, drainages and wells. Highway 4 and dense urban development are significant barriers to movement between known occurrence sites and the project footprint. Based on planning survey results, 25-foot setback from the drainage, marginal aquatic and upland habitat, and significant barriers between the project site and recorded CNDDB occurrences, California red-legged frogs are not likely to occur onsite and be impacted by project activities.

Covered Shrimp

There is no suitable habitat for covered shrimp within the project footprint. No notable depressions were identified in the narrow strip of patchy grassland habitat between the railroad and the northern perimeter fence of the project parcel. The drainage and associated wetland habitat located near the southern perimeter of the project parcel are perennial in nature. A 25-foot setback will be established from this drainage to protect the aquatic features from potential project impacts. Suitable habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp occurs in the two seasonal drainages located east of the project boundary. No project activities will occur within 100 feet of these drainages; therefore, impacts to covered shrimp species are not anticipated.

There is one reported occurrence (Occ. #50) within a 10-mile radius of the project site of a covered shrimp species, California linderiella (*Linderiella occidentalis*), describing this species found in drainage basins in the Concord Naval Weapons Station in 2008. The nearest occurrences for midvalley fairy shrimp, vernal pool fairy shrimp, vernal pool tadpole shrimp and Conservancy fairy shrimp are located 10 miles northeast (Occ. #47), 6 miles southeast (Occ. #212), 6 miles northeast miles (Occ. #161) and 6 miles northeast (Occ. #37), respectively, describing shrimp observed in vernal pools and non-vegetated depressions along railroad tracks.

8) Covered and No-Take Plants

Please check the applicable boxes in Table 2b based on the land cover types found in the project area. If suitable land cover types are present on site, surveys must be conducted using approved CDFW/USFWS methods during the appropriate season for identification of covered and no-take species (see page 6-9 of the ECCC HCP/NCCP). Reference populations of covered and no-take plants should be visited, where possible, prior to conducting surveys to confirm that the plant species is visible and detectable at the time surveys are conducted. In order to complete all the necessary covered and no-take plant surveys, spring, summer, and fall surveys may be required.

Table 2b. Covered and No-Take Plant Species

Plant Species	Covered (C) or No-Take (N)	Associated Land Cover Type	Typical Habitat or Physical Conditions, if Known	Typical Blooming Period	Suitable Land Cover Type Present
Adobe navarretia (*Navarretia nigelliformis* ssp. *radians*) [a]	C	Annual Grassland	Generally found on clay barrens in Annual Grassland [b]	Apr–Jun	☒ Yes ☐ No
Alkali milkvetch (*Astragalus tener* ssp. *tener*)	N	Alkali grassland Alkali wetland Annual grassland Seasonal wetland	Generally found in vernally moist habitat in soils with a slight to strongly elevated pH	Mar–Jun	☒ Yes ☐ No
Big tarplant (*Blepharizonia plumosa*)	C	Annual grassland	Elevation below 1500 feet [d] most often on Altamont Series or Complex soils	Jul–Oct	☒ Yes ☐ No
Brewer's dwarf flax (*Hesperolinon breweri*)	C	Annual grassland Chaparral and scrub Oak savanna Oak woodland	Generally, restricted to grassland areas within a 500+ buffer from oak woodland and/or chaparral/scrub [d]	May–Jul	☒ Yes ☐ No
Brittlescale (*Atriplex depressa*)	C	Alkali grassland Alkali wetland	Restricted to soils of the Pescadero or Solano soil series; generally found in southeastern region of plan area [d]	May–Oct	☒ Yes ☐ No
Caper-fruited tropidocarpum (*Tropidocarpum capparideum)*	N	Alkali grassland		Mar–Apr	☒ Yes ☐ No
Contra Costa goldfields (*Lasthenia conjugens*)	N	Alkali grassland Alkali wetland Annual grassland Seasonal wetland	Generally found in vernal pools	Mar–Jun	☒ Yes ☐ No
Diablo Helianthella (*Helianthella castanea*)	C	Chaparral and scrub Oak savanna Oak woodland	Elevations generally above 650 feet [d]	Mar–Jun	☐ Yes ☒ No
Diamond-petaled poppy (*Eschscholzia rhombipetala*)	N	Annual grassland		Mar–Apr	☒ Yes ☐ No
Large-flowered fiddleneck (*Amsinckia grandiflora*)	N	Annual grassland	Generally on clay soil	Apr–May	☒ Yes ☐ No
Mount Diablo buckwheat (*Eriogonum truncatum*)	N	Annual grassland Chaparral and scrub	Ecotone of grassland and chaparral/scrub	Apr–Sep	☒ Yes ☐ No
Mount Diablo fairy-lantern (*Calochortus pulchellus*)	C	Annual grassland Chaparral and scrub Oak savanna Oak woodland	Elevations generally between 650 and 2,600[d]	Apr–Jun	☐ Yes ☒ No
Mount Diablo Manzanita (*Arctostaphylos auriculata*)	C	Chaparral and scrub	Elevations generally between 700 and 1,860 feet; restricted to the eastern and northern flanks of Mt. Diablo [d] and the vicinity of Black Diamond Mines	Jan–Mar	☐ Yes ☒ No
Recurved larkspur (*Delphinium recurvatum*)	C	Alkali grassland Alkali wetland		Mar–Jun	☒ Yes ☐ No
Round-leaved filaree (*California macrophylla*) [c]	C	Annual grassland		Mar–May	☒ Yes ☐ No
San Joaquin spearscale (*Extriplex joaquiniana*) [e]	C	Alkali grassland Alkali wetland		Apr–Oct	☒ Yes ☐ No
Showy madia (*Madia radiata*)	C	Annual grassland Oak savanna Oak woodland	Primarily occupies open grassland or grassland on edge of oak woodland	Mar–May	☒ Yes ☐ No

[a] The species *Navarretia nigelliformis* subsp. *nigelliformis* is no longer considered to occur within Contra Costa County based on specimen annotations at the UC and Jepson Herbaria at the University of California Berkeley as well as the opinions of experts in the genus. This taxon is now recognized as *Navarretia nigelliformis* subsp. *radians.* Any subspecies of *Navarretia nigelliformis* encountered as a part of botanical surveys in support of a PSR should be considered as covered under this HCP/NCCP.

