
Appendix E

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: Bridle Gate	
PROJECT TYPE: <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Transportation <input type="checkbox"/> Utility <input type="checkbox"/> Other	
PROJECT DESCRIPTION (BRIEF): The proposed project is development of 286 single family residential units, two parks, and open space, with access from the extension of Sand Creek Road. See detailed project description in Attachment A.	
PROJECT ADDRESS/LOCATION: The Study Area is located at the west end of Sand Creek Road, just west of State Highway 4 in Brentwood, Contra Costa County, California.	
PARCEL/PROJECT SIZE (ACRES): 135.31+/- acres (92.13+/- acre Bridle Gate site, 2.64+/- acres of land for the potential extension of Sand Creek Road, and 40.54+/- acres of lands to the north with no improvements)	
PROJECT APN(S): 019-082-009 & 019-082-010	
APPLICATION SUBMITTAL DATE: February 2023	FINAL PSR DATE: (City/County/Conservancy use)
LEAD PLANNER:	
JURISDICTION: <input checked="" type="checkbox"/> City of Brentwood <input type="checkbox"/> City of Clayton <input type="checkbox"/> City of Oakley <input type="checkbox"/> City of Pittsburg <input type="checkbox"/> Contra Costa County <input type="checkbox"/> 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: <input type="checkbox"/> Zone I <input checked="" type="checkbox"/> Zone II <input type="checkbox"/> Zone III <input type="checkbox"/> 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: Discovery Builders, Inc.	
AUTHORIZED AGENT'S NAME AND TITLE: Louis Parsons, Project Manager	
PHONE NO.: (925) 682-6419	APPLICANT'S E-MAIL: lp Parsons@discoverybuilders.com
MAILING ADDRESS: 4061 Port Chicago Highway, Concord, California 94520	

BIOLOGIST INFORMATION ¹	
BIOLOGICAL/ENVIRONMENTAL FIRM: Moore Biological Consultants	
CONTACT NAME AND TITLE: Diane S. Moore, M.S., Principal Biologist	
PHONE NO.: (209) 745-1159	CONTACT'S E-MAIL: moorebio@softcom.net
MAILING ADDRESS: 10330 Twin Cities Rd., Ste 30, Galt, CA 95632	

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
<input type="checkbox"/> Initial Study		
<input checked="" type="checkbox"/> Notice of Preparation	Filed	12/29/22
<input type="checkbox"/> Draft EIR		
<input type="checkbox"/> Final EIR		
<input type="checkbox"/> Notice of Categorical Exemption		
<input type="checkbox"/> Notice of Statutory Exemption		
<input checked="" type="checkbox"/> Revised EIR	In preparation	

III. EXISTING CONDITIONS AND IMPACTS

Please complete and/or provide the following attachments:

1) Field-Verified Land Cover Map²

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).

*Proposed for HCP/NCCP Dedication
on the Parcel
(Requires Conservancy Approval)*

Table 1: Land Cover Types and Impacts (92.13 acre “Bridle Gate Project Site”)

Land Cover Type	Permanent Impacts	Temporary Impacts	Stream Setback	Preserve System Dedication
<i>Grassland</i>				
Annual Grassland				
Alkali Grassland				
Ruderal	86.84 acres			
<i>Shrubland</i>				
Chaparral and Scrub				
<i>Woodland</i>				
Oak Savannah				
Oak Woodland				
<i>Riparian</i>				
Riparian Woodland/Scrub	0.70 acres			
<i>Wetland</i>				
Permanent Wetland				
Seasonal Wetland	4.588 acres (no impact)			
Alkali Wetland				
<i>Aquatic</i>				
Aquatic (Reservoir/Open Water)				
Slough/Channel				
Pond				
Stream (in linear feet)	512 feet (no impact)	-	-	-
<i>Irrigated Agriculture</i>				
Pasture				
Cropland				
Orchard				
Vineyard				
<i>Other</i>				
Nonnative woodland				
Wind turbines				
<i>Developed (not counted toward Fees)</i>				
Urban				
Aqueduct				
Turf				
Landfill				
TOTAL IMPACTS	92.13 acres			

Identify any uncommon vegetation and uncommon landscape features³:

Supplemental to Table 1: Uncommon Vegetation and Landscape Features

	Permanent Impacts	Temporary Impacts
<i>Uncommon Grassland Alliances</i>		
Purple Needlegrass Grassland		
Blue Wildrye Grassland		
Creeping Ryegrass Grassland		
Wildflower Fields		
Squirreltail Grassland		
One-sided Bluegrass Grassland		
Serpentine Bunchgrass Grassland		
Saltgrass Grassland		
Alkali Sacaton Bunchgrass Grassland		
<input type="checkbox"/> Other		
<i>Uncommon Landscape Features</i>		
Rock Outcrops		
Caves		
Springs and seeps		
Scalds		
Sand Deposits		
<input type="checkbox"/> Mines ⁴		
<input type="checkbox"/> Buildings (bat roosts) ³		
<input checked="" type="checkbox"/> Potential nest sites (trees or cliffs) ³		

There are 49 trees in the Bridle Gate project site. Several of these trees are large enough to support nesting raptors, and songbirds may use the trees in the Study Area for nesting. The Bridle Gate project will not involve tree removal.

Please provide details of impacts to stream features: None. The Bridle Gate project will not involve impacts to Sand Creek.

Stream Name: **Watershed:**

Supplemental to Table 1: Stream Feature Detail⁵

Stream Width	Stream Type ⁶	Permanent Impacts (linear feet) ⁷	Temporary Impacts (linear feet) ⁷
<input type="checkbox"/> ≤ 25 feet wide <input type="checkbox"/> > 25 feet wide	<input type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral, 3 rd or higher order <input type="checkbox"/> Ephemeral, 1 st or 2 nd order		
<input type="checkbox"/> ≤ 25 feet wide <input type="checkbox"/> > 25 feet wide	<input type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral, 3 rd or higher order <input type="checkbox"/> Ephemeral, 1 st or 2 nd order		
<input type="checkbox"/> ≤ 25 feet wide <input type="checkbox"/> > 25 feet wide	<input type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral, 3 rd or higher order <input type="checkbox"/> Ephemeral, 1 st or 2 nd order		

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.

Table 1a: Land Cover Types and Impacts (2.64 acre "Sand Creek Extension")

Land Cover Type	Permanent Impacts	Temporary Impacts	Stream Setback	Preserve System Dedication
<i>Grassland</i>				
Annual Grassland				
Alkali Grassland				
Ruderal	2.64 acres			
<i>Shrubland</i>				
Chaparral and Scrub				
<i>Woodland</i>				
Oak Savannah				
Oak Woodland				
<i>Riparian</i>				
Riparian Woodland/Scrub				
<i>Wetland</i>				
Permanent Wetland				
Seasonal Wetland				
Alkali Wetland				
<i>Aquatic</i>				
Aquatic (Reservoir/Open Water)				
Slough/Channel				
Pond				
Stream (in linear feet)	-	-	-	-
<i>Irrigated Agriculture</i>				
Pasture				
Cropland				
Orchard				
Vineyard				
<i>Other</i>				
Nonnative woodland				
Wind turbines				
<i>Developed (not counted toward Fees)</i>				
Urban				
Aqueduct				
Turf				
Landfill				
TOTAL IMPACTS	2.64 acres			

4) Summary of Land Cover Types

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

The 135.31+/- acre Study Area includes the 92.13+/-acre Bridle Gate project site and 2.64+/- acres of off-site lands for the extension of Sand Creek Road if the Bridle Gate project is developed in advance of the City's overall Sand Creek Road extension project. The Study Area also includes 40.54+/- acres of lands to the north; there will be no improvements in this 40.54+/- acre area.

Field surveys of the Study Area were conducted on April 1, 9, 16, and 30, 2020, and January 13, 2022.

During the past decade, the Study Area has been subject to substantial earth disturbance related to the construction of State Highway 4. The Study Area has also been farmed in hay crops for many years. Lands to the south of Sand Creek support ruderal grassland vegetation that is periodically disturbed by disking and farming winter wheat. The parcel to the north of Sand Creek also supports ruderal grassland vegetation that is periodically disturbed by disking; this area has also been farmed in winter wheat in recent years. There is a seasonal wetland swale in the west part of the Study Area that drains into Sand Creek. There are numerous

trees in the Sand Creek riparian corridor, a few trees in the field north of Sand Creek, and a few trees along Old Sand Creek Road.

Ruderal Grassland: The Study Area is vegetated with ruderal grassland vegetation that has been highly disturbed by agricultural use and ground disturbance related to highway construction (Figures 3 and 4a-4d). Grasslands in the Study Area have been graded and re-graded numerous times over the years, and are routinely disked. Dominant grass species in the Study Area include oats (*Avena fatua*), soft chess brome (*Bromus hordeaceus*), riggut brome (*Bromus diandrus*), and perennial ryegrass (*Lolium perenne*). Other grassland species such yellow star-thistle (*Centaurea solstitialis*), black mustard (*Brassica nigra*), yellow sweetclover (*Melilotus officinalis*), American vetch (*Vicia americana*), purple owl's clover (*Castilleja exserta*) and filaree (*Erodium* spp.) are intermixed with the grasses.

Riparian Woodland/Scrub: Sand Creek flows west to east through the Study Area, including through the northwest tip of the Bridle Gate site (Figures 3, 4d-f, and Wetland Delineation Map in Attachment E). Sand Creek is located in an incised corridor approximately 15 feet below the adjacent grasslands. Valley oak (*Quercus lobata*), California black walnut (*Juglans californica*), California buckeye (*Aesculus californica*), cottonwoods (*Populus fremontii*), almond (*Prunus dulcis*), and fan palm (*Washingtonia filifera*) are the dominant trees along Sand Creek. There are a few scattered elderberry (*Sambucus nigra* ssp. *caerulea*) shrubs and patches of wild rose (*Rosa californica*) along the banks of the stream. Cattails (*Typha* sp.), bulrush (*Schoenoplectus americanus*), water plantain (*Alisma trivale*), and curly dock (*Rumex crispus*) are dominant species in creekbed.

Seasonal Wetland: The seasonal wetland in the west part of the Bridle Gate site has also been routinely disked and is highly disturbed (Figures 3, 4g, and Wetland Delineation Map in Attachment E). Water drains into the Study Area from an off-site basin in the residential subdivision just south of the Study Area and drains through the seasonal wetland feature before draining into Sand Creek in the northwest part of the Study Area. The swale is saturated seasonally but surface water is present only during or shortly after rain events. Perennial ryegrass is the dominant species in the swale, with lesser amounts of Mediterranean barley (*Hordeum marinum*), as well as upland species such as Harding grass (*Phalaris aquatica*) and black mustard.

Trees: There are numerous trees along the Sand Creek riparian corridor and a few in and along the edges of the field north of Sand Creek (Figure 5a). Valley oak and almonds are the most dominant tree species, intermixed with lesser numbers of black walnut, California buckeye, willows (*Salix* spp.), toyon (*Heteromeles arbutifolia*), Fremont cottonwood, and a few ornamental tree species.

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:

<input type="checkbox"/> CWA Section 404 Permit ⁸	<input type="checkbox"/> CWA Section 401 Water Quality Certification
<input type="checkbox"/> Waste Discharge Requirements	<input type="checkbox"/> Lake and Streambed Alteration Agreement
- c) Provide any additional information on impacts to jurisdictional wetland and waters below, including status of the permit(s):

⁸ 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).

A wetland delineation of the Study Area was conducted on April 1, 2020 and April 16, 2020 and the mapped wetland boundaries were confirmed in the field on January 5, 2022. There is a total of 5.086+/- acres of potentially jurisdictional Waters of the U.S and Wetlands in the Study Area (see Wetland Delineation Map in Attachment E). This total includes a 4.588+/- acre seasonal wetland and 0.112+/- acres of stream in the Bridle Gate project site and an additional 0.386+/- acres of stream further east.

The project will not involve the placement of fill in in jurisdictional Waters of the U.S. The seasonal wetland swale will be fully avoided and will remain in open space. Sand Creek will be fully avoided by the Bridle Gate project, but will eventually be impacted by the City’s overall Sand Creek Road extension project.

6) 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 ⁹	Info in HCP
<input checked="" type="checkbox"/> Grasslands, oak savannah, agriculture, or ruderal	<input checked="" type="checkbox"/> 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
	<input checked="" type="checkbox"/> 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
<input checked="" type="checkbox"/> Aquatic (ponds, wetlands, streams, sloughs, channels, and marshes)	<input type="checkbox"/> Giant garter snake	Aquatic habitat accessible from the San Joaquin River	Identify and map potential habitat.	pp. 6-43 to 6-45
	<input type="checkbox"/> 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
	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
<input type="checkbox"/> Any	<input type="checkbox"/> 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
	<input checked="" type="checkbox"/> 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
	<input checked="" type="checkbox"/> 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.

⁹ 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) Planning Survey Species Habitat Maps

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

8) 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.

General Setting: The 135.31+/- acre Study Area is in Brentwood, in Contra Costa County, California (Figure 1). The Study Area is within Section 10 in Township 1 North, Range 2 East of the USGS 7.5-minute Brentwood topographic quadrangle. The Study Area is situated at elevations of approximately 130 to 220 feet above mean sea level.

Land uses in this portion of Brentwood are primarily residential and agricultural. Most of the natural habitats in the project vicinity are either intensively farmed or have been replaced with development. There is a relatively new subdivision to the south of the Study Area and commercial development to the east of the Study Area, across Highway 4. The fields to the north and west of the Study Area have been farmed in hay crops during the past few years.

San Joaquin Kit Fox: The Study Area is ruderal grassland that is within the range of San Joaquin kit fox (*Vulpes macrotis mutica*) (Figure 5a) and is mapped as "suitable core habitat" in the modeled range of the species as mapped in Appendix D of the ECCCHCP. The Study Area was inspected for burrows or dens with evidence of kit fox occupancy (i.e., scat, tracks) or burrows or dens that meet the dimensional criteria for kit fox. A search of the Study Area for potential San Joaquin kit fox dens was accomplished by driving and walking meandering transects throughout the property. While a few burrows were observed in the Study Area, they were too small and appeared to be used by ground squirrels. No dens with appropriate dimensions and/or evidence of San Joaquin kit fox were observed in the Study Area. The nearest occurrence of this species in California Department of Fish and Wildlife's California Natural Diversity Database (CNDDDB, 2023) is a record approximately 3 miles southwest of the Study Area.

