Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS
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May 5, 2016

Mr. Adam Kuperman
Associate Project Manager
Satellite Affordable Housing Associates
1835 Alcatraz Avenue
Berkeley, California 94703

Subject: Biological Assessment Report for 20269 Broadway in Sonoma, California

Dear Mr. Kuperman:

At your request, Huffman-Broadway Group, Inc. (HBG) conducted a biological assessment for a 1.97 acre site in City of Sonoma, Sonoma County, California (see Figures 1 and 2). Our assessment is detailed below.

BACKGROUND

Project Location. The Project Site is a 1.97-acre parcel located on State Highway 12 in the City of Sonoma, California. The property consists of Sonoma County Assessor Parcel (APN) No. 128-181-001. State Highway 12 (Broadway) forms the eastern border of the property. Further to the east across Broadway is an amusement park known as Train Town and commercial uses, including a bike shop and restaurant. Clay Street runs along the southern border of the site and land uses on the south side of Clay Street include the Lodge at Sonoma. Residential uses occur to the west of the site and a commercial use with associated paved parking lot is found to the north of the property. The latitude and longitude of the approximate centroid point of the site is 38°16'41.432"N, 122°27'38.458"W. The Project Site is located on the Sonoma 7.5-minute USGS quadrangle map.

Proposed Project. The project proponent, Satellite Affordable Housing Associates, has indicated an intent to eventually develop the property with an affordable housing project. The density of land uses and configuration of site development depend in part on the results of this biological assessment.

Study Purpose and Objectives. The purpose of this biological study is to provide a general level biological survey to determine if there is the potential for the presence of special status species and/or sensitive habitats and, if present, the potential for project

impacts. The assessment is based on information (e.g., technical reports, data, mapping, aerial photography, and imagery) readily available at the time of the study and also on site conditions observed during a field inspection. If it is determined that there is a potential for special status species or sensitive habitats to be present, more detailed technical study following local, state, and federal environmental agency requirement would be recommended. The biological assessment is, therefore, not an official protocol level survey for establishing the presence or absence of special status species or sensitive habitats, but a study to determine the potential for presence.

The objectives of the biological assessment are to:

1. Determine if there is the potential for any special status plant species or special status animal species to be present within the Project Site;
2. Determine if there is the potential for any sensitive habitat to be present within the Project Site;
3. Analyze the potential for impacts to any special status species and sensitive habitat from the implementation of the proposed project; and
4. Determine if more detailed studies are necessary to determine the presence or absence of any special status plant species, special status animal species, or special status habitat.

Regulatory Background. The following provides regulatory background information regarding special status species and sensitive habitats:

***Special Status Species*.** Special status species include those species listed by the federal and state governments as endangered, threatened, or rare or candidate species for these lists. Endangered or threatened species are protected by the federal Endangered Species Act of 1973 as amended, the California Native Plant Protection Act of 1977, and the California Endangered Species Act of 1970. The California Environmental Quality Act (CEQA) provides additional protection for unlisted species that meet the "rare" or "endangered" criteria defined in Title 14, California Code of Regulations Section 15380. Special status species also include those species listed by the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) as Species of Special Concern which face extirpation in California if current population and habitat trends continue. Although CDFW and USFWS Species of Concern generally have no special legal status, they are given special consideration under CEQA. The CEQA also considers impacts to plant species on California Native Plant Society (CNPS) Lists 1 and 2 as special status species and impacts to these species as well as those described above to be significant. In addition to the above described federal and state regulations for special status species, most birds in the United States, including non-special status species, are protected by the Migratory Bird Treaty Act of 1918. Under this act destroying active nests, eggs, and young is illegal.

The CDFW maintains records for the distribution and known occurrences of special status species and sensitive habitats in the California Natural Diversity Database (CNDDB). The CNDDB is organized into map areas based on 7.5 minute topographic quadrangle maps produced by the U.S. Geological Survey (USGS). All known occurrences of special status species are mapped onto quadrangle maps maintained by the CNDDB. The database gives further detailed information on each occurrence, including specific location of the individual, population, or habitat (if possible) and the presumed current state of the population or habitat.

Sensitive Habitats. Sensitive habitats are those habitats which have been identified by local, state, or federal agencies as areas which provided special functions or values. These habitats are subject to regulation under various local, state, and federal regulations such as the following:

City or County Tree Ordnances	The California Endangered Species Act
City or County General Plan Land Use Areas	The Federal Clean Water Act
City, County, State, or Federal Special Habitat Management Areas	The Federal Endangered Species Act (listed species or critical habitat)
The California Porter-Cologne Act	The Federal Migratory Bird Treaty Act
The California Coastal Act	The Bald and Golden Eagle Protection Act
The California Environmental Quality Act (CEQA)	The National Environmental Protection Act
Habitats such as serpentine soils or vernal pools supporting plant species on California Native Plant Society (CNPS) Lists 1 and 2 which are considered special status habitats under CEQA.	The Federal Magnuson-Stevens Fishery Conservation and Management Act
The California Department of Fish and Wildlife Lake and Streambed Alteration Agreement Program	The Federal Coastal Zone Management Act

Sensitive habitats potentially found within the Project Area include:

Waters of the United States. The Department of the Army, acting through the U.S. Army Corps of Engineers (USACE), has the authority to permit the discharge of dredge or fill material in waters of the U.S. under Section 404 of the Clean Water Act (CWA). Waters of the U.S. include both wetlands and "other waters of the U.S." Wetlands and other waters of the U.S. are described by U.S. Environmental Protection Agency (US EPA) and USACE regulations (40 CFR § 230.3(s) and 33 CFR § 328.3(a), respectively). US EPA and the USACE define wetlands as "…those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (US EPA regulations at 40 CFR § 230.3(t); USACE regulations at 33 CFR § 328.3(b)). Both natural and manmade wetlands and other waters (not vegetated by a dominance of rooted emergent vegetation) are subject to regulation. The geographic extent of wetlands is defined by the collective presence of a dominance of wetland vegetation, wetland hydrology conditions, and wetland soil conditions as determined following the USACE' 1987 Wetlands Delineation Manual (1987 Manual); the USACE' 2008 Regional Supplement to Corps of Engineers Wetland Delineation Manual: Arid West, Version 2.0 (Arid West Regional Supplement); and

supporting guidance documents. The geographic extent of other waters of the U.S. is defined by an ordinary high water mark (OHWM) in non-tidal waters (33 CFR. §328.3(e)) and by the High Tide Line within tidal waters (33 CFR. §328.3(d)).