[b] Habitat for the *Navarretia nigelliformis* subspecies that occurs within the inventory are is inaccurately described in the HCP/NCCP as vernal pools. The entity within the Inventory generally occupies clay barrens within Annual Grassland habitat, which is an upland habitat type.

[c] From California Native Plant Society. 2007. *Inventory of Rare and Endangered Plants* (online edition, v7-07d). Sacramento, CA. Species may be identifiable outside of the typical blooming period; a professional botanist shall determine if a covered or no take plant occurs on the project site. Reference population of covered and no-take plants should be visited, where possible, prior to conducting surveys to confirm that the plant is visible and detectable at the time surveys are conducted.

[d] See Species Profiles in Appendix D of the Final HCP/NCCP. Reference populations of covered and no-take plants should be visited, where possible, prior to conducting surveys to confirm that the plant species is visible and detectable at the time surveys are conducted.

[e] In the recent update to the Jepson eflora (JFP 2013) *Atriplex joaquinana* has been circumscribed and segregated into a new genus called *Extriplex* based on the work of Elizabeth Zacharias and Bruce Baldwin (2010). The etymology of the genus *Extriplex* means, "beyond or outside Atriplex".

9) Results of Covered and No-Take Plant Species

Provide a written summary describing the results of the planning surveys conducted as required in Table 2b. Describe the methods used to survey the site for all covered and no-take plants, including the dates and times of all surveys conducted (see Tables 3-8 and 6-5 of the ECCC HCP/NCCP for covered and no-take plants), including reference populations visited prior to conducting surveys.

If any covered or no-take plant species were found, include the following information in the results summary:

- Description and number of occurrences and their rough population size.
- Description of the "health" of each occurrence, as defined on pages 5-49 and 5-50 of the HCP/NCCP.
- A map of all the occurrences.
- Justification of surveying time window, if outside of the plant's blooming period.
- The CNDDB form(s) submitted to CDFW (if this is a new occurrence).
- A description of the anticipated impacts that the covered activity will have on the occurrence and how the project will avoid impacts to all covered and no-take plant species. If impacts to covered plant species cannot be avoided and plants will be removed by covered activity, the Conservancy must be notified and has the option to salvage the covered plants. All projects must demonstrate avoidance of all six no-take plants (see table 6-5 of the HCP/NCCP).

Survey Methods

A reconnaissance survey of the project area was performed by qualified botanist Chris Rogers (Wood Biological Consulting) on August 31, 2021. All plant species detected were identified to a level sufficient to determine whether or not they were special-status species.

Survey Results and Discussion

No "covered" or "no-take" plant species were observed or are expected to occur on the project site. An evaluation is presented below for each covered species for which potentially suitable is present. Annual grassland habitat on the site is considered marginally suitable at best, due to ongoing grazing that eliminates most of the characteristic annual grassland plant species. Additionally, none of the "covered" and "no take" species have been recently been documented in this lowland portion of the northwestern HCP/NCCP plan area. The "covered" and "no take" species associated with grasslands are typically located in alkali grasslands in the vicinity of Byron, on particular soil types not found at the project site, or in non-native annual grasslands in the higher elevation Diablo foothills. Despite the low likelihood of covered and no-take plant species occurring in the project site, we understand that the Conservancy requires that appropriately timed surveys be performed during the blooming periods of all rare plant species listed below. Based on Table 2b, two surveys will be performed in mid-April and late-May of 2022. Survey results will be provided to the Conservancy prior to construction initiation.

Navarretia spp. Annual grassland at the project site provides a marginally suitable landcover type for adobe navarretia. However, the species is associated with the heavy clay soils of vernal pools and other low, seasonally moist areas in grasslands. These specific habitat conditions are lacking in the annual grasslands present on the project site. The closest occurrence is near Contra Loma Reservoir, nearly nine miles southeast of the project site[20]. It is not known from the lowland portions of the HCP/NCCP inventory area. The probability of occurrence on the project site is very low.

Alkali Milkvetch. Annual grassland at the project site provides a marginally suitable landcover type for alkali milkvetch. However, the species is associated with vernally moist habitat with slightly-to strongly alkaline soils. Although soil alkalinity is apparent at the project site, as indicated by the presence of salt grass and alkali mallow, the actual grassland type in the absence of grazing would be dominated by typical non-native annual grass species and other non-alkali, non-wetland species. The species is known from alkali grasslands near the Byron Airport, twenty-two miles southeast of the project site[21]. The probability of occurrence on the project site is very low.

[20] California Natural Diversity Database (CNDDB). 2021. Version 5.2.14. Query for Contra Costa County. California Department of Fish and Wildlife, Biogeographic Data Branch. Sacramento, California. Information dated September 1.
[21] CNDDB, 2021. *ibid.*

Big Tarplant. Annual grassland at the project site area provides a marginally suitable landcover type for big tarplant. However, the species is associated with soils belonging to the Altamont or Complex series; only Antioch loam is mapped at the project site. Historic records (from 1885 and 1937) are located within four miles of the project site; recent occurrences occur within 7.5 miles to the southeast, in and near Black Diamond Mines Regional Park[22]. The species was not detected during a survey by a qualified botanist conducted during the blooming season (July-October). The species is presumed to be absent from the project site.