Western Burrowing Owl: The Study Area is ruderal grassland (Figure 5a) that is within the range of western burrowing owl (*Athene cunicularia*). The Study Area and visible areas on adjacent lands were inspected for burrowing owls and ground squirrel burrows with evidence of burrowing owl occupancy (i.e., white wash, pellets, feathers). Comprehensive inspection of potential burrowing owl habitat was accomplished by walking and driving meandering transects throughout the property. No western burrowing owls were observed in the Study Area. No burrows with evidence of burrowing owl occupancy were observed. There are a few occurrences of burrowing owls in the CNDDDB (2023) within 500 feet of the Study Area and several other records within half of a mile from the Study Area (Figure 5b).

Swainson's Hawk: The Study Area is ruderal grassland along the extreme western edge of the range of Swainson's hawks (*Buteo swainsoni*). There are several potential nest trees along Sand Creek and in the field north of Sand Creek that may be utilized by Swainson's hawk for nesting (Figure 5a). No Swainson's hawks were observed perching or nesting in the trees within the Study Area or trees visible from the Study Area during the April 2020 field surveys. The grasslands in the Study Area may be used for foraging by Swainson's hawks.

The CNDDDB (2023) contains a 2007 record of a pair of Swainson's hawks nesting in a tree along Sand Creek in the Study Area, approximately 100 feet east of the Bridle Gate project site (Figure 5b). During the 2020 field surveys, a nest occupied by great-horned owls was observed in the same location along the creek. There are no other records of nesting Swainson's hawks within 1,000 feet of the Study Area.

Golden Eagle: The Study Area is ruderal grassland and is within the range of golden eagles (*Aquila chrysaetos*). There are a few potential nest trees for golden eagles in the Study Area along Sand Creek and in the field north of Sand Creek (Figure 5a). The nearest occurrence of this species in the CNDDDB (2023) is approximately 5 miles southeast of the Study Area; there are no records of nesting golden eagle within 0.5 miles of the Study Area. As described above, trees in and visible from the Study Area were inspected for raptor stick nests and only one was observed along Sand Creek, which was occupied by great-horned owls. No other

raptor stick nests were observed in the trees within the Study Area or trees visible from the Study Area. No golden eagles were observed during the 2020 or 2022 field surveys.

California Red-legged Frog: The Study Area is within the range of California red-legged frog (*Rana aurora draytonii*) and Sand Creek provides low quality, yet potentially suitable habitat for this species. The entire Study Area is “potential migration and aestivation habitat” in the modeled range of California red-legged frog as mapped in Appendix D of the ECCCHCP; Sand Creek and the seasonal wetland are mapped as potential breeding habitat for this species. California red-legged frog may travel across the grasslands in the Study Area while dispersing from aquatic habitats, but due to intensive disking, they would not be expected to aestivate in the Study Area. There are no notable plunge pools within Sand Creek providing highly suitable breeding habitat; most of the creek consists of shallow runs. The seasonal wetland does not provide suitable California red-legged frog breeding habitat. The nearest occurrence of California red-legged frog in the CNDDDB (2023) is a 2005 record approximately 1 mile southwest of the Study Area.

Other Covered Species: The 4.59-acre seasonal wetland (Figure 3) is not a vernal pool. The seasonal wetland swale has directional flow and is saturated seasonally, but surface water is present only during or shortly after rain events. This seasonal wetland feature is highly disturbed from periodic disking and hay farming. This seasonal wetland swale does not provide suitable habitat for vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardii*), or other special-status branchiopods. Due to its hydrological regime, the seasonal wetland does not provide suitable breeding habitat for California tiger salamander (*Ambystoma californiense*). Due to intensive disking, the grasslands in the Study Area are not suitable for California tiger salamander aestivation.

The site mapped in Appendix D of the ECCCHCP as “primary foraging habitat” for tricolored blackbird (*Agelaius tricolor*). The on-site grasslands may be used by this species for foraging. Vegetation in and adjacent to Sand Creek including patches of wild rose, bulrush, cattails, and willows could be used by tricolored blackbird for nesting.

9) 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 ECCCHCP/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 (<i>Navarretia nigelliformis</i> ssp. <i>radians</i>) ^a	C	Annual Grassland	Generally found on clay barrens in Annual Grassland ^b	Apr–Jun	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Alkali milkvetch (<i>Astragalus tener</i> ssp. <i>tener</i>)	N	Alkali grassland Alkali wetland Annual grassland Seasonal wetland	Generally found in vernal moist habitat in soils with a slight to strongly elevated pH	Mar–Jun	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Big tarplant (<i>Blepharizonia plumosa</i>)	C	Annual grassland	Elevation below 1500 feet ^d most often on Altamont Series or Complex soils	Jul–Oct	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Brewer’s dwarf flax (<i>Hesperolinon breweri</i>)	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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Brittlescale (<i>Atriplex depressa</i>)	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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Caper-fruited tropidocarpum (<i>Tropidocarpum capparideum</i>)	N	Alkali grassland		Mar–Apr	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Contra Costa goldfields (<i>Lasthenia conjugens</i>)	N	Alkali grassland Alkali wetland Annual grassland Seasonal wetland	Generally found in vernal pools	Mar–Jun	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Diablo Helianthella (<i>Helianthella castanea</i>)	C	Chaparral and scrub Oak savanna Oak woodland	Elevations generally above 650 feet ^d	Mar–Jun	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Diamond-petaled poppy (<i>Eschscholzia rhombipetala</i>)	N	Annual grassland		Mar–Apr	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Large-flowered fiddleneck (<i>Amsinckia grandiflora</i>)	N	Annual grassland	Generally on clay soil	Apr–May	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Mount Diablo buckwheat (<i>Eriogonum truncatum</i>)	N	Annual grassland Chaparral and scrub	Ecotone of grassland and chaparral/scrub	Apr–Sep	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Mount Diablo fairy-lantern (<i>Calochortus pulchellus</i>)	C	Annual grassland Chaparral and scrub Oak savanna Oak woodland	Elevations generally between 650 and 2,600 ^d	Apr–Jun	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Mount Diablo Manzanita (<i>Arctostaphylos auriculata</i>)	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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Recurved larkspur (<i>Delphinium recurvatum</i>)	C	Alkali grassland Alkali wetland		Mar–Jun	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Round-leaved filaree (<i>California macrophylla</i>) ^c	C	Annual grassland		Mar–May	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
San Joaquin spearscale (<i>Extriplex joaquiniana</i>) ^e	C	Alkali grassland Alkali wetland		Apr–Oct	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Showy madia (<i>Madia radiata</i>)	C	Annual grassland Oak savanna Oak woodland	Primarily occupies open grassland or grassland on edge of oak woodland	Mar–May	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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*”.

10) 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 CNDDDB 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

Initial surveys to assess potentially suitable habitat for special-status plants in the Study Area were undertaken almost a decade ago, on July 12, 2012 and February 8 and April 30, 2013.

Focused surveys for special-status plants and an updated assessment of the Study Area for potentially suitable habitat for special-status plants were undertaken on April 9 and April 30, 2020, by botanist Jeff Glazner. The Study Area was systematically searched for special-status plants by walking throughout the Study Area, identifying plants as possible in the field, and collecting specimens for subsequent identification in the laboratory. The field survey was floristic in nature with the goal of identifying species observed to the taxonomic level necessary to determine whether it was a special-status species.

A final survey was conducted on January 13, 2022 to confirm the suitability of the Study Area to support special-status plants has not changed since the 2020 surveys.

Survey Results and Discussion

No covered or no-take plants were observed or are expected to occur in the Study Area. The Study Area has been farmed in hay crops for over a decade and the ruderal grassland in the Study Area is highly disturbed and does not provide potentially suitable habitat for any of the covered plants that occur in more natural annual grasslands in the greater project vicinity. No alkaline soils are present in the Study Area. The seasonal wetland is also highly disturbed and provides very poor-quality habitat for covered plants that occur in seasonal wetland habitats (i.e., alkali milkvetch and Contra Costa Goldfields). Covered seasonal wetland plants are discussed below. For the sake of completeness, each of the plant species identified in Table 2b as potentially occurring in annual grassland habitats is also discussed below.

Alkali Milkvetch (*Astragalus tener ssp. tener*): Alkali milkvetch, a dicot of the Fabaceae family, is an annual herb native and endemic to California. It is ranked by the CNPS as 1B.2. It produces upright stems up to 30 cm tall with several lance-shaped to oval leaflets. The inflorescence is a dense cluster of pinkish-purple white-smudged flowers. The California Native Plant Society (CNPS) on-line *Inventory of Rare and Endangered Plants* (2023) describes alkali milkvetch as occurring in alkaline habitats of playas, and valley and foothill grasslands in adobe clay soils, and vernal pools, at elevations up to 197 feet. It grows in both coastal and inland areas. The CNPS Inventory also describes this species as extirpated in Contra Costa County. The ECCCHCP/NCCP does not contain a model predicting where this species may occur within the plan area. No alkaline soil is present in the Study Area, and the species was not detected during the rare plant surveys.

Contra Costa Goldfields (*Lasthenia conjugens*): Contra Costa goldfields, a dicot of the Asteraceae family, is an annual herb native and endemic to California, primarily in vernal pools. It is ranked by the CNPS as 1B.2. Stems are simple or freely branched and erect attaining a height of less than 40 cm. The yellow ray flowers may number six to thirteen petals, and the five to ten-millimeter ligules are yellow as well. The yellow disk flowers are numerous, and anther tips are linear to somewhat ovate. The CNPS on-line *Inventory of Rare and Endangered Plants* (2023) describes Contra Costa goldfields as occurring in mesic habitats of cismontane woodland, alkaline playas, valley and foothill grasslands, and vernal pools at elevations up to 1,541 feet. The Study Area falls within the known range of the species; the ECCCHCP/NCCP does not contain a model predicting where this species may occur within the plan area. There are no vernal pools in the Study Area and no suitable habitat for this species. It was not detected during the rare plant surveys.

Adobe (Shining) Navarretia (*Navarretia nigelliformis* ssp. *radians*)¹⁰: This navarretia, a dicot of the Polemoniaceae family, is an annual herb native to California. It is ranked by the CNPS as 1B.2. The herbage is light gray-green with branches decumbent. The corolla is included, nine to 11 mm long, with lobes one to two mm. The on-line *Inventory of Rare and Endangered Plants* (2023) describes shining navarretia as occurring in vernal pools and clay depressions, at elevations between 492 and 3,280 feet. The Study Area falls within the known range of the species; the ECCCHCP/NCCP does not contain a model predicting where this species may occur within the plan area. There are no vernal pools in the Study Area and other than the wetland swale, no mesic areas were observed in the Study Area. The species was not detected during the rare plant survey.

Big Tarplant (*Blepharizonia plumosa*): Big tarweed, a dicot of the Asteraceae family, is an annual herb native and endemic to California. It is ranked by the CNPS as 1B.1. This aromatic annual herb produces a hairy, erect stem up to two meters tall. The leaves are linear in shape and sometimes toothed. The inflorescence bears several flower heads, each with a fringe of up to 13 red-veined white ray florets. The CNPS on-line *Inventory of Rare and Endangered Plants* (2023) describes big tarplant as occurring in valley and foothill grassland habitats (usually clay) at elevations between 98 and 1,657 feet. It grows in the Central Coast Ranges and adjacent sections of the southern San Francisco Bay Area and Central Valley. The Study Area is mapped in the ECCCHCP/NCCP as both “Suitable” and “Suitable Low Potential Habitat”. The ruderal grasslands in the Study Area do not provide suitable habitat for big tarplant, and its likelihood of occurrence is extremely low.

Brewer’s Dwarf Flax (*Hesperolinon breweri*): Brewer’s dwarf flax, a dicot of the Linaceae family, is an annual herb native and endemic to California, where it is known from three counties in the San Francisco Bay Area. It is ranked by the CNPS as 1B.2. It grows erect to a height of five to 20 cm. Its narrow, linear leaves are greenish to purplish in color, and it produces dense inflorescences of flowers with glandular sepals and five bright yellow petals. The CNPS on-line *Inventory of Rare and Endangered Plants* (2023) describes Brewer’s dwarf flax as occurring in chaparral, cismontane woodland, and valley and foothill grasslands, usually in serpentinite soils, at elevations between 295 and 2,953 feet. The Study Area is not mapped in the ECCCHCP/NCCP as “Suitable Low Potential Habitat” or as “Suitable Habitat” for Brewer’s dwarf flax. No serpentinite is present in the Study Area. The ruderal grasslands in the Study Area do not provide suitable habitat for Brewer’s dwarf flax, and it was not detected during the rare plant surveys.

Brittlescale (*Atriplex depressa*): Brittlescale, a dicot, is an annual herb of the Chenopodiaceae family that is native and endemic to California. It is ranked by the CNPS as 1B.2. Brittlescale occurs on alkali soils and typically occurs in barren areas within alkali grassland, alkali meadow, and alkali scrub. The CNPS states that the species occurs in alkaline and clay soils of chenopod scrub, meadows and seeps, playas, valley and foothill grassland and vernal pools. It is occasionally found on the margins of alkali vernal pools. Brittlescale occurs along the western side of the Great Valley from Glenn County to Merced County and in the small valleys of the inner Coast Ranges, including the Livermore Valley. It occurs in the broad flood basins of the valley floor and on alluvial fans associated with the major streams draining from the inner Coast Range foothills. It is generally found at low elevations but has been collected up to 1,055 feet. Brittlescale is diminutive and generally grows prostrate; it rarely exceeds 20 centimeters in height. It blooms from April to October. The Study Area is not mapped in the ECCCHCP/NCCP as “Suitable Habitat” for brittlescale, no alkaline soil is present in the Study Area, and the species was not detected during the rare plant surveys.