Waters of the State. Waters of the State are defined more broadly than "waters of the US" to mean "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code section 13050(e)). Examples include, but are not limited to, rivers, streams, lakes, bays, marshes, mudflats, unvegetated seasonally ponded areas, drainage swales, sloughs, wet meadows, natural ponds, vernal pools, diked baylands, seasonal wetlands, and riparian woodlands. Waters of the State include all waters within the state's boundaries, whether private or public, including waters in both natural and artificial channels. They include all "waters of the United States"; all surface waters that are not "waters of the United States, e.g. non-jurisdictional wetlands; groundwater; and the territorial seas (http://www.waterboards.ca.gov/academy/courses/wqstandards/materials/water_us_ca/ca_water_042508.pdf)

The State Water Quality Control Board (SWQCB) and its Regional Boards, including the North Coast Regional Water Quality Control Board (NCRWQCB), routinely rely on the USACE / US EPA jurisdictional determinations as they have no adopted methodology for the identification and delineation of wetlands or other waters of the State. However, as a matter of policy the SWQCB / NCRWQCB consider wetlands and waters determined non-jurisdictional by the USACE / USEPA under *SWANCC or Rapanos guidance to remain jurisdictional as waters of the State subject to* SWQCB / NCRWQCB jurisdiction. Similarly the SWQCB / NCRWQCB typically takes jurisdiction over wetlands and other waters where the USACE / US EPA has determined a wetland or other water of the US is exempted or excluded from jurisdiction or where the USACE / USEPA determines that the proposed project activity is exempt from regulation.

Lakes, Streams and Associated Riparian Habitat. The California Department of Fish and Wildlife (CDFW) regulates lakes and streams under Section of 1602 of the California Fish and Game Code (FGC). CDFW's regulations implementing the FGC define the relevant rivers, streams and lakes over which the agency has jurisdiction to constitute "all rivers, streams, lakes, and streambeds in the State of California, including all rivers, streams and streambeds which have intermittent flows of water." (Title 14 *California Code of Regulations* [CCR] § 720). The regulations further define the terms "stream" and "lake" as follows:

> 14 CCR § 1.72. Stream (Includes Creeks and Rivers). *A stream is a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation.*

14 CCR § 1.56. Lake. *Includes natural lakes or man-made reservoirs.*

The CDFW takes jurisdiction under its Lake and Streambed Alteration Agreement Program for any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. The CDFW does not have a methodology for the identification and delineation of the jurisdictional limits of streams except for the general guidance provided in *A Field Guide to Lake and Streambed Alteration Agreements, Section 1600-1607 California Fish and Game Code* (CDFG 1994). In making jurisdictional determinations, CDFW staff typically rely on field observation of physical features that provide evidence of water flow through a bed and channel such as observed flowing water, sediment deposits and drift deposits and that the stream supports fish or other aquatic life. Riparian habitat is not specifically defined by the FGC but CDFW takes jurisdiction over areas within the flood plain of a body of water where the vegetation (grass, sedges, rushes, forbs, shrubs, and trees) is supported by the surface or subsurface flow.

Sensitive Plant Communities. Sensitive plant communities are those natural plant communities identified in local or regional plans, policies, ordinances, regulations, or by the CDFW which provide special functions or values. The CDFW natural plant communities considered sensitive are those CDFW ranks sensitive communities as 'threatened' or 'very threatened' and keeps records of their occurrences in its CNDDB. All known occurrences of sensitive habitats are mapped onto 7.5 minute USGS topographic quadrangle maps maintained by the CNDDB. Sensitive plant communities are also identified by CDFW on their List of California Natural Communities Recognized by the CNDDB. Impacts to sensitive natural communities must be considered and evaluated under CEQA.

BIOLOGICAL SURVEY

Methods. In preparation for HBG's field inspection of the Project Site, existing landforms and soil types that may potentially contain sensitive habitats were searched for by reviewing orthorectified digital aerial photograph (Figure 1); USGS topographic mapping (Figure 2); and the NRCS Web Soil Resources Report for the Study Area (NRCS 2016). A search of the CNDDB records of occurrence for special status plants and animals and sensitive habitats was also conducted. This database search included the Sonoma 7.5-minute quadrangle which contains the Project Site and adjacent USGS 7.5-minute quadrangles which include the Glen Ellen, Napa, Rutherford, Petaluma River, Sears Point and Cuttings Wharf quadrangles. A field inspection of the Project Site was conducted by Gary Deghi of HBG on April 26, 2016. This field survey consisted of walking the parcel on foot noting: (1) plant communities present; (2) if the site provided conditions potentially suitable for special status species; or (3) if sensitive habitats were potentially present. All information collected prior to and during the April 26, 2016 field

inspection was analyzed to determine (1) if there is the potential for special status species or sensitive habitats to be present onsite and (2) the potential for biological impacts resulting from development of the site with an affordable housing project.

General Project Site Description. The Project Site was found to be surrounded by residential, commercial and recreational land uses within an urban area developed on relatively level terrain (Figures 1 and 2). Based on review of the U.S. Department of Agriculture Natural Resources Conservation Service Web Soil Survey the underlying soils throughout the site are mapped as Wright loam, 0 to 9 percent slopes (USDA 2016).