Brewer's Dwarf Flax. Annual grassland at the project site provides a marginally suitable landcover type for Brewer's dwarf flax. However, the species typically occupies grassland in the vicinity of oak woodlands or chapparal/scrub vegetation, which is absent from the vicinity of the project site. The species is not known to occur in the lowland areas of the HCP/NCCP inventory area, and is more common in hilly areas in Mt Diablo State Park and near Morgan Territory. The nearest occurrences are 7.5 miles to the southeast, in Black Diamond Mines Regional Park[22]. The probability of occurrence on the project site is very low.

Brittlescale. Annual grassland at the project site provides a marginally suitable landcover type for brittlescale. However, it is general generally found in southeastern region of plan area, and considered to be restricted to soils of the Pescadero or Solano soil series, which are absent from the project site. The nearest occurrence to the project site is in alkali grasslands south of Antioch, twelve miles southeast of the project site[22]. The species was not detected during a survey by a qualified botanist conducted during the blooming season (July-October). The species is presumed to be absent from the project site.

Caper-fruited tropidocarpum. Annual grassland at the project site provides a marginally suitable landcover type for this species. Most occurrences are historic, and tend toward the southeastern region of plan area near Byron and Tracy. The nearest occurrence to the project site was near Clayton in 1896, 6.5 miles south of the project site[22]. The species was not detected during a survey by a qualified botanist conducted during the blooming season (July-October). The probability of occurrence on the project site is very low.

Contra Costa Goldfields. Annual grassland at the project site provides a marginally suitable land-cover type for Contra Costa goldfields. The species is associated vernally moist habitat with slightly-to strongly alkaline soils. Although soil alkalinity is apparent at the project site, as indicated by the presence of salt grass and alkali mallow, the actual grassland type in the absence of grazing would be dominated by typical non-native annual grass species and other non-alkali, non-wetland species. There are no vernal pools or other seasonally wet habitats on the project site. Although historic occurrences were located in the HCP/NCCP inventory area, extant populations are located near Fairfield and in the south San Francisco Bay[22]. The probability of occurrence of this species is very low.

Diamond-Petaled Poppy. Annual grassland at the project site area provides a suitable land-cover type for diamond-petaled poppy. Historic populations within the HCP/NCCP inventory area at Antioch dunes (8.5 miles east of the project site) and Byron Airport (22 miles southeast of the project site) ae considered possibly extirpated. An extant population was recently discovered near Bethany Reservoir, 26 mile southeast of the project site[22]. The probability of occurrence of this species is very low.

Large-Flowered Fiddleneck. Annual grassland at the project site provides a suitable land-cover type for large-flowered fiddleneck. However the species is not known from the lowland portion of the HCP/NCCP inventory area[22] One population which was reintroduced at Black Diamond Mines (7 miles southeast), is possibly extant. The probability of occurrence of this species is very low.

Mount Diablo Buckwheat. Annual grassland at the project site provides a marginally suitable land-cover type for Mount Diablo buckwheat. However, the species is associated with an ecotone with chaparral or scrub, which is absent from the project site. Many populations are historic and their status is unknown. The nearest occurrence is at Black Diamond Mines, nine miles southeast of the project site[22]. The probability of occurrence of this species is very low.

[22] CNDDB, 2021. *ibid.*

Round-Leaved Filaree. Annual grassland at the project site provides a suitable land-cover type for round-leaved filaree. In 2017, this species was deleted from California Rare Plant Rank 1B.2[23], is not listed by CDFW as a special plant[24] and is not tracked by CNDDB[22]. The probability of occurrence of this species is very low.

San Joaquin spearscale. Annual grassland at the project site provides a marginally suitable landcover type for San Joaquin spearscale. However, it is generally found in alkali wetlands, and most frequently in the southeastern region of the HCP/NCCP inventory area. The nearest occurrence to the project site is in alkali wetlands near Clyde, 4.6 miles west of the project site[25]. The species was not detected during a survey by a qualified botanist conducted during the blooming season (July-October). The species is presumed to be absent from the project site.

Showy Madia. Annual grassland at the project site provides a suitable land-cover type for showy madia. Occurrences in the lowland portion of the HCP/NCCP inventory area are historic, in currently developed parts of Antioch . The nearest occurrence is at Black Diamond Mines, 7.5 miles southeast of the project site[25]. The probability of occurrence of this species is very low.

[23] Rare Plant Status Review: California macrophylla Proposed Deletion from CRPR 1B.2, G3? / S3? Kaitlyn Green (CNPS), Aaron E. Sims (CNPS), and Roxanne Bittman (CNDDB) August 28, 2017

[24] California Natural Diversity Database (CNDDB). July 2021. Special Vascular Plants, Bryophytes, and Lichens List. California Department of Fish and Wildlife. Sacramento, CA.

[25] CNDDB, 2021. *ibid.*

IV. SPECIES-SPECIFIC AVOIDANCE AND MINIMIZATION REQUIREMENTS

Please complete and/or provide the following attachments:

1) Species-Specific Avoidance and Minimization for Selected Covered Wildlife
Complete the following table and check the applicable box for covered species determined by the planning surveys.