Caper-fruited tropidocarpum (*Tropidocarpum capparideum*): Caper-fruited tropidocarpum is an annual herb in the Brassicaceae (mustard) family that is native to California. It is ranked by the CNPS as 1B.1. It occurs in alkaline soils of low hills and Valley and foothill grassland at elevation less than 1,312 feet. The species was generally considered to be extinct since the 1950s, but it has been reported since. According to CNPS, occurrences in Alameda, Contra Costa, Glenn, Santa Clara, and San Joaquin counties are presumed extirpated. Flowers are obovate to spoon-shaped, yellow, occasionally tinged purple, and the bloom period is from March to April. Habitat distribution has not been modeled for caper-fruited tropidocarpum in the ECCCHCP/NCCP. No alkaline soil is present in the Study Area, and the species was not detected during the rare plant surveys.

¹⁰ Per Table 2B, 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*.

Diablo helianthella (*Helianthella castanea*): Diablo helianthella, a dicot, is a perennial herb of the sunflower family (Asteraceae) that is native to California and endemic to the San Francisco Bay Area, occurring in the Diablo Range, Berkeley Hills, and San Bruno Mountain. It is ranked by the CNPS as 1B.2. It usually occurs in thin, rocky, well-drained soils, often in partial shade. According to CNPS, its habitats include broadleaved upland forest, chaparral, cismontane and riparian woodland, coastal scrub, and valley and foothill grassland. It most often occurs at elevations below 2,400 feet but it has been collected from locations as high as 3,800 feet. Diablo helianthella grows up to 18 inches tall. Its leaves are up to six inches long. The plant usually produces one yellow flower head per stem. Each head contains both ray flowers and disc flowers. It blooms from March to June. The ECCCHCP/NCCP contains a model predicting where this species may occur within the plan area. However, the Study Area is located well north of areas deemed “Suitable Habitat” for the species, and Diablo helianthella was not detected during the rare plant surveys.

Diamond-petaled poppy (*Eschscholzia rhombipetala*): Diamond-petaled poppy, a dicot of the Papaveraceae family, is an annual herb native and endemic to California, growing 5-30 cm. tall. It is ranked by the CNPS as 1B.1. Diamond-petaled California poppy may have erect or nodding buds, the flowers are small and yellow, and the bases of the leaves are fleshy. The fruits are conspicuous because they are four to seven cm. long, which may nearly equal the height of the plants. The CNPS on-line *Inventory of Rare and Endangered Plants (2023)* describes diamond-petaled poppy as occurring in valley and foothill grassland habitats with alkaline or clay soils, at elevations up to 3,198 feet; the CNPS Inventory describes this species as extirpated in Contra Costa County. The Study Area falls within the known range of the species; the ECCCHCP/NCCP does not contain a model predicting where this species may occur within the plan area. No areas of alkaline or clay soils were observed in the Study Area. The ruderal grasslands in the Study Area do not provide suitable habitat for diamond-petaled poppy and it was not detected during the rare plant surveys.

Large-flowered fiddleneck (*Amsinckia grandiflora*): Large-flowered fiddleneck, a dicot of the Boraginaceae family, is an annual herb native and endemic to California. It is ranked by the CNPS as 1B.1. It is a striking annual plant, growing to 50 cm. tall and having bright orange flowers (14-20 mm. long). The CNPS on-line *Inventory of Rare and Endangered Plants (2023)* describes large-flowered fiddleneck as occurring in cismontane woodland and valley and foothill grassland habitats at elevations between 902 and 1,804 feet. The Study Area falls within the known range of the species; the ECCCHCP/NCCP does not contain a model predicting where this species may occur within the plan area. While the ruderal grassland in the Study Area may provide potentially suitable habitat for large-flowered fiddleneck, The Study Area is below the elevation range of this species, and this species was not detected during the rare plant surveys.

Mount Diablo buckwheat (*Eriogonum truncatum*): Mount Diablo buckwheat, a dicot of the Polygonaceae family, is an annual herb native and endemic to California, known only from Mt. Diablo in Contra Costa County. It is ranked by the CNPS as 1B.1. It grows between 150–750 millimeters high and blooms with several dozen pinkish flowers, having a maroon line down the center of each petal. The CNPS on-line *Inventory of Rare and Endangered Plants (2023)* describes Mount Diablo buckwheat as occurring in sandy soils of chaparral, coastal scrub, and valley and foothill grassland habitats, at elevations between ten and 1,148 feet. The Study Area falls within the known range of the species; the ECCCHCP/NCCP does not contain a model predicting where this species may occur within the plan area. No areas of sandy soils were observed in the Study Area. The ruderal grasslands in the Study Area do not provide suitable habitat for Mount Diablo buckwheat, and it was not detected during the rare plant surveys.

Mount Diablo fairy-lantern (*Calochortus pulchellus*): Mount Diablo fairy-lantern, a monocot of the Liliaceae family, is a perennial herb (bulb) that is native and endemic to California. It is ranked by the CNPS as 1B.2. It grows a branching stem up to about 30 cm. tall. The basal leaf is up to 40 cm. long, and does not wither at flowering. The inflorescence is a solitary flower or a cluster of several flowers, which are nodding and usually spherical with all their petal tips touching. The three sepals and three petals are two or three cm long and pale to deep yellow. The CNPS on-line *Inventory of Rare and Endangered Plants (2023)* describes Mount Diablo fairy-lantern as occurring in chaparral, cismontane or riparian woodland, and valley and foothill grassland habitats at elevations between 98 and 2,756 feet. In contrast, the ECCCHCP/NCCP describes this species as occurring at elevations between 650 and 2,600 feet. The Study Area is not mapped in the ECCCHCP/NCCP as “Suitable Habitat”. The ruderal grasslands in the Study Area do not provide suitable habitat for Mount Diablo fairy-lantern, and it was not detected during the rare plant surveys.

Mount Diablo manzanita (*Arctostaphylos auriculata*): Mount Diablo manzanita, a dicot, is an evergreen shrub that is native and endemic to Contra Costa County, California. It is ranked by the CNPS as 1B.3. Mount Diablo manzanita occurs primarily in chaparral (sandstone) and cismontane woodland. It can be found as an understory shrub in coast live oak woodland. It is found only on Mount Diablo and in the adjacent foothills, between 700 and 1,860 feet. Mount Diablo manzanita is generally between one and 4.5 meters tall with serpentine, glandless stems covered in white hair. The short, silvery leaves overlap and have deeply lobed bases. It flowers densely in white. The Mount Diablo Manzanita has no basal burl for regrowth and must propagate by seed. While its bloom period is from January to March, this evergreen shrub can be identified at any time of the year. The Study Area is not mapped in the ECCCHCP/NCCP as “Suitable Habitat” for Mount Diablo manzanita; furthermore, the study area is below the reported range for this species, and it was not detected during the rare plant surveys.

Recurved larkspur (*Delphinium recurvatum*): Recurved larkspur, a perennial herb, is a member of the buttercup family (Ranunculaceae) that is native and endemic to California. It is ranked by the CNPS as 1B.2. Recurved larkspur occurs on alkaline soils in chenopod scrub, cismontane woodland, and valley and foothill grasslands ranging in elevation from 328 to 6,562 feet. The species now appears to be very rare outside the southern San Joaquin Valley. Four occurrences are reported from the inventory area, three of which are on private land southeast of Byron. (East Contra Costa County HCP). This species reaches a maximum height of about half a meter. Its deeply lobed leaves are mainly basal, with those located further up the dark purple stem being much smaller. The flowers are generally pale blue, with the sepals and lower petals darker than the upper petals. The sepals are usually curved back, the trait which gives the plant its name. It blooms from March to June. No alkaline soils are present in the Study Area, and the Study Area is located below the elevational range of the species. In addition, the Study Area is not mapped in the ECCCHCP/NCCP as “Suitable Habitat” for recurved larkspur, and the species was not detected during the rare plant surveys.

Round-leaved filaree (*California macrophylla*): Round-leaved filaree, a dicot of the Geraniaceae family, is an annual herb native to California. It is ranked by the CNPS as CBR (Considered but Rejected) (CNPS 2023). It grows only a few centimeters high, forming a patch of slightly lobed, somewhat kidney-shaped to rounded leaves on long, slender petioles. The inflorescence is an umbel of flowers with petals around a centimeter long and white in color, often tinted pinkish or purplish. The fruit has a fuzzy base and a long, narrow style which may reach five cm. in length. The 2016 version of the CNPS on-line *Inventory of Rare and Endangered Plants* described round-leaved filaree as blooming from March through May and occurring in annual grassland habitats with clay soils, at elevations between 49 and 3,937 feet. The 2023 version of the *Inventory* provides no description of the species. Portions of the northern and eastern edges of the Study Area are mapped in the ECCCHCP/NCCP as “Secondary Habitat”. The ruderal grasslands in the Study Area do not provide suitable habitat for round-leaved filaree, and it was not detected during the rare plant surveys.

San Joaquin spearscale (*Atriplex joaquiniana*): San Joaquin spearscale, a dicot, is an annual herb of the Chenopodiaceae family that is native and endemic to California. It is ranked by the CNPS as 1B.2. San Joaquin spearscale typically occurs in alkaline soils of chenopod scrub, meadows and seeps, playas and valley and foothill grassland. San Joaquin spearscale occurs along the western side of the Great Valley from Glenn County to Merced County and in the small valleys of the inner Coast Ranges, including the Livermore Valley. It occurs in the broad flood basins of the valley floor and on alluvial fans associated with the major streams draining from the inner Coast Range foothills. It is generally found at low elevations but has been collected up to 1,055 feet. It is an annual herb between one and three feet tall, blooming from April to October. According to the ECCCHCP/NCCP, “a species distribution model was developed that had the same assumptions as the model developed for brittlescale (all alkali grasslands and alkali wetlands on soils of the Pescadero or Solano soil series). Many occurrences, however, fell outside of the modeled habitat. Comparison with detailed mapping of San Joaquin spearscale populations in the Los Vaqueros Watershed (Jones & Stokes Associates 1989) showed that this species is not restricted to soils of the Solano and Pescadero soil series. Other soil series on which the species was found were too widespread to provide a useful prediction of the species’ distribution in the inventory area. Therefore, the original species model was discarded.” No alkaline soils are present in the Study Area, and San Joaquin spearscale was not detected during the rare plant surveys.

Showy madia (*Madia radiata*): Showy madia, a dicot of the Asteraceae family, is an annual herb native to California, mostly from the Central Coast Ranges and adjacent edges of the San Francisco Bay Area and Central Valley. It is ranked by the CNPS as 1B.1. It grows upright ten to 90 cm. tall, the stem often branching and coated

in bulbous resin glands. The bristly, glandular leaves are up to 10 cm. long, often wider at the top of the plant than below. The inflorescence produces flower heads lined with hairy, gland-studded phyllaries. The head has golden yellow ray florets up to almost two cm, long and a center filled with many disc florets. The CNPS on-line *Inventory of Rare and Endangered Plants* (2023) describes showy madia as blooming from March through May, and occurring in cismontane woodland and valley and foothill grassland habitats at elevations between 82 and 2,953 feet. The Inventory also describes this species as extirpated in Contra Costa County. The Study Area falls within the known range of the species; the ECCCHCP/NCCP does not contain a model predicting where this species may occur within the plan area. The ruderal grasslands in the Study Area do not provide suitable habitat for showy madia, and it was not detected during the rare plant surveys.

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 Requirements¹¹

Species	Preconstruction Survey Requirements	Avoidance and Minimization Requirements	Construction Monitoring Required	Info in HCP
<input checked="" type="checkbox"/> San Joaquin kit fox	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Monitor dens Destroy unoccupied dens Discourage use of occupied (non-natal) dens 	<ul style="list-style-type: none"> 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
<input checked="" type="checkbox"/> Western burrowing owl	<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Establish buffer zones (250 ft around nests) Establish buffer zones (160 ft around burrows) 	pp. 6-39 to 6-41
<input type="checkbox"/> Giant garter snake	<ul style="list-style-type: none"> Delineate aquatic habitat up to 200 ft from water’s edge on each side Document any occurrences 	<ul style="list-style-type: none"> Limit construction to Oct-May Dewater habitat April 15 – Sep 30 prior to construction Minimize clearing for construction 	<ul style="list-style-type: none"> 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
<input type="checkbox"/> California tiger salamander	<ul style="list-style-type: none"> Provide written notification to USFWS and CDFW regarding timing of construction and likelihood of occurrence on site 	<ul style="list-style-type: none"> Allow agency staff to translocate species, if requested 	<ul style="list-style-type: none"> None 	p. 6-45
<input checked="" type="checkbox"/> California red-legged frog	<ul style="list-style-type: none"> Provide written notification to USFWS and CDFW regarding timing of construction and likelihood of occurrence on site 	<ul style="list-style-type: none"> Allow agency staff to translocate species, if requested 	<ul style="list-style-type: none"> None 	p. 6-46
<input type="checkbox"/> Covered shrimp	<ul style="list-style-type: none"> Establish presence/absence Document and evaluate use of all habitat features (e.g. vernal pools, rock outcrops) 	<ul style="list-style-type: none"> Establish buffer near construction activities Prohibit incompatible activities 	<ul style="list-style-type: none"> 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

¹¹ The requirements in this table are not comprehensive; they are detailed in the next section on the following page.

<input type="checkbox"/> Townsend's big-eared bat	<ul style="list-style-type: none"> Establish presence/absence Determine if potential sites were recently occupied (guano) 	<ul style="list-style-type: none"> Seal hibernacula before Nov Seal nursery sites before April Delay construction near occupied sites until hibernation or nursery seasons are over 	<ul style="list-style-type: none"> None 	pp. 6-36 to 6-37
<input checked="" type="checkbox"/> Swainson's hawk	<ul style="list-style-type: none"> Determine whether potential nests are occupied 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Establish 1,000 ft buffer around active nest and monitor compliance (no activity within established buffer) 	pp. 6-41 to 6-43
<input checked="" type="checkbox"/> Golden Eagle	<ul style="list-style-type: none"> Establish presence/absence of nesting eagles 	<ul style="list-style-type: none"> No construction within ½ mile near active nests (most activity late Jan – Aug) 	<ul style="list-style-type: none"> Establish ½ mile buffer around active nest and monitor compliance with buffer 	pp. 6-38 to 6-39

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).