Plant Communities. Vegetation communities are assemblages of plant species growing in an area of similar biological and environmental factors. Vegetation communities and habitats at the project site were identified based on the currently accepted List of Vegetation Alliances and Associations (or Natural Communities List) (CDFW 2010). The list is based on A Manual of California Vegetation, Second Edition (Sawyer and Keeler-Wolf 2009), which is the National Vegetation Classification applied to California. Wetland habitats on-site were further classified using the U.S. Fish and Wildlife's Service's "Classification System for Wetland and Deepwater Habitats" (Cowardin et al. 1979). The project site contains one habitat type according to the Natural Communities List: Non-native Grassland.

Vegetation within the Non-native Grassland area included mostly non-native species of grasses and herbaceous plants. Dominant species throughout the site were non-native species that included soft chess (*Bromus hordeaceus*), wild oats (*Avena fatua*), filaree (*Erodium botrys*), foxtail barley (*Hordeum murinum ssp. leporinum*), black mustard (*Brassica nigra*), sweet clover (*Melilotus indica*) and bur clover (*Medicago polymorpha*). Other non-native species observed at the site were ripgut brome (*Bromus diandrus* perennial ryegrass (*Festuca perennis*), medusahead (*Taeniatherum caput-medusae*), wild radish (*Raphanus sativa*), sweet fennel (*Foeniculum vulgare*), dandelion (*Taraxacum officinale),* salsify (*Tragopogon porrifolius*), bull mallow (*Malva nicaeensis*), curly dock (*Rumex crispus*), English plantain (*Plantago lanceolata*), Italian thistle (*Carduus pycnocephalus*), sweet pea (*Lathyrus* sp.), rose clover (*Trifolium hirtum*), and other clover species (*Trifolium* sp.). Some native species were also found including California poppy (*Eschscholzia californica*) and native lupines (*Lupinus* sp.). Small thickets of native California blackberry (*Rubus ursinus*) and non-native Himalayan blackberry (*Rubus armeniacus*) could be found along fence lines at the property boundaries.

The Non-native Grassland was interspersed with a number of mostly non-native species of trees and shrubs. Most of these planted trees are walnut trees (*Juglans* sp.), several others are fruit trees (*Prunus* sp.) and there is a single fig tree (*Ficus carica*). Native trees included one large and one small valley oak (*Quercus lobata*), a small California bay tree (*Umbellularia californica*) and one small interior live oak (*Quercus wislizeni*). Shrubs included species such as cotoneaster (*Cotoneaster* sp.) and several others, including a grape vine (*Vitis vinifera*).

Animal Populations. The mostly non-native trees, shrubs and grasslands in this urban environment provide limited habitat for species of wildlife. A number of bird species were noted during the field visit including Eurasian Collared-Dove (*Streptopelia decaocto),* Anna's Hummingbird (*Calypte anna*), Black Phoebe (*Sayornis nigricans*), Western Scrub-jay (*Aphelocoma californica),* Common Raven (*Corvus corax*), American Crow (*Corvus brachyrhynchos*), Northern Mockingbird (*Mimus polyglottos)*, Tree Swallow (*Tachycineta bicolor)*, Western Bluebird (*Sialia mexicana*), European Starling *(Sturnus vulgaris)*, California Towhee *(Pipilo crissalis)* and House Finch (*Haemorhous mexicanus*). A Red-shouldered Hawk (*Buteo lineatus*) was heard calling from a nearby location. As visits were conducted during the nesting season, it is entirely possible that any of these species could be nesting on or in the vicinity of the site. Species flying over the site during the survey included Cooper's Hawk (*Accipiter cooperii*), Turkey Vulture (*Cathartes aura*) and America White Pelican (*Pelicanus eurythrorhynchos*).

No mammals were observed during the survey, but mammals anticipated to use the site would be species adapted to disturbed urban environments such as Botta's pocket gopher (*Thomomys bottae),* Virginia opossum (*Didelphis virginiana*), deer mouse (*Peromyscus maniculatus*), striped skunk (*Mephitis mephitis*) and raccoon (*Procyon lotor*). No amphibians or reptiles were observed despite looking under a number of boards, but amphibians occurring in the area are likely to include Pacific treefrog (*Pseudacris regilla*), western toad (*Bufo boreas*), arboreal salamander (*Aneides lugubris*) and California slender salamander (*Batrachoseps attenuatus*). Reptiles could include western fence lizard (*Sceloperus occidentalis)*, northern alligator lizard (*Gerrhonotus coerulus*), gopher snake (*Pituophis melanoleucus)* and Coast garter snake (*Thamnophis elegans terrestris*).

Special Status Species. HBG considered the potential for special status plant and animal species to occur at the Project Site. A target list of special status plants found within 10 miles of the site is shown in Table 1 that includes all species mentioned in the CNDDB occurring within 10 miles of the project site. Table 2 presents an evaluation of special status animal species that have been reported in the vicinity of the project. The special status animal species evaluated in Table 2 include those noted in the CNDDB as occurring within 10 miles of the site and those that are known to occur in the general vicinity based on the knowledge of HBG biologists. Key species are either known to occur in the vicinity of the property or with a potential to occur at the site, or that require specific study to determine presence/absence, are discussed below.

Special Status Plant Species. Special status plant species noted in the CNDDB as occurring within a couple miles of the Project Site include Franciscan onion *(Allium peninsulare* var. *franciscanum),* big-scale balsamroot (*Balsamorhiza macrolepis var. macrolepis),* Sonoma sunshine *(Blennosperma bakeri),* narrow-anthered California brodiaea (*Brodiaea californica var. leptandra*), dwarf downingia (*Downingia pusilla*), and congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta*).

Sonoma Sunshine is state and federally-listed endangered and on California Native Plant Society (CNPS) List 1B.1. Dwarf downingia is on CNPS list 2B.2. Both are vernal pool species that would not be present on the subject property due to the lack of such habitats at the site. Big-scale balsamroot, narrow-anthered brodiaea and congested-headed hayfield tarplant are all on CNPS list 1B.2. The remaining plant species mentioned are found in habitats not present at the site: Franciscan onion and big-scale balsamroot are often found on serpentine soils, narrow-anthered California brodiaea is found in broadleaf forest, and congested-headed hayfield tarplant is found in hills and valleys in grasslands. Though these species can be found in the general vicinity of the Project Site, none of these species would find suitable habitat conditions for occurrence at the subject property.