Table 3. Summary of Applicable Preconstruction Surveys, Avoidance and Minimization, and Construction Monitoring Requirements[26]

Species	Preconstruction Survey Requirements	Avoidance and Minimization Requirements	Construction Monitoring Required	Info in HCP
☐ San Joaquin kit fox	• On project footprint and 250-ft radius, map all dens (>5 in. diameter) and determine status • Provide written survey results to USFWS within 5 working days after surveying	• Monitor dens • Destroy unoccupied dens • Discourage use of occupied (non-natal) dens	• Establish exclusion zones (>50 ft for potential dens, and >100 ft for known dens) • Notify USFWS of occupied natal dens	pp. 6-37 to 6-38
☒ Western burrowing owl	• On project footprint and 500-ft radius, identify and map all owls and burrows, and determine status • Document use of habitat (e.g. breeding, foraging)	• Avoid occupied nests during breeding season (Feb-Sep) • Avoid occupied burrows during nonbreeding season (Sep – Feb) • Install one-way doors in occupied burrow (if avoidance not possible) • Monitor burrows with doors installed	• Establish buffer zones (250 ft around nests) • Establish buffer zones (160 ft around burrows)	pp. 6-39 to 6-41
☐ Giant garter snake	• Delineate aquatic habitat up to 200 ft from water's edge on each side • Document any occurrences	• Limit construction to Oct-May • Dewater habitat April 15 – Sep 30 prior to construction • Minimize clearing for construction	• Delineate 200 ft buffer around potential habitat near construction • Provide field report on monitoring efforts • Stop construction activities if snake is encountered; allow snake to passively relocate • Remove temporary fill or debris from construction site • Mandatory training for construction personnel	pp. 6-43 to 6-45
☒ California tiger salamander	• Provide written notification to USFWS and CDFW regarding timing of construction and likelihood of occurrence on site	• Allow agency staff to translocate species, if requested	• None	p. 6-45
☒ California red-legged frog	• Provide written notification to USFWS and CDFW regarding timing of construction and likelihood of occurrence on site	• Allow agency staff to translocate species, if requested	• None	p. 6-46
☐ Covered shrimp	• Establish presence/absence • Document and evaluate use of all habitat features (e.g. vernal pools, rock outcrops)	• Establish buffer near construction activities • Prohibit incompatible activities	• Establish buffer around outer edge of all hydric vegetation associated with habitat (50 ft or immediate watershed, whichever is larger) • Mandatory training for construction personnel	pp. 6-46 to 6-48
☐ Townsend's big-eared bat	• Establish presence/absence • Determine if potential sites were recently occupied (guano)	• Seal hibernacula before Nov • Seal nursery sites before April • Delay construction near occupied sites until hibernation or nursery seasons are over	• None	pp. 6-36 to 6-37
☒ Swainson's hawk	• Determine whether potential nests are occupied	• No construction within 1,000 ft of occupied nests within breeding season (March 15 - Sep 15) • If necessary, remove active nest tree after nesting season to prevent occupancy in second year.	• Establish 1,000 ft buffer around active nest and monitor compliance (no activity within established buffer)	pp. 6-41 to 6-43
☒ Golden Eagle	• Establish presence/absence of nesting eagles	• No construction within ½ mile near active nests (most activity late Jan – Aug)	• Establish ½ mile buffer around active nest and monitor compliance with buffer	pp. 6-38 to 6-39

[26] The requirements in this table are not comprehensive; they are detailed in the next section on the following page.

2) Required Preconstruction Surveys, Avoidance and Minimization, and Construction Monitoring

All preconstruction surveys shall be conducted in accordance with the requirements set forth in Section 6.4.3, Species-Level Measures, and Table 6-1 of the ECCC HCP/NCCP. Detailed descriptions of preconstruction surveys, avoidance and minimization, and construction monitoring applicable to each of the wildlife species in Table 3 are located below. Please remove the species-specific measures that do not apply to your project (highlight entire section and delete).

WESTERN BURROWING OWL

Preconstruction Surveys

Prior to any ground disturbance related to covered activities, a USFWS/CDFW- approved biologist will conduct a preconstruction survey in areas identified in the planning surveys as having potential burrowing owl habitat. The surveys will establish the presence or absence of western burrowing owl and/or habitat features and evaluate use by owls in accordance with CDFW survey guidelines (California Department of Fish and Game 1995).

On the parcel where the activity is proposed, the biologist will survey the proposed disturbance footprint and a 500-foot radius from the perimeter of the proposed footprint to identify burrows and owls. Adjacent parcels under different land ownership will not be surveyed. Surveys should take place near sunrise or sunset in accordance with CDFW guidelines. All burrows or burrowing owls will be identified and mapped. Surveys will take place no more than 30 days prior to construction. During the breeding season (February 1– August 31), surveys will document whether burrowing owls are nesting in or directly adjacent to disturbance areas. During the nonbreeding season (September 1–January 31), surveys will document whether burrowing owls are using habitat in or directly adjacent to any disturbance area. Survey results will be valid only for the season (breeding or nonbreeding) during which the survey is conducted.

Avoidance and Minimization and Construction Monitoring

This measure incorporates avoidance and minimization guidelines from CDFW's *Staff Report on Burrowing Owl Mitigation* (California Department of Fish and Game 1995).

If burrowing owls are found during the breeding season (February 1 – August 31), the project proponent will avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young. Avoidance will include establishment of a non-disturbance buffer zone (described below). Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the birds have not begun egg-laying and incubation or that the juveniles from the occupied burrows have fledged. During the nonbreeding season (September 1 – January 31), the project proponent should avoid the owls and the burrows they are using, if possible. Avoidance will include the establishment of a buffer zone (described below).