SAN JOAQUIN KIT FOX

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 supporting suitable breeding or denning habitat for San Joaquin kit fox. The surveys will establish the presence or absence of San Joaquin kit foxes and/or suitable dens and evaluate use by kit foxes in accordance with USFWS survey guidelines (U.S. Fish and Wildlife Service 1999). Preconstruction surveys will be conducted within 30 days of ground disturbance. On the parcel where the activity is proposed, the biologist will survey the proposed disturbance footprint and a 250-foot radius from the perimeter of the proposed footprint to identify San Joaquin kit foxes and/or suitable dens. Adjacent parcels under different land ownership will not be surveyed. The status of all dens will be determined and mapped. Written results of preconstruction surveys will be submitted to USFWS within five working days after survey completion and before the start of ground disturbance. Concurrence is not required prior to initiation of covered activities.

If San Joaquin kit foxes and/or suitable dens are identified in the survey area, the measures described below will be implemented.

Avoidance and Minimization Requirements

- If a San Joaquin kit fox den is discovered in the proposed development footprint, the den will be monitored for three days by a USFWS/CDFW– approved biologist using a tracking medium or an infrared beam camera to determine if the den is currently being used.
- Unoccupied dens should be destroyed immediately to prevent subsequent use.
- If a natal or pupping den is found, USFWS and CDFW will be notified immediately. The den will not be destroyed until the pups and adults have vacated and then only after further consultation with USFWS and CDFW.
- If kit fox activity is observed at the den during the initial monitoring period, the den will be monitored for an additional five consecutive days from the time of the first observation to allow any resident animals to move to another den while den use is actively discouraged. For dens other than natal or pupping dens, use of the den can be discouraged by partially plugging the entrance with soil such that any resident animal can easily escape. Once the den is determined to be unoccupied it may be excavated under the direction of the biologist. Alternatively, if the animal is still present after five or more consecutive days of plugging and monitoring, the den may have to be excavated when, in the judgment of a biologist, it is temporarily vacant (i.e., during the animal's normal foraging activities).

Construction Monitoring

If dens are identified in the survey area outside the proposed disturbance footprint, exclusion zones around each den entrance or cluster of entrances will be demarcated. The configuration of exclusion zones should be circular, with a radius measured outward from the den entrance(s). No covered activities will occur within the exclusion zones. Exclusion zone radii for potential dens will be at least 50 feet and will be demarcated with four to five flagged stakes. Exclusion zone radii for known dens will be at least 100 feet and will be demarcated with staking and flagging that encircles each den or cluster of dens but does not prevent access to the den by kit fox.

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 one 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 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 one 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.

Mitigation for Loss of Nest Trees

The loss of non-riparian Swainson's hawk nest trees will be mitigated by the project proponent by:

- If feasible on-site, planting 15 saplings for every tree lost with the objective of having at least five mature trees established for every tree lost according to the requirements listed below.

AND either

- 1) Pay the Implementing Entity an additional fee to purchase, plant, maintain, and monitor 15 saplings on the HCP/NCCP Preserve System for every tree lost according to the requirements listed below, OR
- 2) The project proponent will plant, maintain, and monitor 15 saplings for every tree lost at a site to be approved by the Implementing Entity (e.g., within an HCP/NCCP Preserve or existing open space linked to HCP/NCCP preserves), according to the requirements listed below.

The following requirements will be met for all planting options:

- Tree survival shall be monitored at least annually for five years, then every other year until year 12. All trees lost during the first five years will be replaced. Success will be reached at the end of 12 years if at least five trees per tree lost survive without supplemental irrigation or protection from herbivory. Trees must also survive for at least three years without irrigation.
- Irrigation and fencing to protect from deer and other herbivores may be needed for the first several years to ensure maximum tree survival.
- Native trees suitable for this site should be planted. When site conditions permit, a variety of native trees will be planted for each tree lost to provide trees with different growth rates, maturation, and life span, and to provide a variety of tree canopy structures for Swainson's hawk. This variety will help to ensure that nest trees will be available in the short term (five to ten years for cottonwoods and willows) and in the long term (e.g., Valley oak, sycamore). This will also minimize the temporal loss of nest trees.
- Riparian woodland restoration conducted as a result of covered activities (i.e., loss of riparian woodland) can be used to offset the nest tree planting requirement above, if the nest trees are riparian species.
- Whenever feasible and when site conditions permit, trees should be planted in clumps together or with existing trees to provide larger areas of suitable nesting habitat and to create a natural buffer between nest trees and adjacent development (if plantings occur on the development site).
- Whenever feasible, plantings in the Study Area should occur closest to suitable foraging habitat outside the UDA.
- Trees planted in the HCP/NCCP preserves or other approved offsite location will occur within the known range of Swainson's hawk in the inventory area and as close as possible to high-quality foraging habitat.

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.

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.¹²
- 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.

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.

¹² 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.

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 Developer, the City, and the East Contra Costa County Habitat Conservancy entered into a Multi-Party Mitigation and Land Dedication In-Lieu of Development Fee Agreement dated August 26, 2019 (“Mitigation Agreement”) in which Developer will pay an adjusted HCP development fee and dedicate that certain real property referred to therein as the Nortonville Strip, Britton Property, and Britton Adjacent Property upon mutually agreed terms and provisions.

On December 12, 2019, the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife issued a joint letter approving use of the Mitigation Agreement for the Bridle Gate project. The adjusted fee for the Bridle Gate project is \$3,156,002.00.

Construction is expected to commence in late-2023 or early-2024. Fees will be paid in accordance with the Multi-Party Mitigation and Land Dedication In-Lieu of Development Fee Agreement.

ATTACHMENT A: PROJECT DESCRIPTION

Bridle Gate Project Description

February 2023

The 135.31+/- acre Bridle Gate Tentative Map site is in Brentwood, Contra Costa County, California. The site is within Section 10, in Township 1 North, Range 2 East of the USGS 7.5-minute Brentwood topographic quadrangle (Figure 1). The site is at the west end of Sand Creek Road, just west of Highway 4. Sand Creek flows meanders from west to east across the north part of the site.

The 135.31+/- acre Bridle Gate Tentative Map site includes the 92.13+/-acre Bridle Gate project site and 2.64+/- acres of off-site lands for the extension of Sand Creek Road if the Bridle Gate project is developed in advance of the City's overall Sand Creek Road extension project. The Study Area also includes 40.54+/- acres of lands to the north; there will be no improvements in this 40.54+/- acre area.

Discovery Builders, Inc., proposes the development of 286 single-family residential units in the Bridle Gate project site, each with a home and ancillary services (Figure 2a and 2b). Approximately 20 acres of land in the northeast part of the site will be developed for commercial uses. Approximate 14 acres north of Sand Creek is for multi-family development of 258 apartments (Figure 2c). The Bridle Gate project includes over 14 acres of parks and approximately 25 acres of land in the west part of the Bridle Gate project site will remain in open space.

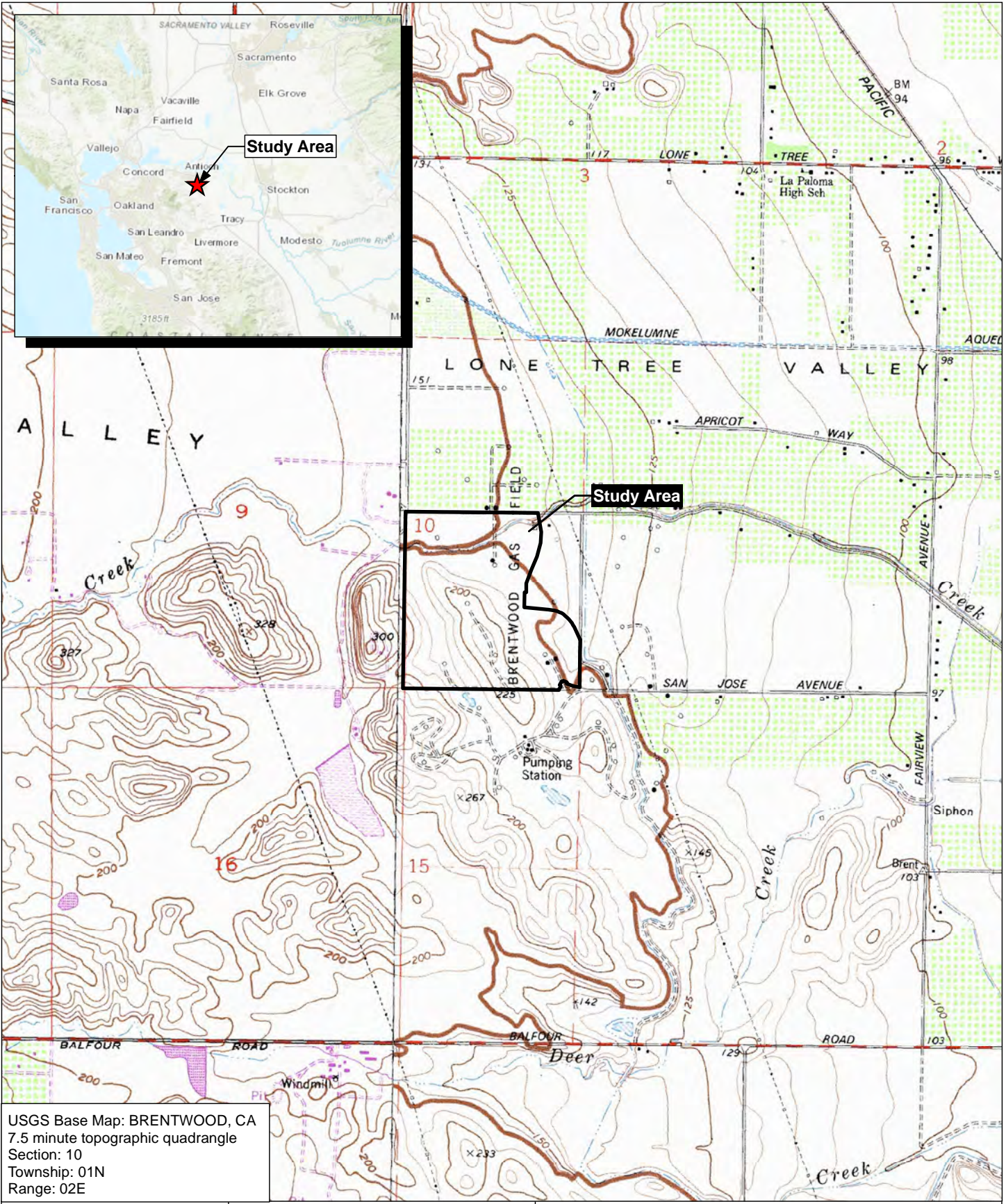
Access to the southeast part of the Bridle Gate project site will be from San Jose Drive and Saint Regis Avenue. Sand Creek Road will be extended approximately 800 feet west to provide access to the north part of the site via Bridle Gate Road. Dependent on which project goes first, the City of Brentwood may construct this section of Sand Creek Road concurrent with their overall "Sand Creek Road Extension" project.

Storm water from the Bridle Gate project site will be conveyed in to several C.3 treatment basins, where it will be treated before being discharged into Sand Creek via existing storm drain outfalls. The new lots will tie into the City's existing sewer and water system.

Standard construction best management practices (BMPs) will be employed during construction to minimize the potential for erosion and off-site transport of fines. BMPs will include use of water trucks, appropriate compaction of soil, and installation of straw wattles, silt fences or other technologies along the perimeter of the site during construction, and stabilization of bare soils as appropriate with seeding, straw, and/or hydrolmulch.

Construction is expected to begin in late-2023 or early-2024 and is expected to continue approximately 2 years.

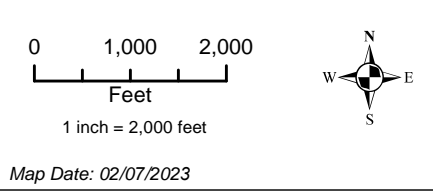
ATTACHMENT B: FIGURES



USGS Base Map: BRENTWOOD, CA
 7.5 minute topographic quadrangle
 Section: 10
 Township: 01N
 Range: 02E