Technical Finding. In general, the highly urbanized nature of the project area and presence of a high component of non-native species of flora, make the site a poor candidate for supporting special status plant species. The Project Site does not provide suitable habitat for any of the special status plant species known to occur within the area. All of the special status plant species found in the general area require unique environments such as vernal pools, woodlands, native grasslands or serpentine soils not found at the Project Site.

Special Status Animal Species. Out of the many special status species reviewed in Table 2, only three have been known to occur within a couple miles of the Project Site. These species include western pond turtle (*Emmys marmorata*), bank swallow *(Riparia riparia),* and pallid bat *(Antrozous pallidus)*. Bank swallow is listed as a threatened species in California and the western pond turtle and pallid bat are state-designated species of special concern. Western pond turtle requires aquatic habitats that are not found at the subject site. The documented sighting of nesting bank swallows noted in the CNDDB is an 1893 record of nesting bank swallow along Sonoma Creek. As no suitable nesting habitat in the form of cliffs or banks occurs within the Project Site, nesting bank swallows would not occur at the subject property. Pallid bat night roosts were identified in 1999 at the Watmaugh Road and Riverside Road bridges over Sonoma Creek, both in the general vicinity of the Project Site. No suitable habitat for a night roost such as found at these bridges occurs at the Project Site and, therefore, pallid bat roosts would not be expected at the site.

Technical Findings. The disturbed nature of the Project Site does not provide suitable habitat for any of the special status animal species known to occur within the area. All of the special status animal species found in the general area require habitat types which are not found at the Project Site.

Sensitive Habitats. Review of the CNDDB shows that no sensitive habitats are documented to have occurred within or in the nearby the vicinity of the Project Site. The field inspection did not find any sensitive habitats within the Project Site. The Project

Site is not within the area covered by the Santa Rosa Plain Conservation Strategy. The nearest streams are Nathanson Creek (located approximately 700 feet or about 0.13 miles to the east of the site) and Sonoma Creek (located approximately 2,400 feet or about 0.45 miles to the west of the site).

Technical Findings. No sensitive habitats as defined by the California Environmental Quality Act or state or federal regulation occur at the Project Site. No sensitive habitats were found that would be potentially regulated by the USACE as waters of the U.S. (including wetlands) under Section 404 of the Clean Water Act; by the RWQCB as waters of the state of California (including wetlands) under their Section 401 Clean Water Act or Porter-Cologne Act regulatory authorities; or by the CDFW under Section of 1602 of the California Fish and Game Code (lakes or streams).

BIOLOGICAL ASSESSMENT

Special Status Species. No impact to special status species would result from the proposed project. This determination is based on the technical finding that the disturbed habitat at the Project Site is not suitable to support any of the special status plant or animal species known to occur within the area as defined by the California Environmental Quality Act or state or federal regulation.

Landscape and orchard trees and shrubs within the Project Site do provide potential nesting sites for birds protected under the MBTA, and an impact to one or more nesting species (including non-special status species) could occur if appropriate protections are not in place during construction activities.

Sensitive Habitats. No impact to sensitive habitat would result from the proposed project. This determination is based on the technical finding that no sensitive habitats as defined by the California Environmental Quality Act or state or federal regulation occur at the Project Site.

Professional Opinion. The proposed project would have no biological impact on special status plants, special status animals, or sensitive habitats. Due to the lack of the potential for special status plant or animal, species or sensitive habitat no further biological assessment is necessary. However, if an affordable housing project is approved for the site, it is recommended that searches for nesting birds be conducted by a qualified biologist prior to commencement of any construction for the proposed project occurring during the nesting season (generally between February 1 and August 31). If an occupied nest for any bird species protected under the MBTA is found, then the active nest should be protected in accordance with the MBTA until the young have fledged.

If you have any questions regarding this biological report please email me at gdeghi@h-bgroup.com or Terry Huffman at thuffman@h-bgroup.com or call us at 415-925-2000.

Sincerely,

Gary Deghi
Senior Environmental Scientist

LITERATURE CITED AND GENERAL REFERENCES

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Figures

Figure 1. Aerial Photograph of the Project Site

Figure 2. USGS Topographic Map of the Project Site

Figure 1. Aerial Photograph of the Project Site
20269 Broadway (APN 128-181-001)
Sonoma, Sonoma County, California