During the breeding season, buffer zones of at least 250 feet in which no construction activities can occur will be established around each occupied burrow (nest site). Buffer zones of 160 feet will be established around each burrow being used during the nonbreeding season. The buffers will be delineated by highly visible, temporary construction fencing.

If occupied burrows for burrowing owls are not avoided, passive relocation will be implemented. Owls should be excluded from burrows in the immediate impact zone and within a 160-foot buffer zone by installing one-way doors in burrow entrances. These doors should be in place for 48 hours prior to excavation. The project area should be monitored daily for 1 week to confirm that the owl has abandoned the burrow. Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation (California Department of Fish and Game 1995). Plastic tubing or a similar structure should be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.

CALIFORNIA TIGER SALAMANDER

Minimization

Written notification to USFWS, CDFW, and the Implementing Entity, including photos and breeding habitat assessment, is required prior to disturbance of any suitable breeding habitat. The project proponent will also notify these parties of the approximate date of removal of the breeding habitat at least 30 days prior to this removal to allow USFWS or CDFW staff to translocate individuals, if requested. USFWS or CDFW must notify the project proponent of their intent to translocate California tiger salamanders within 14 days of receiving notice from the project proponent. The applicant must allow USFWS or CDFW access to the site prior to construction if they request it.

There are no restrictions under this Plan on the nature of the disturbance or the date of the disturbance unless CDFW or USFWS notify the project proponent of their intent to translocate individuals within the required time period. In this case, the project proponent must coordinate the timing of disturbance of the breeding habitat to allow USFWS or CDFW to translocate the individuals. USFWS and CDFW shall be allowed 45 days to translocate individuals from the date the first written notification was submitted by the project proponent (or a longer period agreed to by the project proponent, USFWS, and CDFW).

CALIFORNIA RED-LEGGED FROG

Minimization

Written notification to USFWS, CDFW, and the Implementing Entity, including photos and habitat assessment, is required prior to disturbance of any suitable breeding habitat. The project proponent will also notify these parties of the approximate date of removal of the breeding habitat at least 30 days prior to this removal to allow USFWS or CDFW staff to translocate individuals, if requested. USFWS or CDFW must notify the project proponent of their intent to translocate California red-legged frog within 14 days of receiving notice from the project proponent. The applicant must allow USFWS or CDFW access to the site prior to construction if they request it.

There are no restrictions under this Plan on the nature of the disturbance or the date of the disturbance unless CDFW or USFWS notify the project proponent of their intent to translocate individuals within the required time period. In this case, the project proponent must coordinate the timing of disturbance of the breeding habitat to allow USFWS or CDFW to translocate the individuals. USFWS and CDFW shall be allowed 45 days to translocate individuals from the date the first written notification was submitted by the project proponent (or a longer period agreed to by the project proponent, USFWS, and CDFW).

SWAINSON'S HAWK

Preconstruction Survey

Prior to any ground disturbance related to covered activities that occurs during the nesting season (March 15–September 15), a qualified biologist will conduct a preconstruction survey no more than 1 month prior to construction to establish whether Swainson's hawk nests within 1,000 feet of the project site are occupied. If potentially occupied nests within 1,000 feet are off the project site, then their occupancy will be determined by observation from public roads or by observations of Swainson's hawk activity (e.g., foraging) near the project site. If nests are occupied, minimization measures and construction monitoring are required (see below).

Avoidance and Minimization and Construction Monitoring

During the nesting season (March 15–September 15), covered activities within 1,000 feet of occupied nests or nests under construction will be prohibited to prevent nest abandonment. If site-specific conditions or the nature of the covered activity (e.g., steep topography, dense vegetation, limited activities) indicate that a smaller buffer could be used, the Implementing Entity will coordinate with CDFW/USFWS to determine the appropriate buffer size.

If young fledge prior to September 15, covered activities can proceed normally. If the active nest site is shielded from view and noise from the project site by other development, topography, or other features, the project applicant can apply to the Implementing Entity for a waiver of this avoidance measure. Any waiver must also be approved by USFWS and CDFW. While the nest is occupied, activities outside the buffer can take place.

All active nest trees will be preserved on site, if feasible. Nest trees, including non-native trees, lost to covered activities will be mitigated by the project proponent according to the requirements below.

GOLDEN EAGLE

Preconstruction Survey

Prior to implementation of covered activities, a qualified biologist will conduct a preconstruction survey to establish whether nests of golden eagles are occupied (see Section 6.3.1, *Planning Surveys*). If nests are occupied, minimization requirements and construction monitoring will be required.

Avoidance and Minimization

Covered activities will be prohibited within 0.5 mile of active nests. Nests can be built and active at almost any time of the year, although mating and egg incubation occurs late January through August, with peak activity in March through July. If site-specific conditions or the nature of the covered activity (e.g., steep topography, dense vegetation, limited activities) indicate that a smaller buffer could be appropriate or that a larger buffer should be implemented, the Implementing Entity will coordinate with CDFW/USFWS to determine the appropriate buffer size.

Construction Monitoring

Construction monitoring will focus on ensuring that no covered activities occur within the buffer zone established around an active nest. Although no known golden eagle nest sites occur within or near the ULL, covered activities inside and outside of the Preserve System have the potential to disturb golden eagle nest sites. Construction monitoring will ensure that direct effects to golden eagles are minimized.

COVERED SHRIMP

A follow-up site visit will be performed by Sapere to reconfirm that the narrow strip of patchy grassland habitat between the railroad and the perimeter fence of the project parcel does not provide suitable covered shrimp habitat, as was determined during initial surveys performed on September 1, 2021. If suitable habitat (e.g. depressions in ruderal ground) is identified, the following surveys and measures will be implemented. Survey results will be provided to the Conservancy prior to construction initiation.