Figure 1

Moore Biological
 Consultants



Site Map/USGS

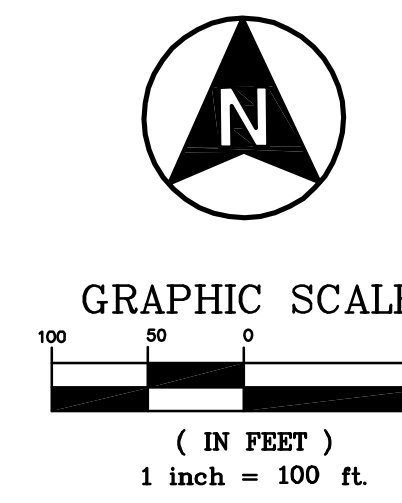
Bridle Gate

City of Brentwood, Contra Costa County, CA

VESTING TENTATIVE MAP

"BRIDLE GATE" SUBDIVISION 9586

CITY OF BRENTWOOD
COUNTY OF CONTRA COSTA
STATE OF CALIFORNIA



OWNER/DEVELOPER

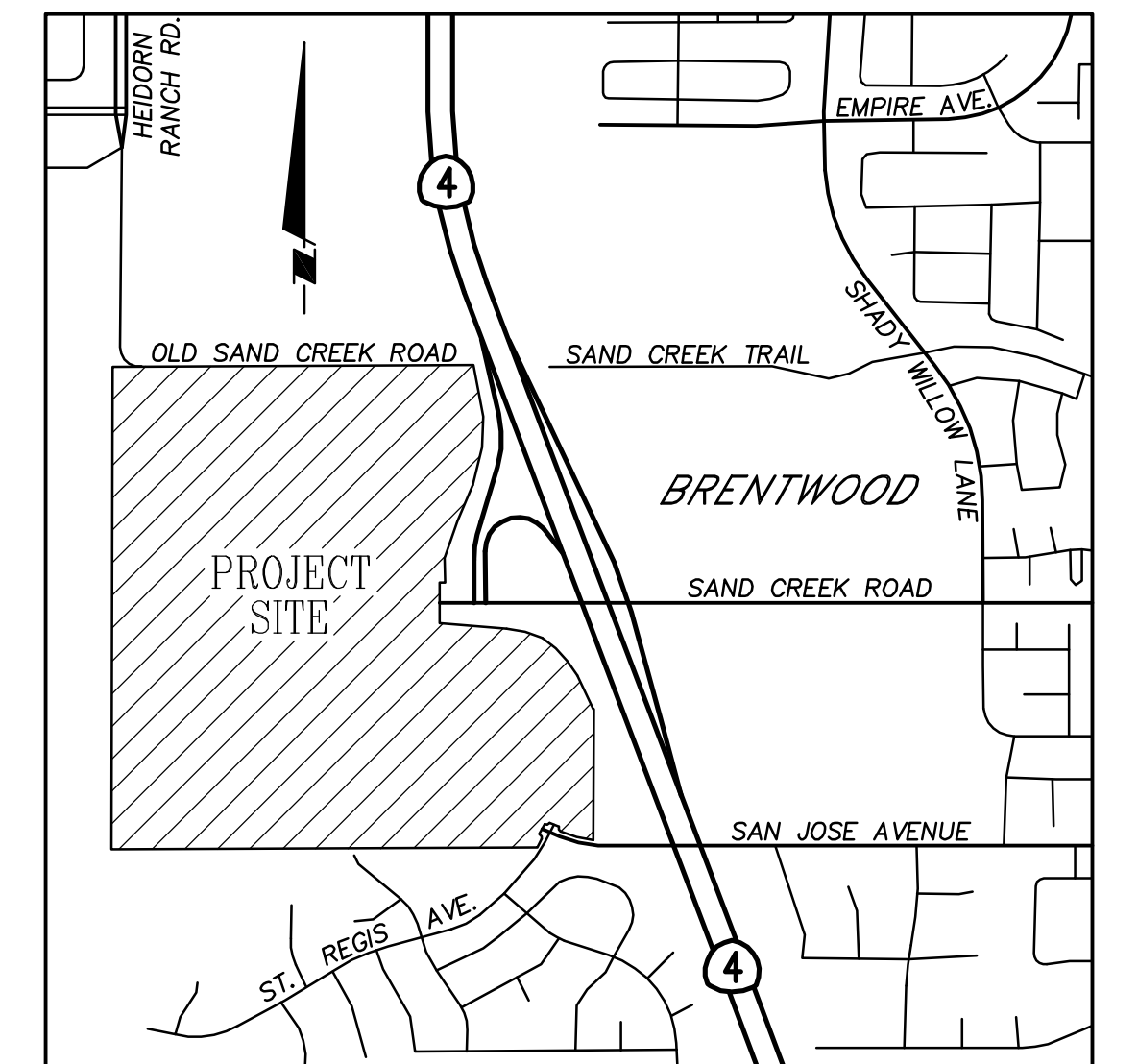
WCHB DEVELOPMENT, LLC
4021 PORT CHICAGO HIGHWAY
CONCORD, CA 94520
(925) 671-7711

CIVIL ENGINEER

APEX CIVIL ENGINEERING & LAND SURVEYING
817 ARNOLD DRIVE, SUITE 50
MARTINEZ, CA 94553
(925) 476-8499
ION VIZCAY, PE (R.C.E. #78203)

SOILS ENGINEER

ENGEO INC
2401 CROW CANYON ROAD, SUITE 200
SAN RAMON, CA 94583
(925) 838-1600



VICINITY MAP
NOT TO SCALE

GENERAL

ASSESSORS PARCEL NO(S): 019-082-007
PROJECT ADDRESS: WEST TERMINUS OF SAN JOSE AVENUE & SAND CREEK ROAD IN BRENTWOOD, CA
TOTAL GROSS: 135.31 ACRES
PROPOSED ZONING: PD-PLANNED DEVELOPMENT
GENERAL PLAN: R-LD: RESIDENTIAL-LOW DENSITY
P: PARK
P-OS: PERMANENT OPEN SPACE
EXISTING USE: VACANT LAND-CATTLE GRAZING
PROPOSED USE: 286 SINGLE FAMILY RESIDENTIAL LOTS (4,500 SF MIN.)
PARCEL A: 6.00 AC (PARK) (1.55 AC < 3% SLOPE)
PARCEL B: 1.85 AC (STORM, C.3, SEWER)
PARCEL C: 0.20 AC (LANDSCAPING)
PARCEL D: 0.48 AC (LANDSCAPING)
PARCEL E: 2.49 AC (STORM, C.3)
PARCEL F: 0.14 AC (LANDSCAPING)
PARCEL G: 3.39 AC (PARK) (3.10 AC < 3% SLOPE)
PARCEL H: 0.05 AC (LANDSCAPING)
PARCEL I: 25.00 AC (OPEN SPACE)
PARCEL J: 0.04 AC (PEDESTRIAN ACCESS)
PARCEL K: 0.02 AC (PEDESTRIAN ACCESS)
PROPOSED DENSITY: 3 DU/AC (SOUTH OF SAND CREEK ROAD CENTERLINE)
FEMA FLOOD DESIGNATION:
EXISTING TOPOGRAPHY DATE: 05-23-2017

FACILITIES

WATER: CITY OF BRENTWOOD
SEWER: CITY OF BRENTWOOD
STORM DRAIN: CITY OF BRENTWOOD
GAS & ELECTRIC: PACIFIC GAS & ELECTRIC
TELEPHONE: AT&T
CABLE: COMCAST
FIRE PROTECTION: CONTRA COSTA COUNTY

NOTE

PURSUANT TO SECTION 66456.1 OF THE SUBDIVISION MAP ACT, THE OWNER RESERVES THE RIGHT TO FILE MULTIPLE MAPS ON THE LANDS SHOWN ON THIS MAP.

BENCHMARK

CONTRA COSTA COUNTY BM. NO. 982, A P.K. NAIL SET IN SOUTHWEST LEG OF P.G.&E. TOWER 200 FEET EAST OF BRIDGE CROSSING SAND CREEK ON OLD SAND CREEK ROAD 40 FEET NORTH OF CENTERLINE OF ROAD. ELEV.=135.43

BASIS OF BEARINGS

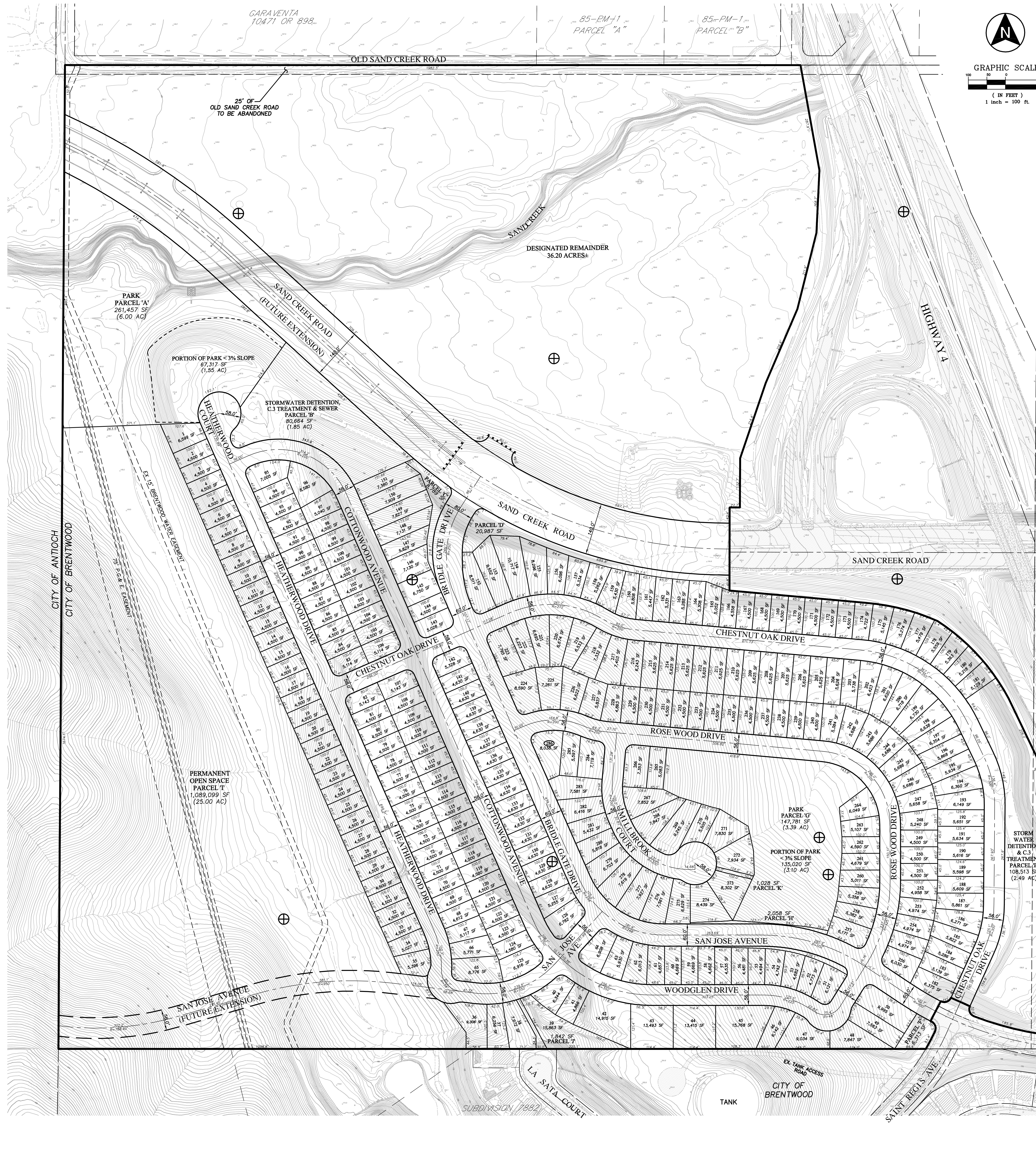
THE BASIS OF BEARINGS FOR THIS MAP IS DETERMINED BY FOUND MONUMENTS SHOWN HEREON, THE BEARING BEING N89°28'41"W BETWEEN STATION 2129 AND STATION 2120 PER RECORD OF SURVEY NO. 2496 (118 LSW 40). THE BEARINGS SHOWN ARE ON CALIFORNIA COORDINATE SYSTEM ZONE III (NAD 83). MULTIPLY DISTANCES AS SHOWN BY 0.99993501 TO OBTAIN GRID DISTANCES.

SHEET INDEX

SHEET No.	DESCRIPTION
1	TITLE SHEET
2	PRELIMINARY GRADING & UTILITY PLAN

LEGEND

EXISTING	PROPOSED	ITEM
[Symbol]	[Symbol]	PAVEMENT
[Symbol]	[Symbol]	SIDEWALK
[Symbol]	[Symbol]	CURB & GUTTER
[Symbol]	[Symbol]	SANITARY SEWER MAIN
[Symbol]	[Symbol]	SANITARY SEWER MANHOLE
[Symbol]	[Symbol]	STORM DRAIN LINE
[Symbol]	[Symbol]	STORM DRAIN MH
[Symbol]	[Symbol]	INLET OR CATCH BASIN
[Symbol]	[Symbol]	FIRE HYDRANT
[Symbol]	[Symbol]	WATER LINE & VALVE
[Symbol]	[Symbol]	WATER METER & BACKFLOW DEVICE
[Symbol]	[Symbol]	AIR RELEASE VALVE
[Symbol]	[Symbol]	SIGN
[Symbol]	[Symbol]	STREET LIGHT
[Symbol]	[Symbol]	UTILITY POLE
[Symbol]	[Symbol]	STREET MONUMENTS
[Symbol]	[Symbol]	CONTOURS
[Symbol]	[Symbol]	RIGHT-OF-WAY
[Symbol]	[Symbol]	LOT BOUNDARY
[Symbol]	[Symbol]	ADJACENT PROPERTY LINE
[Symbol]	[Symbol]	DIRECTION OF DRAINAGE FLOW
[Symbol]	[Symbol]	RETAINING WALL
[Symbol]	[Symbol]	ABANDONED OIL WELL



CITY OF BRENTWOOD
PUBLIC WORKS DEPARTMENT
700 Third Street, Brentwood, CA 94511
Ph: (925) 336-6504 • FAX: (925) 336-6501
www.ci.brentwood.ca.us

APEX
CIVIL ENGINEERING & LAND SURVEYING
817 Arnold Drive, Ste. 50
Martinez, CA 94553
Ph: (925) 476-8499
www.apexce.net