Huffman-Broadway Group, Inc.
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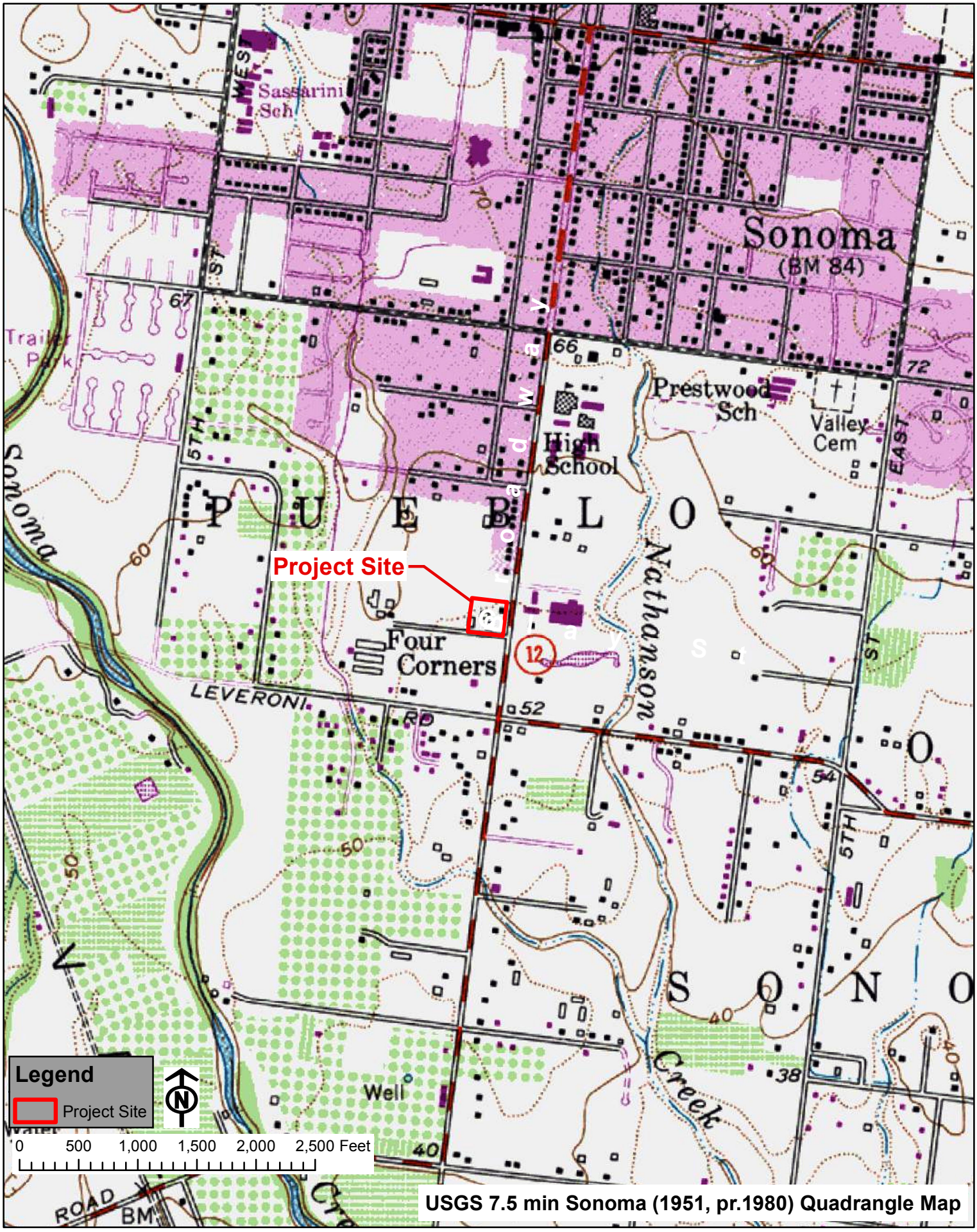

Figure 2. USGS Topographic Map of the Project Site
20269 Broadway (APN 128-181-001)
Sonoma, Sonoma County, California

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Tables

Table 1. Special Status Plants Known to Occur in the Vicinity of the Project Area, Sonoma County, California

Table 2. Special Status Animal Species That Have Been Reported in the Vicinity of the Project Area, Sonoma County, California

Table 1. Special Status Plants Known to Occur in the Vicinity of the Project Area, Sonoma County, California

SCIENTIFIC NAME	STATUS[2] FED/STATE/CNPS	HABITAT/RANGE	OCCURRENCE
Franciscan onion *(Allium peninsulare* var. *franciscanum)*	--/--/1B.2	On clay soils on dry hillsides, often on serpentine, in cismontane woodland and valley and foothill grassland. 100-300m.	Not present. Suitable habitat is not present at the site.
Napa false indigo (*Amorpha californica* var. *napensis*)	--/--/1B.2	Broad-leafed upland forest, chaparral, cismontane woodland; openings in forest or woodland or in chaparral (150-2000m).	Not present. Suitable habitat is not present at the site.
Rincon Ridge Manzanita *(Arctostaphylos stanfordiana ssp. decumbens)*	--/--/1B.1	Chaparral. Highly restricted to endemic rhyolites in Sonoma County. 75-310m.	Not present. Suitable habitat is not present at the site.
San Joaquin spearscale (*Atriplex joaquiniana*)	--/--/1B.2	Chenopod scrub, meadows, playas, valley and foothill grassland and vernal pools. Usually in seasonal alkali wetlands or alkali sink scrub with *Distichlis*, *Frankenia*, etc. 1-835m.	Not present. Suitable habitat is not present at the site.
Big-scale (California) balsamroot (*Balsamorhiza macrolepis var. macrolepis*)	--/--/1B.2	Chaparral, cismontane woodland, valley and foothill grassland, sometimes on serpentinite. 90-1555m.	Not present. Suitable habitat is not present at the site.
Sonoma sunshine *(Blennosperma bakeri)*	FE/CE/1B.1	Vernal pools and swales in valley and foothill grassland. 10-100m.	Not present. Suitable habitat is not present at the site.
Narrow-anthered California brodiaea (*Brodiaea californica var. leptandra*)	--/--/1B.2	Broadleafed upland forest, chaparral, lower montane coniferous forest. 110-915m.	Not present. Suitable habitat is not present at the site.