Preconstruction Survey

Prior to any ground disturbance related to covered activities, a USFWS-approved biologist will conduct a preconstruction survey in areas identified in the planning surveys as having suitable shrimp habitat. The surveys will establish the presence or absence of covered shrimp and/or habitat features and evaluate use by listed shrimp in accordance with modified USFWS survey guidelines (U.S. Fish and Wildlife Service 1996b). Project proponents are required to conduct USFWS protocol surveys in one year (rather than two) to determine presence or absence of listed shrimp species. If covered shrimp are absent from the site, there are no further requirements related to covered shrimp. If covered shrimp are present, the following avoidance and minimization and construction monitoring measures are required.

Avoidance and Minimization Requirements

To the maximum extent practicable, impacts on occupied habitat of covered shrimp will be avoided by implementing the following measures based on existing mitigation standards (U.S. Fish and Wildlife Service 1996a).

- If suitable habitat for covered shrimp will be retained on site, establish a buffer (described below) from the outer edge of all hydric vegetation associated with seasonal wetlands occupied by covered shrimp. Alternatively, at the request of the project proponent, representatives of the Implementing Entity and USFWS may conduct site visits to inspect the particular characteristics of specific project sites and may approve reductions of the buffer. Buffer reductions may be approved for all or portions of the site whenever reduced setbacks will maintain the hydrology of the seasonal wetland and achieve the same or greater habitat values as would be achieved by the original buffer.

- Activities inconsistent with the maintenance of seasonal wetlands within the buffers and disturbance of the onsite watershed will be prohibited. Inconsistent activities include altering existing topography; placing new structures within the buffers; dumping, burning, and/or burying garbage or any other wastes or fill materials; building new roads or trails; removing or disturbing existing native vegetation; installing storm drains; and using pesticides or other toxic chemicals.
- Filling of seasonal wetlands, if unavoidable, will be delayed until pools are dry and samples from the top 4 inches of wetland soils are collected. Soil collection will be sufficient to include a representative sample of plant and animal life present in the wetland by incorporating seeds, cysts, eggs, spores, and similar inocula. The amount of soil collected will be determined by the size of the wetland filled and the variation in physical and biological conditions within the wetland. The number and size of samples will be sufficient to capture this variation. For very small wetlands it may be most cost effective to simply collect all topsoil. These samples will be provided to the Implementing Entity so that the soil can be translocated to suitable habitat within the inventory area unoccupied by covered shrimp or used to inoculate newly created seasonal wetlands on preserve lands.
- Seasonal wetlands occupied by covered shrimp that are filled will be offset by preserving or acquiring seasonal wetlands occupied by the covered shrimp species and restoring habitat suitable for the covered shrimp species in accordance with Conservation Measure 3.8. Such mitigation will supercede requirements for mitigation of impacts on wetland habitat when covered species are present.

Construction Monitoring

If suitable habitat for covered shrimp will be retained on site, project proponents will establish a buffer from the outer edge of all hydric vegetation associated with seasonal wetlands occupied (or assumed to be occupied) by covered shrimp. This buffer zone will be determined in the field by the biologists as the immediate watershed feeding the seasonal wetland or a minimum of 50 feet, whichever is greater. Buffers will be marked by brightly colored fencing or flagging throughout the construction process. Activities will be prohibited within this buffer in accordance with the minimization measure above.

Construction personnel will be trained to avoid affecting shrimp. A qualified biologist approved by USFWS will inform all construction personnel about the life history of covered shrimp, the importance of avoiding their habitat, and the terms and conditions of the HCP/NCCP related to avoiding and minimizing impacts on covered shrimp.

3) Construction Monitoring Plan

Before implementing a covered activity, the applicant will develop and submit a construction monitoring plan to the planning department of the local land use jurisdiction and the East Contra Costa County Habitat Conservancy for review and approval. Elements of a brief construction monitoring plan will include the following:

- Results of planning and preconstruction surveys.[27]
- Description of avoidance and minimization measures to be implemented, including a description of project-specific refinements to the measures or additional measures not included in the HCP/NCCP.
- Description of monitoring activities, including monitoring frequency and duration, and specific activities to be monitored.
- Description of the onsite authority of the construction monitor to modify implementation of the activity.

☒ Check box to acknowledge this requirement.

[27] If the preconstruction surveys do not trigger construction monitoring, results of preconstruction surveys should still be submitted to the local jurisdiction and the East Contra Costa County Habitat Conservancy.

V. SPECIFIC CONDITIONS ON COVERED ACTIVITIES

1) Check off the HCP conservation measures that apply to the project.

APPLIES TO ALL PROJECTS

☒ **Conservation Measure 1.11. Avoid Direct Impacts on Extremely Rare Plants, Fully Protected Wildlife Species, or Migratory Birds.** This conservation measure applies to all projects. All projects will avoid all impacts on extremely rare plants and fully protected species listed in Table 6-5 of the ECCC HCP/NCCP. See HCP pp. 6-23 to 6-25, and Table 6-5.

APPLIES TO PROJECTS THAT IMPACT COVERED PLANT SPECIES

☐ **Conservation Measure 3.10. Plant Salvage when Impacts are Unavoidable.** This condition applies to projects that cannot avoid impacts on covered plants and help protect covered plants by prescribing salvage whenever avoidance of impacts is not feasible. Project proponents wishing to remove populations of covered plants must notify the Conservancy of their construction schedule to allow the Conservancy the option of salvaging the populations. See HCP pp. 6-48 to 6-50.