NO.	REVISIONS	NO	BY	DATE

DESIGN: JV
DRAWN: STAFF
CHECKED: JV
PROJECT #: 20066

VESTING TENTATIVE MAP
"BRIDLE GATE" SUB # 9586 BRENTWOOD, CA

SHEET 1 OF 2
DATE 01-06-2022

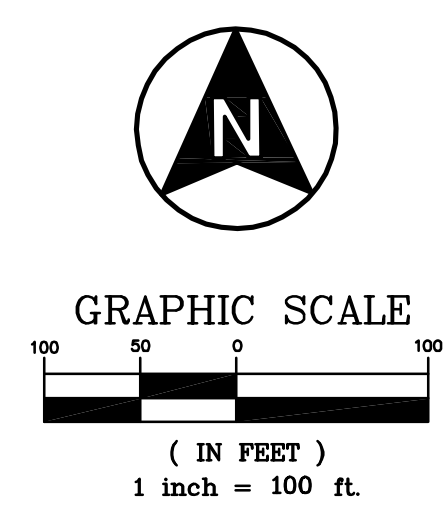
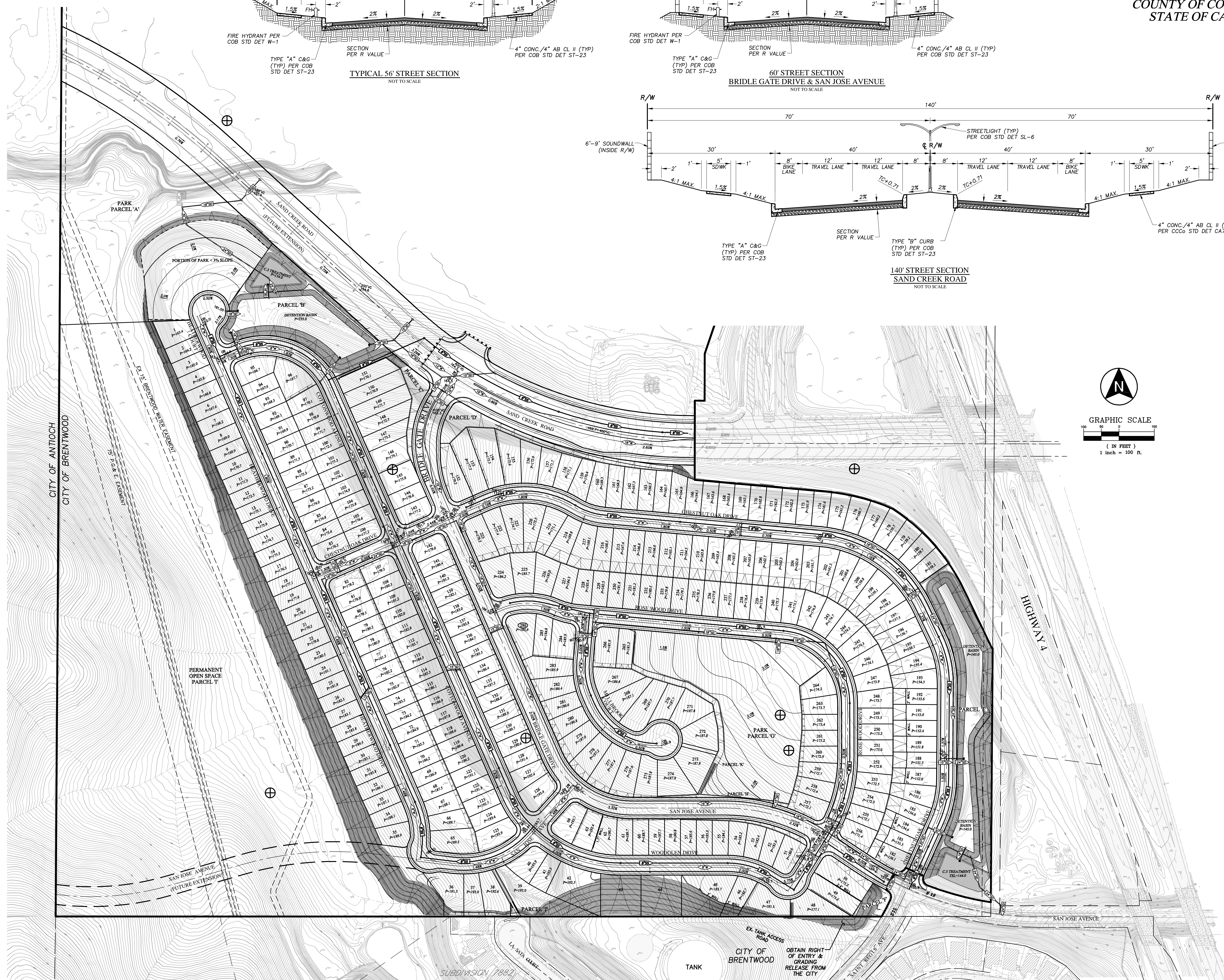
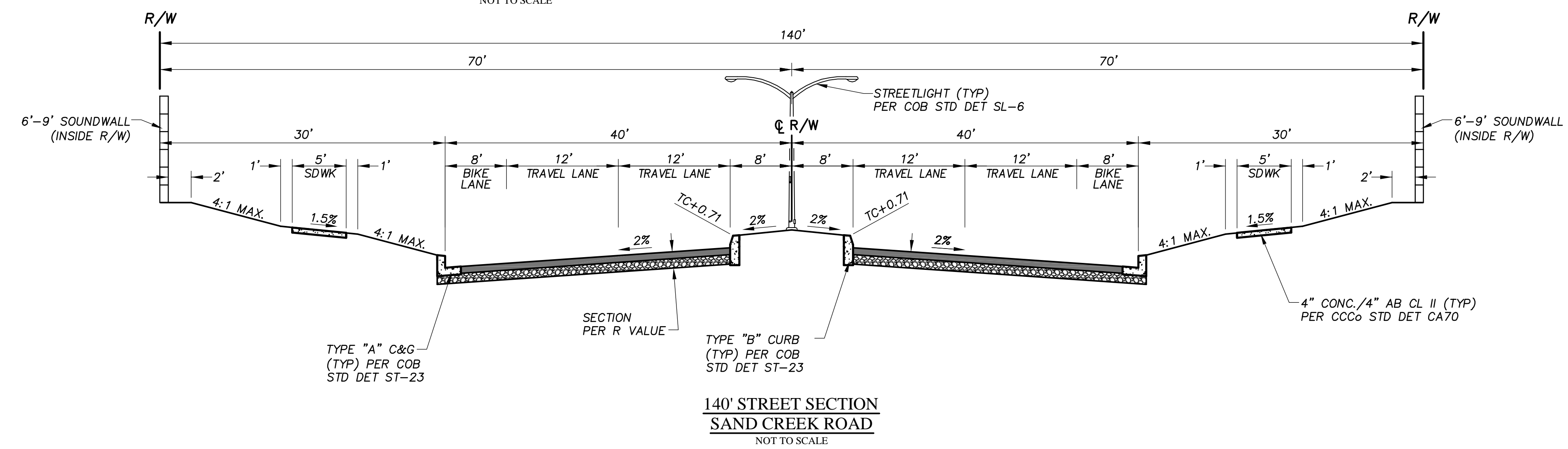
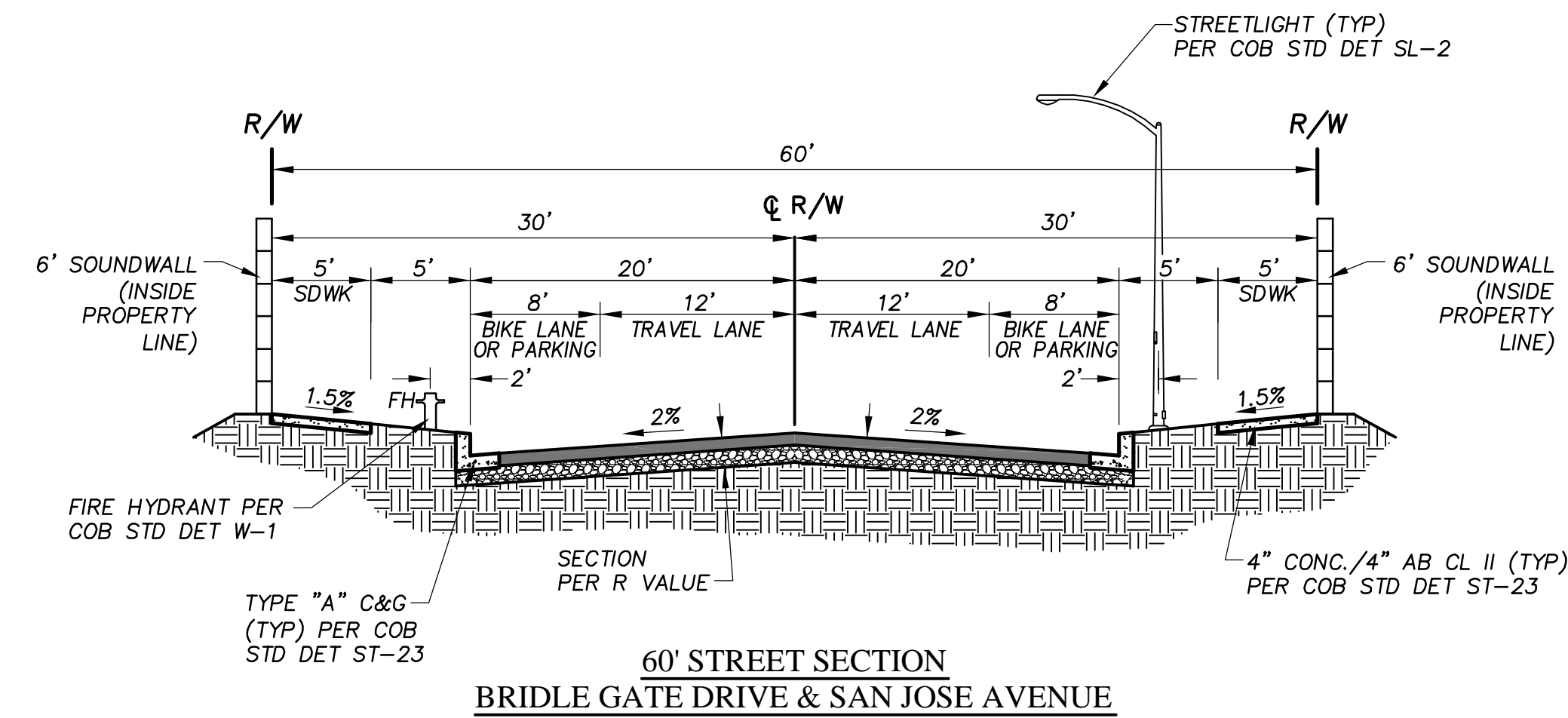
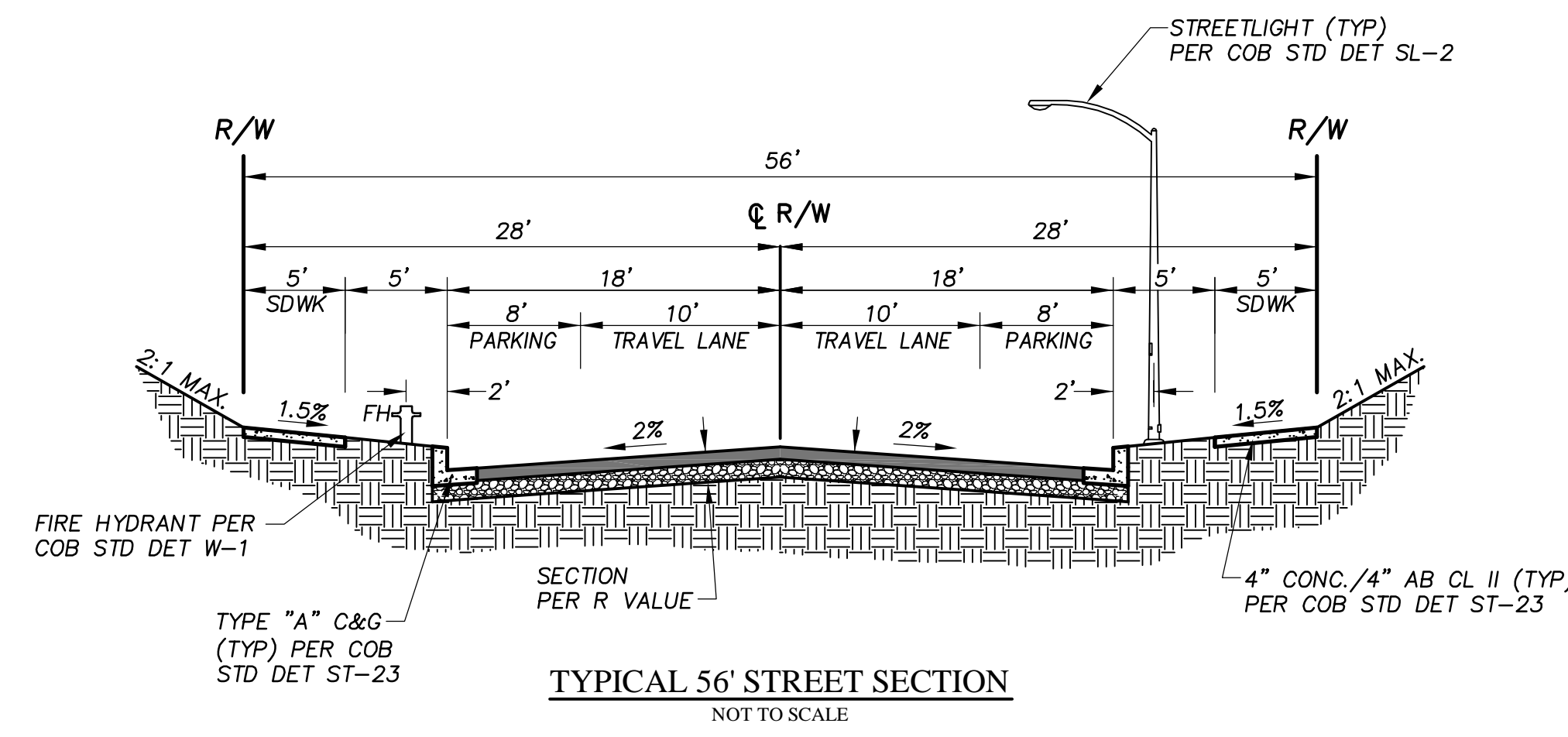
Figure 2a. Bridle Gate Tentative Map Sheet 1

BRIDLE GATE - VESTING TENTATIVE MAP - 01-06-2022

PRELIMINARY GRADING & UTILITY PLAN

"BRIDLE GATE" SUBDIVISION 9586

CITY OF BRENTWOOD
COUNTY OF CONTRA COSTA
STATE OF CALIFORNIA



- ABBREVIATIONS**
- AB - AGGREGATE BASE
 - AC - ACRE
 - AD - AREA DRAIN
 - BW - BOTTOM OF WALL
 - CB - CATCH BASIN
 - CCWD - CITY OF BRENTWOOD
 - COB - CITY OF BRENTWOOD
 - CONC - CONCRETE
 - DET - DETAIL
 - DU - DWELLING UNITS
 - EX - EXISTING
 - FC - FACE OF CURB
 - FF - FINISH FLOOR
 - FL - FINISH GRADE
 - FL - FLOW LINE ELEVATION
 - G - GRATE ELEVATION
 - QL - GARAGE LIP ELEVATION
 - HP - HIGH POINT
 - LF - LINEAR FEET
 - P - PAD
 - PL - PROPERTY LINE
 - PVC - POLYVINYL CHLORIDE
 - R/W - RIGHT OF WAY
 - SD - STORM DRAIN
 - SDWK - SIDEWALK
 - SF - SQUARE FEET
 - SO - SIDE OPENING
 - SS - SANITARY SEWER
 - SSCO - SANITARY SEWER CLEANOUT
 - SSE - SANITARY SEWER EASEMENT
 - STD - STANDARD
 - TC - TOP OF CURB
 - TW - TOP OF WALL
 - TYP - TYPICAL
 - WTRNCH - WATER SERVICES TRENCH



NOTE:
THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES DURING CONSTRUCTION.



