3.3 - Biological Resources

3.3.1 - Introduction

This section describes the existing biological setting and potential effects from project implementation on the project site and the surrounding area. This section also identifies mitigation measures to reduce these potential effects to less than significant levels. Descriptions and analysis in this section are based in part on a Biological Resources Report performed by Huffman-Broadway Group, Inc. (HBG) in May 2021, provided in Appendix C.

3.3.2 - Environmental Setting

Climate

The project site is located in the City of American Canyon, which is part of the greater north San Francisco Bay Area. Like other portions of Northern California, American Canyon experiences a Mediterranean climate characterized by warm, dry summers and cool, wet winters. The project area typically exhibits annual low/high temperatures between 40-80°F (degrees Fahrenheit) and an annual average rainfall of approximately 20 inches.

Hydrology

The 208-acre project site is currently undeveloped land. The headwaters of No Name Creek occur within the northwestern portion of the project site. No Name Creek flows off the site at the northwestern corner of the property into the Napa Logistics Park Wetland Preserve. The drainage is hydrologically connected to Fagan Slough, which flows into the Napa River. The majority of wetlands that occur throughout the site and are supported by direct precipitation.

Topography and Soils

The majority of the project site is relatively flat at approximately 40 feet mean sea level and a total elevation variance of 30 feet. The project site generally slopes at about 0 to 2 percent with two highpoints to the southeast and southwest of the gradually sloping north toward No Name Creek. Although the remaining portions of the project site are relatively flat, grazing and inundation in topographic low areas has created a hummocky landscape with depressional microrelief. As a result, there are small seasonal wetlands and swales scattered throughout the site. Other large, and deep wetlands occur on the eastern and southern portions of the site. In the southeastern portion of the project site a berm confines surface water sheet flows creating several inundated depressional features.

Soil survey information for the project site was obtained from the National Resources Conservation Service Web Soil Survey.[1] Three different soil types were mapped by the Natural Resources Conservation Service (NRCS) within the project site. The mapped soil units include Clear Lake clay

[1] Natural Resources Conservation Service (NRCS). 2021. Official Soil Series Descriptions. United States Department of Agriculture (USDA). Website: http://www.nrcs.usda.gov/. Accessed May 2021.

drained (116), 0 to 2 percent slopes, Haire loam (146), 2 to 9 percent slopes, and Haire clay loam (148), 2 to 9 percent slopes. Exhibit 3.3-1 provides a soils map.

Plant Communities

Plant communities are assemblages of plant species growing in an area of similar biological and environmental factors. The project site contains three plant communities, as shown in Exhibit 3.3-2: Annual Grassland, Seasonal Wetlands (also referred to as palustrine emergent wetlands according to Cowardin classification) and Vernal Pool. This identification of habitat types on the property matches the findings of Monk & Associates as stated in their wetland delineation technical letter report submitted to the United States Army Corps of Engineers (USACE)[2] and Helm Biological Consulting as described in their rare plant survey. An inventory of plant species found on the project site during biological studies conducted by Monk & Associates is provided in the HBG report (Appendix C).

Annual Grassland

The Annual Grassland on the project site consist of naturalized annual grasslands, dominated by introduced annual grasses and forbs,. Dominant non-native annual grass species on the project site include Italian ryegrass (*Festuca perennis*), Mediterranean barely (*Hordeum marinum* ssp. *gussoneanum*), medusa head (*Elymus caput-medusae*), and soft chess (*Bromus hordeaceus*). Common non-native forbs found on the project site include bird's foot trefoil (*Lotus corniculatus*), subterranean clover (*Trifolium subterranean*), broadleaf filaree (*Erodium botrys*), English plantain (*Plantago lanceolata*), yellow glandweed (*Parentucellia viscosa*), Mediterranean linseed (*Bellardia trixago*), spring vetch (*Vicia sativa*), and bristly ox-tongue (*Helminthotheca echioides*). Native forbs and wildflowers were also present and include yellow owl's clover (*Triphysaria versicolor* ssp. *faucibarbata*), hayfield tarplant (*Hemizonia congesta* ssp. *luzulifolia*), and coastal tarweed (*Deinandra corymbosa*). Other common species noted by HBG Biologists during winter surveys in 2020 included species such as Harding grass (*Phalaris aquatica),* rip-gut brome (*Bromus diandrus*), field bindweed (*Convolvulus arvensis*), and sweet fennel (*Foeniculum vulgare*), and scattered coyote brush (*Baccharis pilularis*) and Himalaya berry (*Rubus armeniacus*) around the edges of the property.