APPLIES TO PROJECTS THAT INCLUDE ARE ADJACENT TO STREAMS, PONDS, OR WETLANDS

☒ **Conservation Measure 2.12. Wetland, Pond, and Stream Avoidance and Minimization.** All projects will implement measures described in the HCP to avoid and minimize impacts on wetlands, ponds, streams, and riparian woodland/scrub. See HCP pp. 6-33 to 6-35.

APPLIES TO NEW DEVELOPMENT PROJECTS

☒ **Conservation Measure 1.10. Maintain Hydrologic Conditions and Minimize Erosion.** All new development must avoid or minimize direct and indirect impacts on local hydrological conditions and erosion by incorporating the applicable Provision C.3 Amendments of the Contra Costa County Clean Water Program's (CCCCWP's) amended NPDES Permit (order no. R2-2003-0022; permit no. CAS002912). The overall goal of this measure is to ensure that new development covered under the HCP has no or minimal adverse effects on downstream fisheries to avoid take of fish listed under ESA or CESA. See HCP pp. 6-21 to 6-22.

APPLIES TO NEW DEVELOPMENT PROJECTS THAT INCLUDE OR ARE ADJACENT TO STREAMS, PONDS, OR WETLANDS

☒ **Conservation Measure 1.7. Establish Stream Setbacks.** A stream setback will be applied to all development projects covered by the HCP according to the stream types listed in Table 6-2 of the HCP. See HCP pp. 6-15 to 6-18 and Table 6-2.

APPLIES TO NEW DEVELOPMENT PROJECTS ADJACENT TO EXISTING PUBLIC OPEN SPACE, HCP PRESERVES, OR LIKELY HCP ACQUISITION SITES

☐ **Conservation Measure 1.6. Minimize Development Footprint Adjacent to Open Space.** Project applicants are encouraged to minimize their development footprint and set aside portions of their land to contribute to the HCP Preserve System. Land set aside that contributes to the HCP biological goals and objectives may be credited against development fees. See HCP pages 6-14 to 6-15.

☐ **Conservation Measure 1.8. Establish Fuel Management Buffer to Protect Preserves and Property.** Buffer zones will provide a buffer between development and wildlands that allows adequate fuel management to minimize the risk of wildlife damage to property or to the preserve. The minimum buffer zone for new development is 100 feet. See HCP pages 6-18 to 6-19.

☐ **Conservation Measure 1.9. Incorporate Urban-Wildlife Interface Design Elements.** These projects will incorporate design elements at the urban-wildlife interface to minimize the indirect impacts of development on the adjacent preserve. See HCP pp. 6-20 to 6-21.

APPLIES TO ROAD MAINTENANCE PROJECTS OUTSIDE THE UDA

☐ **Conservation Measure 1.12. Implement Best Management Practices for Rural Road Maintenance.** Road maintenance activities have the potential to affect covered species by introducing sediment and other pollutants into downstream waterways, spreading invasive weeds, and disturbing breeding wildlife. In order to avoid and minimize these impacts, BMPs described in the HCP will be used where appropriate and feasible. See HCP pp. 6-25 to 6-26.

APPLIES TO NEW ROADS OR ROAD IMPROVEMENTS OUTSIDE THE UDA

☐ **Conservation Measure 1.14. Design Requirements for Covered Roads Outside the Urban Development Area (UDA).** New roads or road improvements outside the UDA have impacts on many covered species far beyond the direct impacts of their project footprints. To minimize the impacts of new, expanded, and improved roads in agricultural and natural areas of the inventory area, road and bridge construction projects will adopt siting, design, and construction requirements described in the HCP and listed in Table 6-6. See HCP pp. 6-27 to 6-33 and Table 6-6.

APPLIES TO FLOOD CONTROL MAINTENANCE ACTIVITIES

☐ **Conservation Measure 1.13. Implement Best Management Practices for Flood Control Facility Maintenance.** Flood control maintenance activities have the potential to affect covered species by introducing sediment and other pollutants into downstream waterways and disturbing breeding wildlife. In order to avoid and minimize these impacts, BMPs described in the HCP will be used where appropriate and feasible. See HCP pp. 6-26 to 6-27.

2) **For all checked conservation measures, describe how the project will comply with each measure. Attach as Attachment C: Project Compliance to HCP Conditions.**

VI. MITIGATION MEASURES

1) **Mitigation Fee Calculator(s)**
Complete and attach the fee calculator (use permanent and/or temporary impact fee calculator as appropriate), and attach as **Attachment D: Fee Calculator(s)**.

2) **Briefly describe the amount of fees to be paid and when applicant plans to submit payment.**

The project site is located in Development Fee Zone I. Implementation of the project will result in permanent impacts to 11.48 acres of habitat comprised of grassland, wetland (perennial, seasonal) ruderal and developed land cover types (Figure 6). No project activities will occur within 25 feet of, nor south and east of, the wetland within the perennial drainage; therefore, no additional wetland mitigation fees are to be paid. As shown in the attached 2021 fee calculator, a development fee of $202,073.26 is due for permanent impacts of 11.48 acres of land within Fee Zone I. If fees are not paid and construction is not initiated prior to release of the 2022 fee rates, fees will be paid based on the 2022 rates.

ATTACHMENT A: PROJECT DESCRIPTION

Project Location

The Bay Point Storage Yard Project is a proposed 11.48-acre parcel (APN 098-250-019) on Port Chicago Highway just south of the McAvoy Road intersection and adjacent to the railroad tracks.