NO.	REVISIONS	NO.	BY	DATE

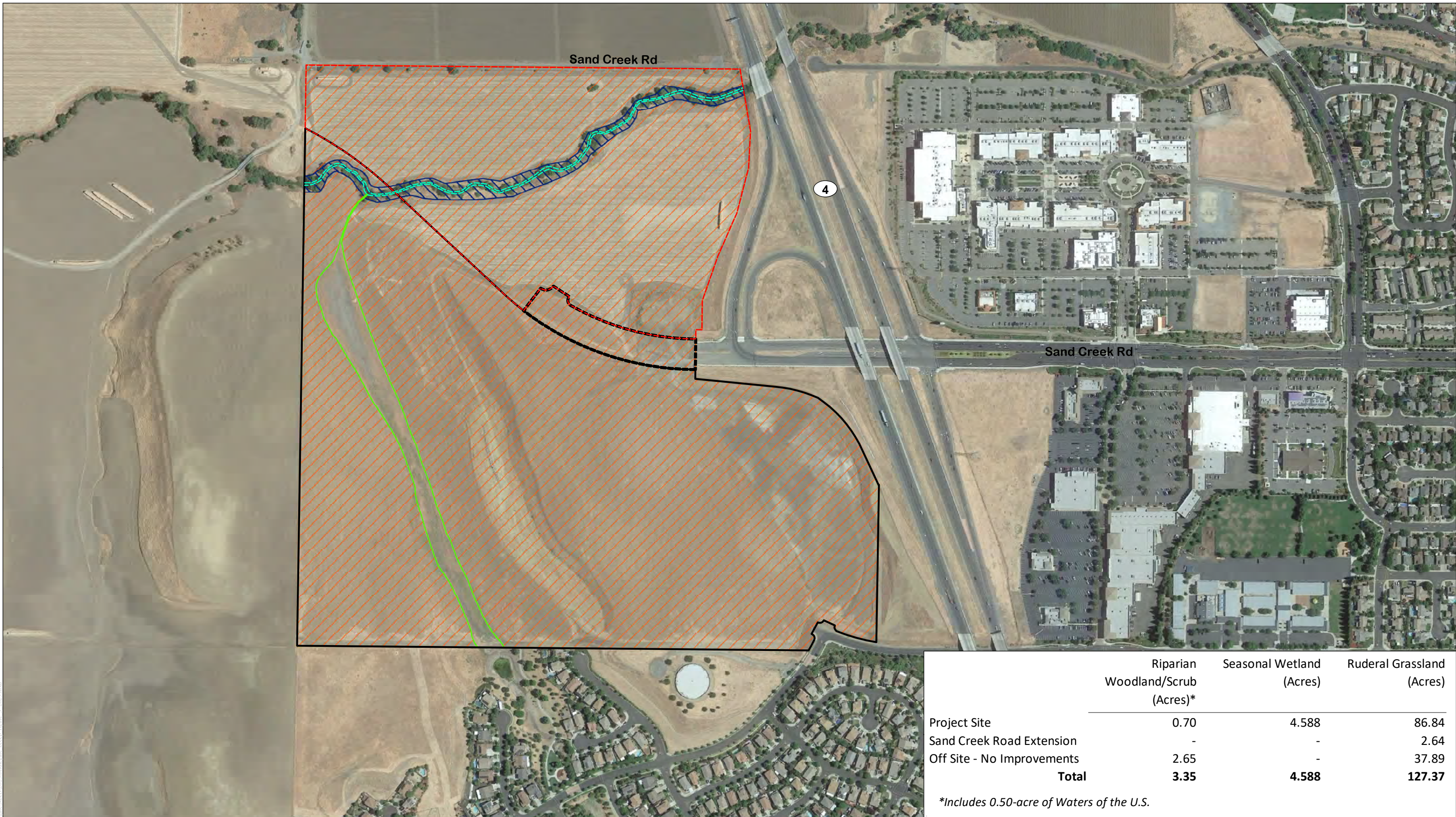
DESIGN:	JV
DRAWN:	STAFF
CHECKED:	JV
PROJECT #:	20066



VESTING TENTATIVE MAP
PRELIMINARY GRADING & UTILITY PLAN
"BRIDLE GATE" SUB # 9586 BRENTWOOD, CA

SHEET
2 OF 2
DATE
01-06-2022

Figure 2b. Bridle Gate Tentative Map Sheet 2



	Riparian Woodland/Scrub (Acres)*	Seasonal Wetland (Acres)	Ruderal Grassland (Acres)
Project Site	0.70	4.588	86.84
Sand Creek Road Extension	-	-	2.64
Off Site - No Improvements	2.65	-	37.89
Total	3.35	4.588	127.37

*Includes 0.50-acre of Waters of the U.S.

Figure 3
Moore Biological
Consultants

Project Site (92.13 acres)
 Off Site - No Improvements (40.54 acres)

Sand Creek Road Extension (2.64 acres)
 Ordinary High Water Mark (OHWM)

Field Verified Landcover Map
Bridle Gate
City of Brentwood, Contra Costa County, CA

Map Date: 02/13/2023
Aerial Source: Google Earth 06/2018)

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Diked ruderal grassland in the southwest part of the site, looking north along the western fenceline; 04/16/20. Due to periodic disking for over a decade, the grasslands do not provide suitable aestivation habitat for California tiger salamander.



Ruderal grassland in the northeast part of the site, looking west; 01/13/22.

FIGURE 4a



Recently planted winter wheat in the northeast part of the site, looking west; 01/13/22.



Ruderal grassland and soil stockpile near Highway 4, looking east; 04/01/20.

FIGURE 4b



Ruderal grassland in the southeast part of the site, looking north from San Jose Avenue; 01/13/22.



East edge of the site where Sand Creek Road will be extended, providing access to the site, looking west; 01/13/22.

FIGURE 4c



Recently planted winter wheat along the south edge of the site, looking west from St. Regis Avenue; 01/13/22.



Sand Creek riparian corridor, looking west; 04/16/20.

FIGURE 4d



Sand Creek near the west edge of the site, looking west; 04/16/20.



Sand Creek, looking west from approximately mid-way down the stream from the west edge of the site; 01/13/22.

FIGURE 4e



Large cottonwoods along Sand Creek near the east edge of the site, looking east;
04/16/20.



Sand Creek approximately 800 feet west of the east edge of the site, looking southwest;
04/16/20. Sand Creek provides poor quality habitat for California red-legged frog.

FIGURE 4f

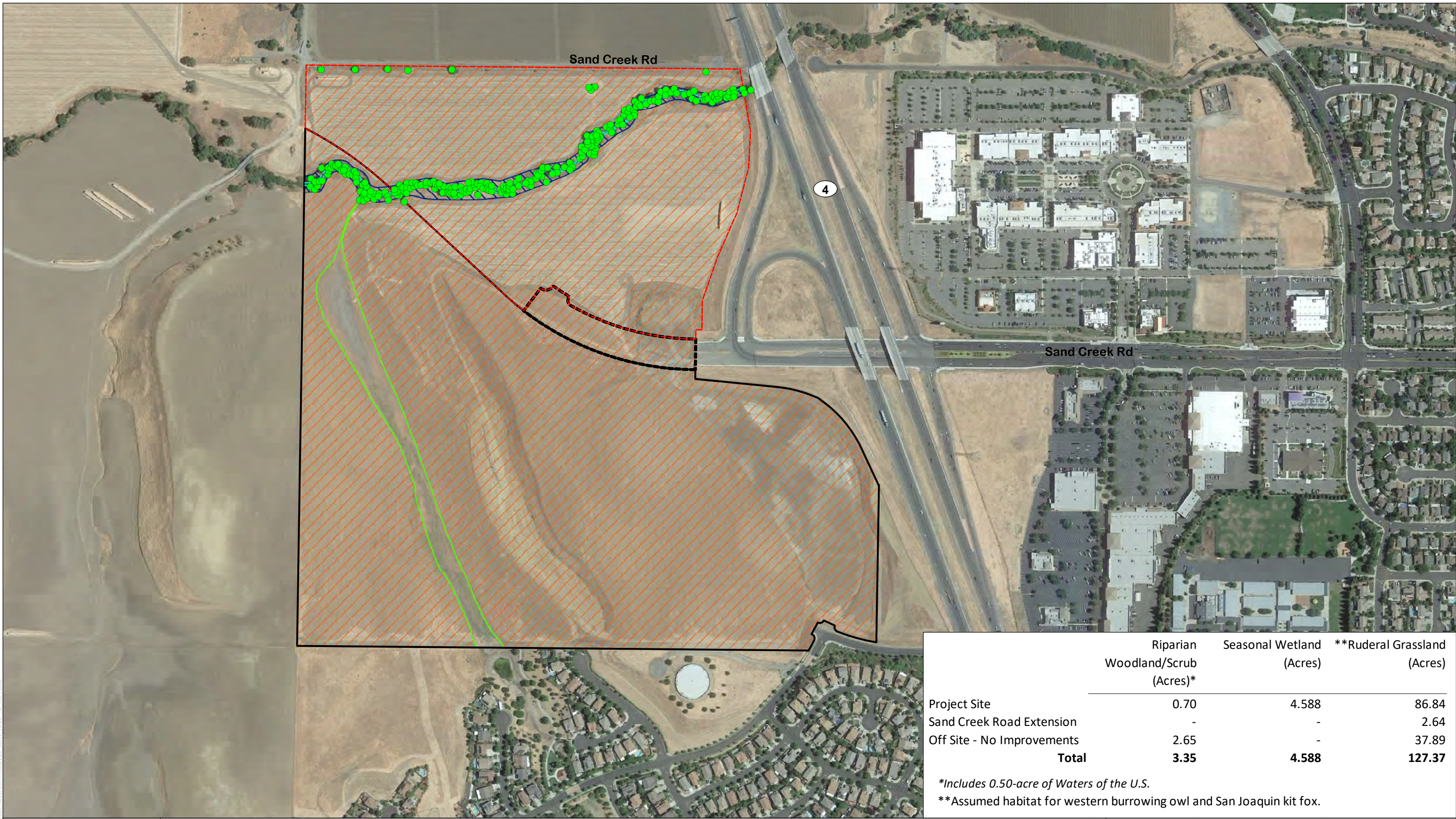


Seasonal wetland swale in the west part of the site, looking northeast; 01/13/22.



Off-site pond just south of the site, looking southwest; 04/01/20. Areas to the south of this pond drain north in to the seasonal wetland swale.

FIGURE 4g



	Riparian Woodland/Scrub (Acres)*	Seasonal Wetland (Acres)	**Ruderal Grassland (Acres)
Project Site	0.70	4.588	86.84
Sand Creek Road Extension	-	-	2.64
Off Site - No Improvements	2.65	-	37.89
Total	3.35	4.588	127.37

*Includes 0.50-acre of Waters of the U.S.

**Assumed habitat for western burrowing owl and San Joaquin kit fox.

Figure 5a

Moore Biological Consultants

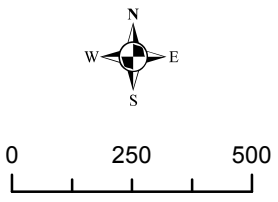
Project Site (92.13 acres)

Sand Creek Road Extension (2.64 acres)

Off Site - No Improvements (40.54 acres)

Ordinary High Water Mark (OHWM); area below the OHWM potential breeding habitat for California red-legged frog.

Trees; assumed habitat for Swainson's hawk, golden eagle, and white-tailed kite.

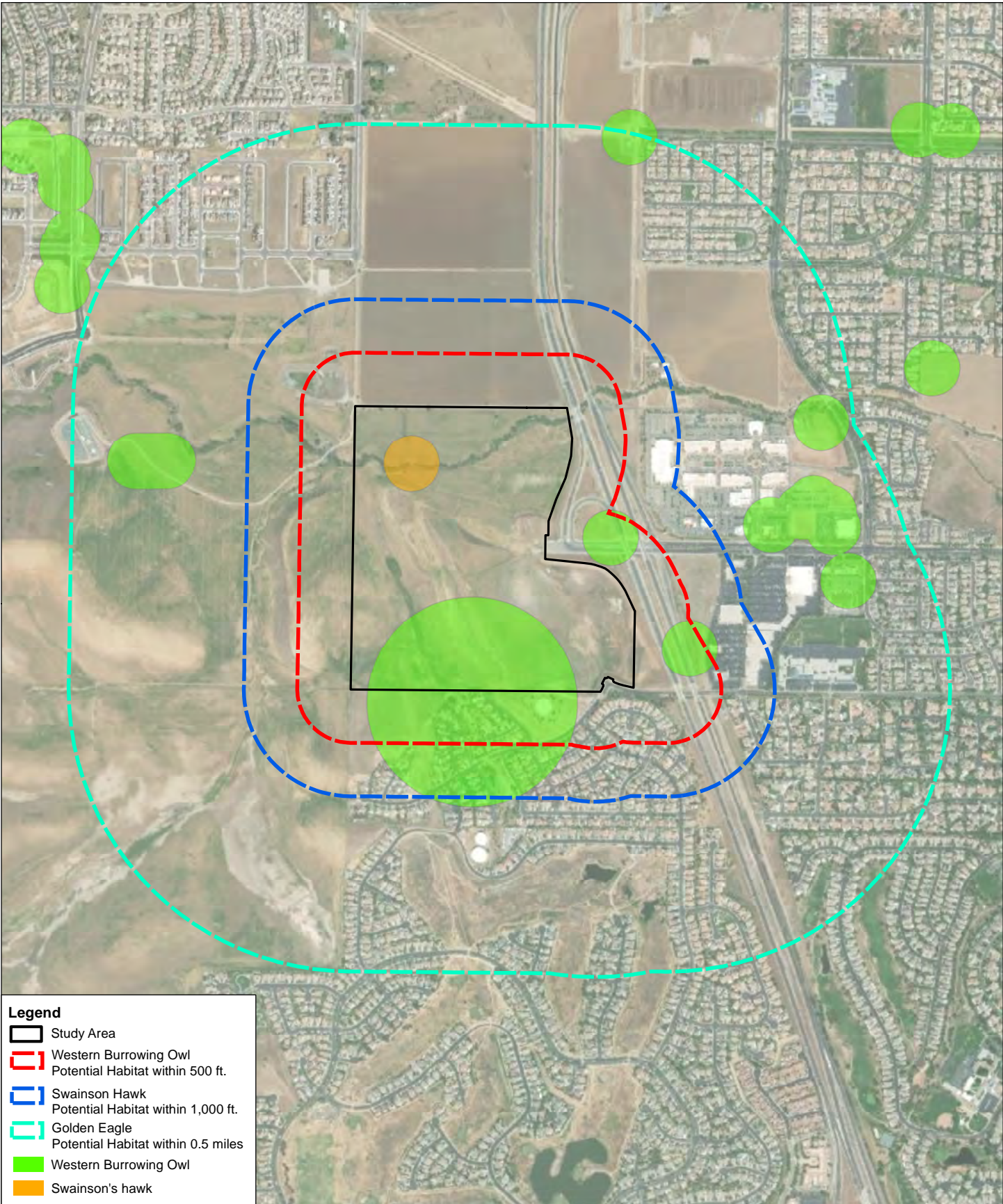


Planning Survey Species Habitat Map

Bridle Gate
City of Brentwood, Contra Costa County, CA

Map Date: 02/13/2023
Aerial Source: Google Earth 06/2018

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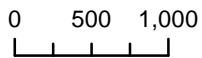