SCIENTIFIC NAME	STATUS[2] FED/STATE/CNPS	HABITAT/RANGE	OCCURRENCE
Rincon Ridge Ceanothus (*Ceanothus confuses)*	--/--/1B.1	Known from volcanic or serpentine soils on dry shrubby slopes in closed-cone coniferous forest, chaparral, and cismontane woodland. 75-1065m.	Not present. Suitable habitat is not present at the site.
Sonoma ceanothus (*Ceanothus sonomensis*)	--/--/1B.2	On sandy, serpentine or volcanic soils in chaparral. 210-800m.	Not present. Suitable habitat is not present at the site.
Pappose tarplant (*Centromadia parryi ssp. parryi*)	--/--/1B.2	Found in mesic and often alkaline site in coastal prairie, meadows and seeps, coastal salt marsh and valley and foothill grasslands. 2-420m	Not present. Suitable habitat is not present at the site.
Soft salty bird's-beak *(Chloropyron molle ssp. molle)*	FE/Rare/1B.2	Found in Coastal salt marsh with *Distichlis, Salicornia, Frankenia,* etc. 0-3m.	Not present. Suitable habitat is not present at the site.
Dwarf downingia (*Downingia pusilla*)	--/--/2B.2	Inhabits vernal pools and vernal lake margins. 1-445m.	Not present. Suitable habitat is not present at the site.
Greene's narrow-leaved daisy (*Erigeron greenei*)	--/--/1B.2	Serpentine and volcanic substrates in chaparral. 75-1060m.	Not present. Suitable habitat is not present at the site.
Fragrant fritillary (*Fritillaria liliaceas*)	--/--/1B.2	Coastal scrub, coastal prairie and valley and foothill grasslands, often on serpentine but usually in clay. 3-410m.	Not present. Suitable habitat is not present at the site.
Congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta*)	--/--/1B.2	Found in grassy valleys and hills in valley and foothill grassland, often in fallow fields and sometimes along roadsides. 20-560m.	Not present. Suitable habitat is not present at the site.
Thin-lobed horkelia (*Horkelia tenuiloba*)	--/--/1B.2	Coastal scrub, chaparral. Sandy soils, mesic openings. 45–500 m.	Not present. Suitable habitat is not present at the site.
California black walnut *(Juglans hindsii)*	--/--/1B.2	Few extant native stands remain in riparian forest and riparian woodland. Found in deep alluvial soils associated with streams and creeks. Widely naturalized. 0-640m.	Not present. Suitable habitat is not present at the site.

SCIENTIFIC NAME	STATUS[2] FED/STATE/CNPS	HABITAT/RANGE	OCCURRENCE
Contra Costa Goldfields (*Lasthenia conjugens*)	FE/--/1B.1	Vernal pools, swales, low depressions, in open grassy areas. 1-445m. Extirpated from most of its range. Most remaining occurrences restricted to the Fairfield region.	Not present. Suitable habitat is not present at the site.
Delta Tule Pea (*Lathyrus jepsonii* var. *jepsonii*)	--/--/1B.2	Inhabits the banks of sloughs and bays in the Suisun Bay and Delta. Found in freshwater and brackish marshes. Occurs along the Napa River.	Not present. Suitable habitat is not present at the site.
Jepson's Leptosiphon (*Leptosiphon jepsonii)*	--/--/1B.2	Found in open to partially shaded grassy slopes on volcanic soils or the periphery of serpentine substrates within chaparral and cismontane woodland. 100-500m.	Not present. Suitable habitat is not present at the site.
Mason's lilaeopsis (*Lilaeopsis masonii*)	--/CR/1B.1	Inhabits the edges of mudflats in brackish marsh and riparian scrub in the Delta. 0-10m. Occurs along the Napa River.	Not present. Suitable habitat is not present at the site.
Cobb mountain lupine (*Lupinus sericatus*)	--/--/1B.2	Chaparral, cismontane woodland, lower montane coniferous forest; in stands of knob cone pine-oak woodland; on open woodland slopes in gravelly soils; sometimes on serpentine. 180-1500m.	Not present. Suitable habitat is not present at the site.
Suisun Marsh aster (*Symphyotrichum lentum*)	--/--/1B.2	Both brackish and freshwater marshes and swamps. 0-3m. Occurs along the Napa River.	Not present. Suitable habitat is not present at the site.
Two-fork clover (*Trifolium amoenum*)	FE/--/1B.1	Inhabits moist clay grassland soils; known from one extant occurrence in Marin County. 5-560m. Known from a 1951 sighting near Napa.	Not present. Suitable habitat is not present at the site.

SCIENTIFIC NAME	STATUS[2] FED/STATE/CNPS	HABITAT/RANGE	OCCURRENCE
Saline Clover (*Trifolium depauperatum* var. *hydrophilum*)	--/--/1B.2	Marshes and swamps, mesic alkaline sites, vernal pools in valley and foothill grassland. 0-300m.	Not present. Suitable habitat is not present at the site.
Oval-leaved viburnum (*Viburnum ellipticum*)	--/--/2B.3	Chaparral, cismontane woodland and lower montane coniferous forest. 215-1400m.	Not present. Suitable habitat is not present at the site.

1. Source: California Natural Diversity Data Base, Natural Heritage Division, California Department of Fish and Wildlife for the Sonoma 7.5 Minute Quadrangle Map and surrounding areas, information April 2016.

2. Status Codes:

FE	Federal-listed Endangered
FT	Federal-listed Threatened
FPE	Federal Proposed Endangered
FPT	Federal Proposed Threatened
CE	California State-listed Endangered
CT	California State-listed Threatened
CR	California Rare
FP	California Fully Protected
CSC	California Species of Special Concern

California Rare Plant Rank 1A: Plants presumed extirpated in California and either rare or extinct elsewhere.
California Rare Plant Rank 1B: Plants rare, threatened, or endangered in California and elsewhere.
California Rare Plant Rank 2A: Plants presumed extirpated in California, but more common elsewhere.
California Rare Plant Rank 2B: Plants rare, threatened, or endangered in California, but more numerous elsewhere.
California Rare Plant Rank 3: Plants about which more information is needed – a review list.
California Rare Plant Rank 4: Plants of limited distribution – a watch list.
CNPS Threat Ranks
0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3-Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Table 2. Special Status Animal Species that have been Reported in the Vicinity of the Project Area, Sonoma County, California

SPECIES	STATUS FED/STATE	HABITAT	OCCURRENCE ON THE PROJECT SITE
ANIMALS			
Blennosperma Vernal Pool Andrenid Bee (*Andrena blennospermatis)*	--/--	Oligolectic on vernal pool flowers, especially Blennosperma.	Not present. Suitable habitat is not present at the site.
Ricksecker's Water Scavenger Beetle (*Hydrochara rickseckeri*)	--/--	Aquatic beetle that lives in weedy shallow, open water associated freshwater seeps, springs, farm ponds, vernal pools (playa type pools) and slow-moving stream habitats.	Not present. Suitable habitat is not present at the site.
Tomales isopod (*Caecidotea tomalensis*)	--/--	Inhabits localized freshwater ponds or streams with still or near-still water in several Bay Area Counties.	Not present. Suitable habitat is not present at the site.
Ricksecker's Water Scavenger Beetle *(Hydrochara rickseckeri)*	-/--	Known from aquatic habitats in the San Francisco Bay Area.	Not present. Suitable habitat is not present at the site.
California Freshwater Shrimp *(Syncaris pacifica)*	FE/CE	Found in low elevation, low gradient streams where riparian cover is moderate to heavy.	Not present. Suitable habitat is not present at the site.
Monarch Butterfly (*Danaus plexippus*)	--/Rare	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress) with nectar and water sources nearby.	Not present. Overwintering sites not present.