Project Description

Redwood Property Investors (Redwood Properties), the owner of 44.72 acres inclusive of the project parcel and an adjacent parcel (APN 098-250-020), is proposing to develop APN 098-250-019 to be leased by Bigge Crane as a storage yard for their equipment. The project plan will include a lot line adjustment to expand APN 098-250-019 to include a portion of APN 098-250-020, thereby increasing the parcel size of APN 098-250-019 to 11.48 acres. The project impact area will be located entirely within the new APN 098-250-019; APN 098-250-020 will be developed at a later date. There will be a 25-foot setback from the existing unnamed perennial drainage (top of bank), and no activities will occur south or east of the drainage within the project parcel. The project parcel will be entirely in the 100-year floodplain, thus preventing any vertical development. Site development will include a temporary (movable) trailer to be used as a yard office. The site would be graded and the interior travel paths would be graveled to provide access throughout the site. A 6-foot fence would be installed at the site perimeter and the Port Chicago Highway frontage would be screened with a slatted fence and landscaped trees. The entry would be via an existing curb cut and have a 100' recessed gate to allow trucks to enter the site without blocking the road. No tree removals will be performed.

Improvements would include a 16,350 square foot storm water detention basin located at the east end of the parcel. Construction of the detention basin will include an outlet structure which will be connected to the existing manhole structure in the existing rail bridge culvert. The concrete culvert historically drains into the drainage ditch. The basin design includes a metering device that will release the clean runoff at a pre-development rate into the existing culvert. The existing drainage ditch is outside of the project footprint and will not be directly impacted by the proposed construction activity.

ATTACHMENT B: FIGURES

ATTACHMENT C: PROJECT COMPLIANCE TO HCP CONDITIONS

Conservation Measure 1.11. Avoid Direct Impacts on Extremely Rare Plants, Fully Protected Wildlife Species, or Migratory Birds.

As described in Section III(8), animal species listed as "covered" or "no-take" under the HCP which could be impacted by the proposed activities include burrowing owls, Swainson's hawk, golden eagles, migratory birds, California tiger salamander and California red-legged frog. The performance of the preconstruction surveys and the avoidance, minimization, monitoring, and mitigation measures outlined in Section IV.2, above, ensure that project implementation would prevent avoidable impacts to these species. These measures will extend to Fully Protected or migratory bird species not listed as "covered" or "no-take" under the HCP but which receive protection under the Migratory Bird Treaty Act and California Fish and Game Code sections 3511, 4700, 5050 and 5515. In the event that active nests are identified, CDFW will be contacted immediately to determine next steps which we expect will include establishing appropriate non-disturbance buffers, baseline monitoring of nesting bird behaviors performed prior to construction initiation, nest checks performed on a regular basis when work is occurring outside of the buffers, and nest monitoring when project activities occur within the buffers.

As described in Section III(10), no plant species listed as "covered" or "no-take" under the HCP are present within either of the work areas and none would be impacted by the proposed activities. Additionally, none of the "covered" and "no take" species has been recently documented in this lowland portion of the northwestern HCP/NCCP plan area. The project site was surveyed by a qualified botanist during the summer season. In order to fully demonstrate that covered and no-take plant species are absent from the project site, additional surveys will be performed in mid-April and late-May during the blooming period of covered plant species.

Conservation Measure 2.12. Wetland, Pond and Stream Avoidance Measures.

As described in Section III(4) and (5), wetlands are present adjacent to the project footprint. However, project implementation would not result in the placement of any fill into these features. All covered activities will implement the following measures to avoid and minimize impacts of covered activities on wetlands and streams.

- Impact avoidance has been incorporated into the project design. The proposed development area is shifted north to exclude the drainage.
- The 25-foot setback from the drainage top of bank will be staked in the field by the field biologist/botanist.
- High visibility ESA fencing will be erected at the 25-foot setback to prevent project creep.
- All construction personnel, including those conducting ground-disturbing activities within or adjacent to the drainage, will be trained by a qualified biologist in these avoidance and measures.
- Trash generated by covered activities will be promptly and properly removed from the site.
- No construction or maintenance vehicles will be refueled within 200 feet of the drainage unless a bermed and lined refueling area is constructed and hazardous material absorbent pads are available in the event of a spill.
- Appropriate erosion-control measures (e.g., fiber rolls, filter fences) will be used on site to reduce siltation and runoff of contaminants into the drainage. Filter fences and mesh will be of material that will not entrap reptiles and amphibians.
- Fiber rolls used for erosion control will be certified as free of noxious weed seed.

Conservation Measure 1.10. Maintain Hydrologic Conditions and Minimize Erosion

Project site development will avoid direct and indirect impacts on local hydrological conditions and erosion by incorporating the following applicable Provision C.3 Amendments of the Contra Costa County Clean Water Program's (CCCCWP's) amended NPDES Permit (order no. R2-2003-0022; permit no. CAS002912):

- The project will not result in the creation of impervious surfaces of 10,000ft^2 or greater. Impervious surfaces are limited to the approximate 720ft^2 roof of a moveable trailer positioned outside of the vicinity of the drainage channel. The remaining footprint will remain bare earth or graveled.
- Grading will be performed to maximize infiltration and slow runoff.
- The project will not result in post-project runoff exceeding pre-project levels, or discharges into the drainage channel.
- A 13,740 SF detention basin will be created at the easternmost section of the parcel to capture any surface water runoff from the proposed project. The project will ensure access for treatment measures by the Contra Costa Mosquito and Vector Control District staff.

Development will have no adverse effects on downstream fisheries.

Conservation Measure 1.7. Establish Stream Setbacks

A stream setback of 25 feet will be applied according to the stream types listed in Table 6-2 of the HCP.

ATTACHMENT D: FEE CALCULATOR(S)

ATTACHMENT E: WETLAND DELINEATION (if applicable)

Not Applicable