Legend

- Study Area
- Western Burrowing Owl
Potential Habitat within 500 ft.
- Swainson Hawk
Potential Habitat within 1,000 ft.
- Golden Eagle
Potential Habitat within 0.5 miles
- Western Burrowing Owl
- Swainson's hawk

Figure 5b

Moore Biological
Consultants



Map Date: 02/13/2023
Aerial Photo: Maxar 05/26/2021

Regional Species Habitat Map

Bridle Gate

City of Brentwood, Contra Costa County, CA

ATTACHMENT C: PROJECT COMPLIANCE TO HCP CONDITIONS

Bridle Gate

Project Compliance to HCP Conditions

February 2023

HCP/NCCP Conservation Measure 1.11. Avoid Direct Impacts on Extremely Rare Plants, Fully Protected Wildlife Species, or Covered Migratory Birds:

The potential for special-status plants to occur within the site is considered low, as described in Section III (10).

Species-specific pre-construction surveys, and if needed, monitoring and avoidance requirements for burrowing owl, Swainson's hawk, and golden eagle will be conducted as described in Section IV (2). There is no suitable habitat in the site for ringtail (*Bassariscus astutus*), a "fully protected species," per California Fish and Game Code Section 4700. Similarly, there is no suitable nesting habitat in the site for peregrine falcon (*Falco peregrinus*), a "fully protected species," per California Fish and Game Code Section 3511.

White-tailed kite (*Elanus caeruleus*), another "fully protected species," per California Fish and Game Code Section 3511 could potentially nest in trees in or near the site. Prior to any ground disturbance related to covered activities that occur during the nesting season (March 15-August 31), a qualified biologist will conduct a preconstruction survey no more than 1 month prior to construction to establish whether white-tailed kite is nesting in trees within or visible from the site. In the event active nests are found, an initial 300-foot buffer shall be established around the nest tree. Ground disturbance related to covered activities within the buffer shall either be delayed until a qualified biologist determines nesting is complete, or until the applicant and consults with the Implementing Entity and CDFW and implements CDFW-approved measures to minimize potential disturbance.

Tricolored blackbird (*Agelaius tricolor*), a State of California threatened species, could nest in vegetation in and adjacent to Sand Creek such as patches of wild rose, bulrush, cattails, and willows. On-site grasslands and vegetation could be used by other species of nesting birds protected by the Migratory Bird Treaty Act. If possible, any ground disturbance related to covered activities will occur outside of the general bird nesting season (February 1 through August 31). Alternately, a qualified biologist will conduct a preconstruction survey no more than 2 weeks

prior to any ground disturbance related to covered activities. In the event active raptors or tricolored blackbird nests are found, an initial 300-foot buffer shall be established around the nests. In the event nests of other birds are found, an initial 50-foot buffer shall be established around the nest. Ground disturbance related to covered activities within the buffers shall either be delayed until a qualified biologist determines nesting is complete, or until the applicant consults with the Implementing Entity and CDFW and implements CDFW-approved measures to minimize potential disturbance.

HCP/NCCP Conservation Measure 2.12. Wetland, Pond, and Stream Avoidance and Minimization:

Potentially jurisdictional Waters of the U.S. and wetlands in the site are being avoided to the maximum extent practicable. The stream in the north part of the site (Sand Creek) will not be impacted by the project. A 75-foot stream setback will be implemented along Sand Creek. The seasonal wetland will be preserved in an Open Space parcel and a portion of a park parcel where no improvements are proposed.

The following measures from pages 6-33 through 6-35 will be implemented to avoid and minimize impacts of covered activities on wetlands:

- The project will comply with the stream setback requirements in Conservation Measure 1.7.
- The project will comply with the guidelines in Conservation Measure 1.10 to minimize the effects of urban development on downstream hydrology, streams, and wetlands.
- All wetlands to be avoided by covered activities will be temporarily staked in the field by a qualified biologist.
- The project will establish a buffer zone between Sand Creek and development as described in Conservation Measure 1.7.
- Personnel conducting ground-disturbing activities adjacent to the seasonal wetland in the west part of the site or the buffer zone along Sand Creek will be trained by a qualified biologist in these avoidance and minimization and the permit obligations of project proponents working under the ECCCHCP. Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas.
- Trash generated during project construction will be promptly and properly removed from the site.
- No construction or maintenance vehicles will be refueled within 200 feet of

Sand Creek or the seasonal wetland 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, vegetative buffer strips) will be used on site to reduce siltation and runoff of contaminants into Sand Creek or the seasonal wetland. Filter fences and mesh will be of material that will not entrap reptiles and amphibians. Erosion control blankets shall be used as a last resort because of their tendency to biodegrade slowly and trap reptiles and amphibians.
- Fiber rolls used for erosion control will be certified as free of noxious weed seed.
- Seed mixtures applied for erosion control will not contain invasive non-native species, and will be composed of native species or sterile nonnative species.
- Herbicides will not be applied within the buffer area along Sand Creek unless needed to control serious invasive plants. In this case, herbicides that have been approved for use by EPA in or adjacent to aquatic habitats may be used as long as label instructions are followed and applications avoid or minimize impacts on covered species and their habitats. Appropriate herbicides may be applied to the ruderal grassland within the buffer area during the dry season to control nonnative invasive species such as yellow star-thistle. Herbicide drift shall be minimized by applying the herbicide as close to the target area as possible.

HCP/NCCP Conservation Measure 1.10. Maintain Hydrologic Conditions and Minimize Erosion:

The project has been designed to maintain hydrologic conditions and minimize erosion. Site drainage will be conveyed to Sand Creek.

The project applicant will develop a Storm Water Pollution Prevention Plan (SWPPP) that will identify best management practices (BMPs) to be implemented to minimize the introduction of foreign material into waterbodies, control stormwater runoff, minimize erosion and sedimentation, and limit the amount of surface disturbance to the area.

Standard construction BMPs will be employed during construction to minimize the potential for erosion and off-site transport of fines. BMPs will include use of water trucks, appropriate compaction of soil, and installation of straw

wattles, silt fences or other technologies along the perimeter of the site during construction, and stabilization of bare soils as appropriate with seeding, straw, and/or hydrolmulch.

HCP/NCCP Conservation Measure 1.7. Establish Stream Setbacks:

A stream is defined in Chapter 3 of the ECCCHCP as “a long, narrow body of flowing water that occupies a channel with defined bed and bank and moves to lower elevations under the force of gravity”.

The stream in the north part of the site (Sand Creek) will not be impacted by the project. A 75-foot stream setback will be implemented along Sand Creek.

Stream setbacks are designed to protect existing habitat quality, to protect water quality and hydrologic processes through buffering, and allow for at least minimal restoration (page 6-16). The stream setback measure is intended to achieve several purposes as listed on pages 6-16 and 6-17 of the ECCCHCP, along a variety of stream types. Six of the seven purposes have applicability to the project:

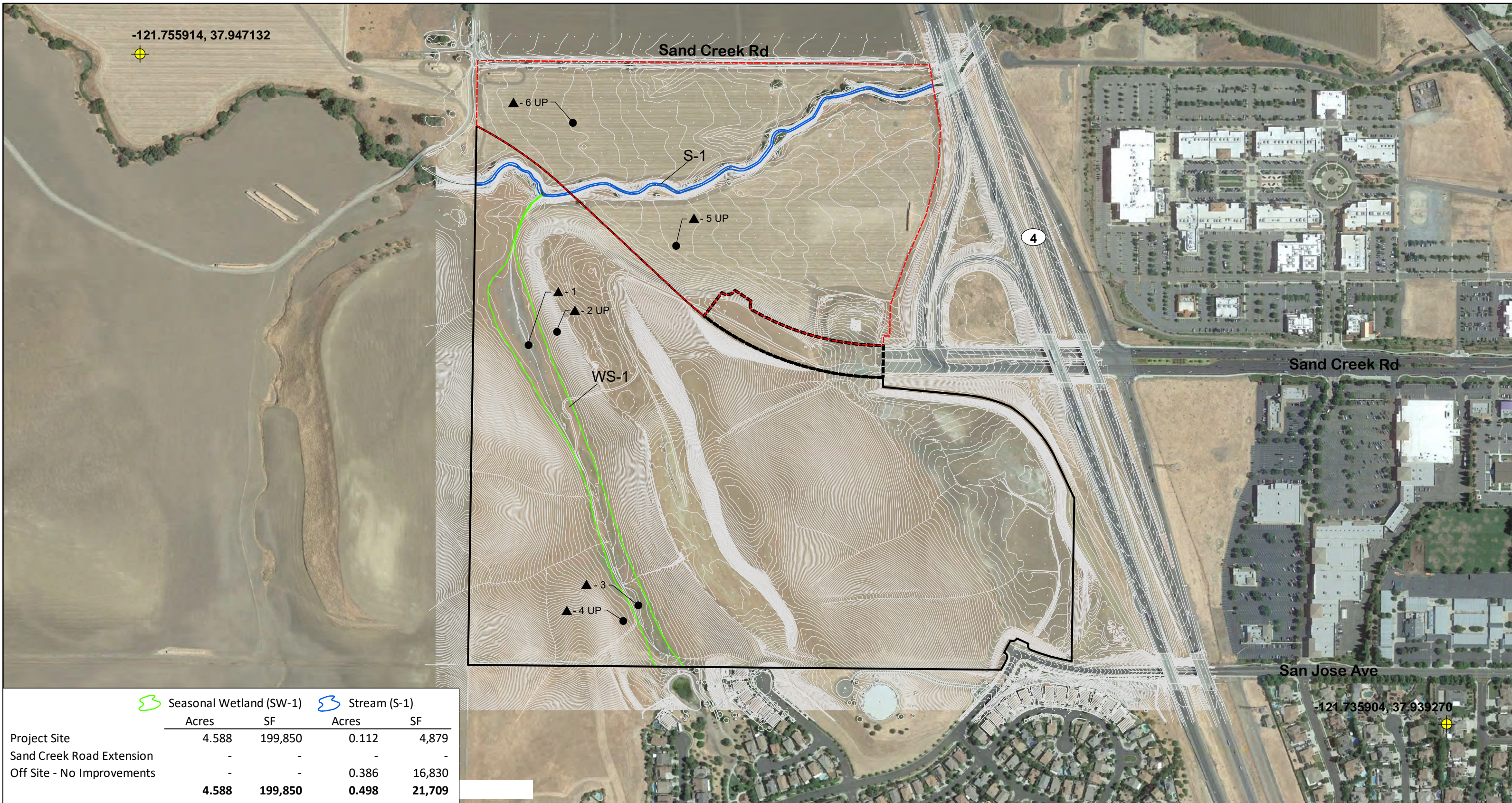
- Maintain or improve water quality by filtering sediments and pollutants from urban runoff before they reach the stream,
- Allow for protection of preserved and restored riparian woodland and scrub within and adjacent to the stream,
- Maintain a buffer zone between urban development and existing and restored nesting habitat for Swainson’s hawk and other bird species,
- Maintain and enhance the water quality of the stream to protect native fish populations, including populations of special-status species that occur in downstream creeks (i.e., fall-run Chinook salmon in Marsh Creek),
- Maintain a more viable wildlife corridor for some species (e.g., California red-legged frog, foothill yellow-legged frog) than would be present with a narrower buffer zone, and
- Maximize the natural flood protection value of the floodplain.

ATTACHMENT D: FEE CALCULATOR

**** NOT APPLICABLE DUE TO SETTLEMENT AGREEMENT IN PLACE THAT ESTABLISHES FEES ****

ATTACHMENT E: WETLAND DELINEATION

-121.755914, 37.947132



-121.735904, 37.939270



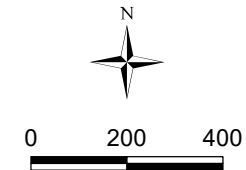
	Seasonal Wetland (SW-1)		Stream (S-1)	
	Acres	SF	Acres	SF
Project Site	4.588	199,850	0.112	4,879
Sand Creek Road Extension	-	-	-	-
Off Site - No Improvements	-	-	0.386	16,830
	4.588	199,850	0.498	21,709

Data Disclaimer:
 The delineation has been done in accordance with the 1987 Wetlands Delineation Manual, US Army Corps of Engineers and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. The boundaries and jurisdictional status of all waters shown on this map are preliminary and subject to verification by the U.S. Army Corps of Engineers.

Aerial Source: Google Earth (06/2018)

Moore Biological Consultants

- Project Site (92.13 acres)
- Off Site - No Improvements (40.54 acres)
- Sand Creek Road Extension (2.64 acres)
- ▲ - 1 3-Parameter Data Point



Potential Waters of the U.S. and Wetlands

Bridle Gate

City of Brentwood, Contra Costa County, CA

Map Date: 02/13/2023