SPECIES	STATUS FED/STATE	HABITAT	OCCURRENCE ON THE PROJECT SITE
Opler's longhorn moth *(Adela oplerella)*	--/--	Ranges from Marin County on the Inner Coast Ranges to Santa Clara County. Most records are on serpentine grassland. Larvae feed on *Platystemon californicus*.	Not present. Suitable habitat is not present at the site.
Steelhead – Central CA Coast DPS (*Oncorhynchus mykiss*)	FT/CSC	Well-oxygenated streams with riffles; loose, silt-free gravel substrate.	Not present. Suitable habitat is not present at the site.
California Tiger Salamander (*Ambystoma californiense*)	FE/CT, CSC	Found in annual grasslands and grassy understory of valley-foothill hardwood habitats in central and northern California. Needs underground refuges, especially ground squirrel burrows and vernal pools or other seasonal water source for breeding.	Not present. Suitable habitat is not present at the site.
California Giant Salamander *(Dicamptodon ensatus)*	--/--	Known from wet coastal forests near streams and seeps from Mendocino County south to Monterey County and east to Napa County. Aquatic larvae found in cold, clear streams and occasionally in lake and ponds. Adults found in wet forests under rocks and logs near streams and lakes.	Not present. Suitable habitat is not present at the site.
California Red-legged Frog (*Rana draytonii*)	FT/CSC	Mostly found in lowlands and foothills in/near permanent sources of deep water but will disperse far during and after rain. Prefers shorelines with extensive vegetation. Requires 11-20 weeks of permanent water for larval development and requires access to aestivation habitat.	Not present. Suitable habitat is not present at the site.

SPECIES	STATUS FED/STATE	HABITAT	OCCURRENCE ON THE PROJECT SITE
Foothill Yellow-legged Frog (*Rana boylii*)	--/CSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying.	Not present. Suitable habitat is not present at the site.
Western Pond Turtle (*Emmys marmorata*)	--/CSC	Associated with permanent or nearly permanent water in a wide variety of habitats. Requires basking sites. Nests found up to 0.5 miles from water.	Not present. Suitable habitat is not present at the site.
Northern Harrier (*Circus cyaneus*) [nesting]	--/CSC	Coastal salt marsh and freshwater marsh; nests and forages in grasslands; nests on ground in shrubby vegetation, usually at marsh edge.	Not present. Suitable habitat is not present at the site.
White-tailed Kite (*Elanus caeruleus*) [nesting]	--/FP	Open grassland and agricultural areas throughout Central California.	Not present. Suitable habitat is not present at the site.
Sharp-shinned Hawk (*Accipiter striatus*) [nesting]	--/WL	Breeds in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers, but not restricted to, riparian habitats. North facing slopes, with plucking perches are critical requirements. All habitats except alpine, open prairie, and bare desert used in winter.	Nesting not present. Suitable habitat has not been present at the site. Species may forage on or near the site, especially in winter.
Cooper's Hawk (*Accipiter cooperii*) [nesting]	--/WL	Nests primarily in deciduous riparian forests; forages in open woodlands.	Nesting not present. Not present. Suitable habitat has not been present at the site. Species may forage on or near the site, especially in winter.
Ferruginous Hawk (*Bueto regalis*) [wintering]	BCC/WL	Inhabits open country. Winters in small number along California coast and inland valleys.	Not present. Suitable habitat is not present at the site.

SPECIES	STATUS FED/STATE	HABITAT	OCCURRENCE ON THE PROJECT SITE
Golden Eagle (*Aquila chrysaetos*) [nesting and wintering]	BCC/FP,WL	Typically frequents rolling foothills, mountain areas, sage-juniper flats and desert.	Not present. Suitable habitat is not present at the site.
American Peregrine Falcon (*Falco peregrinus anatum*)	Delisted,BCC/Delisted, FP	Nests in woodland, forest and coastal habitats, on cliffs or banks, and usually near wetlands, lakes, rivers, sometimes on human-made structure. In non-breeding seasons found in riparian areas and coastal and inland wetlands.	Not present. Suitable habitat is not present at the site.
Merlin (*Falco columbarius*) [wintering]	--/WL	Breeds in Canada, winters in a variety of California habitats, including grasslands, savannahs, wetlands, etc.	Not present. Suitable habitat is not present at the site.
Osprey (*Pandion haliaetus*) [Nesting]	--/WL	Breeds in northern California from the Cascade Ranges south to Lake Tahoe, and along the coast south to Marin County. Associated strictly with large, fish-bearing waters, primarily in Ponderosa pine through mixed conifer habitats.	Not present. Suitable habitat is not present at the site.
Western Snowy Plover (*Charadrius alexandrinus nivosus*) [nesting]	FT,BCC/CSC	Found on sandy beaches or marine and estuarine shores; also salt pond levees and shores of large alkali lakes; requires sandy, gravelly or friable soil substrate for nesting.	Not present. Suitable habitat is not present at the site.
Ridgway's (California clapper) Rail (*Rallus obsoletus*)	FE/CE,FP	Found in saltwater marshes traversed by tidal sloughs in the vicinity of San Francisco Bay; associated with abundant growths of pickleweed; feeds on mollusks obtained from mud bottomed sloughs.	Not present. Suitable habitat is not present at the site.

SPECIES	STATUS FED/STATE	HABITAT	OCCURRENCE ON THE PROJECT SITE
California Black Rail *(Laterallus jamaicensis coturniculus)*	BCC/CT,FP	Mainly inhabits salt-marshes bordering larger bays. Occurs in tidal salt marsh with dense growths of pickleweed; also occurs in freshwater and brackish marshes.	Not present. Suitable habitat is not present at the site.
Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*)	FC,BCC/CE	Nests in riparian forests along the broad, lower flood-bottoms of larger river systems. Requires willows, cottonwoods with lower story of blackberry, nettles or wild grape.	Not present. Suitable habitat is not present at the site.
Western Burrowing Owl *(Athene cunicularia hypugea)* (burrow sites)	BCC/CSC	Found in open dry annual or perennial grasslands, deserts and scrublands characterized by low growing vegetation. This species is a subterranean nester, dependent upon the burrows of burrowing mammals, most notably the California Ground Squirrel.	Not present. Suitable habitat is not present at the site.
Bank Swallow *(Riparia riparia)* (nesting)	--/CT	A migrant found primarily in riparian and other lowland habitats in California west of the deserts. A spring and fall migrant in the interior, less common on coast; an uncommon and very local summer resident. In summer, restricted to riparian areas with vertical cliffs and banks with fine-textured or sandy soil, into which it digs its nesting holes. There is an 1893 record in the CNDDB of a bank swallow colony near Sonoma.	Not present. Suitable habitat is not present at the site.

SPECIES	STATUS FED/STATE	HABITAT	OCCURRENCE ON THE PROJECT SITE
Loggerhead Shrike (*Lanius ludovicianus*)	BCC/CSC	Habitat includes open areas such as desert, grasslands and savannah. Nests in thickly foliaged trees or tall shrubs. Forages in open habitats, which contain trees, fence posts, utility poles, and other perches.	Not present. Suitable habitat is not present at the site.
California Horned Lark (*Eremophila alpestris actia*)	--/WL	Resident in a variety of open habitats, including grasslands, less common in mountain regions.	Not present. Suitable habitat is not present at the site.
Yellow Warbler (*Setophaga petechia*) [nesting]	BCC/CSC	Breeds in deciduous riparian woodlands, widespread during fall mitigation.	Nesting not present. No breeding habitat has been present onsite, migrants expected on site, especially in fall.
Saltmarsh Common Yellowthroat (*Geothlypis trichas sinuosa*)	BCC/CSC	Requires thick continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	Not present. Appropriate nesting habitat not present on site. Foraging by the species is possible, especially in winter.
Grasshopper Sparrow *(Ammodramus savannarum)*	--/CSC	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs and scattered shrubs.	Not present. Suitable habitat is not present at the site.
San Pablo Song Sparrow *(Melospiza melodia samuelis)*	BCC/CSC	Tidal, brackish or salt marshes, San Pablo Bay.	Not present. Suitable habitat is not present at the site.
Tri-colored Blackbird (*Agelaius tricolor*) [nesting colony]	BCC/CSC	Breeds near freshwater, usually in tall emergent vegetation. Requires open water with protected nesting substrate. Colonies prefer heavy growth of cattails and tules. Uses grasslands and agricultural lands for foraging.	Not present. Suitable habitat is not present at the site.

SPECIES	STATUS FED/STATE	HABITAT	OCCURRENCE ON THE PROJECT SITE
Suisun Shrew *(Sorex ornatus sinuosus)*	--/CSC	Inhabits tidal marshes along the northern shores of San Pablo and Suisun Bays.	Not present. Suitable habitat is not present at the site.
Salt Marsh Harvest Mouse (*Reithrodontomys raviventris*)	FE/CE,FP	Inhabits saline emergent wetlands in the San Francisco Bay and its tributaries. Pickleweed is the primary habitat.	Not present. Suitable habitat is not present at the site.
American Badger (*Taxidea taxus*)	--/CSC	Drier open stages of most shrub, forest, and herbaceous habitats; needs sufficient food, friable soils and open, uncultivated ground. Publications from 1937 indicate the presence of the species in Napa.	Not present. Suitable habitat is not present at the site.
Townsend's Big-eared Bat *(Corynorhinus townsendii)*	--/CCT,CSC	Found in desert scrub and coniferous forests. Roost in caves or abandoned mines and occasionally are found to roost in buildings.	Not present. Suitable habitat is not present at the site.
Long-legged Myotis Bat *(Myotis volans)*	--/--	Most common in woodland and forest habitats above 1200m. Also forages in chaparral, Coastal scrub and in early successional slopes of woodlands and forests. Roosts in rock crevices, buildings, under tree bark, in snags, mines, and caves. Forms nursery colonies numbering hundreds of individuals, usually under bark or in hollow trees, but occasionally in crevices or buildings.	Not present. Suitable habitat is not present at the site.
Pallid Bat *(Antrozous pallidus)*	--/CSC	Found in deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in rocky areas primarily in oak woodland and ponderosa pine habitats; forages in open areas.	Not present. Suitable habitat is not present at the site.

SPECIES	STATUS FED/STATE	HABITAT	OCCURRENCE ON THE PROJECT SITE
Hoary Bat (*Lasuirus cinereus*)	--/--	Prefers open habitats with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees.	Not present. Suitable habitat is not present at the site.

1. Source: California Natural Diversity Data Base, Natural Heritage Division, California Department of Fish and Wildlife for the Sonoma 7.5-Minute Quadrangle Map and surrounding areas, information dated April 2016.

2. Status Codes:

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FPT Federally Proposed Threatened
FC Federal Candidate
BCC USFWS Bird Species of Conservation Concern

CE California State-listed Endangered
CT California State-listed Threatened
CR California Rare
FP California Fully Protected
CSC CDFW Species of Special Concern
WL CDFW Watch List Species