Seasonal Wetland

The seasonal wetland habitat is referenced throughout this document and the supporting studies as palustrine emergent wetlands or seasonal wetlands. The seasonal wetlands on the property are vegetated with a variety of native and non-native species adapted for life in saturated soil conditions. Monk & Associates and Helm Biological Consulting noted the vegetation in the seasonal wetlands as being dominated by mix of native and non-native species such as Italian ryegrass, rabbit's foot grass (*Polypogon monspeliensis*), ditch beard grass (*Polypogon interruptus*), Bermuda grass (*Cynodon dactylon*), curly dock (*Rumex crispus*), Baltic rush (*Juncus balticus* ssp. *ater*), Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), saltgrass (*Distichlis spicata*), pennyroyal (*Mentha pulegium*), rough cocklebur (*Xanthium strumarium*), tall flat-sedge (*Cyperus eragrostis*), and swamp timothy (*Crypsis schoenoides*), and in some areas of deeper inundation,

[2] Monk & Associates. 2016. Request for a Confirmed/Approved Jurisdictional Determination Aquatic Resources Delineation Report, Giovannoni Property, City of American Canyon, Napa County, California. Letter from Hope Kingma of Monk & Associates to Holly Costa of the San Francisco Regulatory Division of the United States Army Corps of Engineers August 29, 2016.

broadleaf cattail (*Typha latifolia*). Plants noted in the seasonal wetlands during winter surveys conducted by HBG included species such as annual hairgrass (*Descampsia danthanoides*), Mediterranean barley, saltgrass, pennyroyal, rough cocklebur, tall flat-sedge, and swamp timothy, and in some areas of deeper inundation, broadleaf cattail.[3]

Vernal Pool

Vernal pools on the property are dominated with a variety of native species adapted for life in seasonally flooded depressions. Monk and Associates and Helm Biological Consulting[4] noted the vegetation in the vernal pool wetlands as being dominated by primarily native species such as annual semaphore grass (*Pleuropogon californicus* var. *californicus*), and creeping spikerush (*Eleocharis macrostachya*). Other subdominant species included: water pygmy weed (*Crassula aquatica*), common spike rush (*Eleocharis macrostachya*), smooth goldfields (*Lasthenia glaberrima*), Jepson's button celery (*Eryngium aristulatum* var. *aristulatum*), and hyssop loosestrife (*Lythrum hyssopifolia*), along with a few non-native wetland species such as rabbit's foot grass and brass buttons (*Cotula coronopifolia*).

Wildlife

The project site provides limited habitat for wildlife species, mostly those adapted to open areas and farm fields and disturbed environments. Grasses and herbaceous plants within the project site provide limited nesting and roosting sites for birds, and cover and foraging habitat for species of birds, mammals, reptiles, and amphibians. Seasonal wetlands provide wildlife with a seasonal water source that supports various animal species during the winter and spring months and sometimes into the early summer. Amphibians will lay their eggs in seasonal wetland habitats and complete much of their life cycle in the wetlands. No Name Creek would be considered a wildlife corridor, but the property is nearly entirely surrounded by development so the extent of wildlife corridors on the property is limited.

A number of wildlife species were documented during a winter season survey conducted at the project site by HBG on December 10, 2020. All species documented at the site are common to abundant in the region and would be expected in the non-native grasslands and seasonal wetlands present at the site. Bird species documented included various species adapted to grasslands and open areas including Canada goose (*Branta canadensis*), California gull (*Larus californicus*), mourning dove (*Zenaida macroura),* Eurasian collared-dove (*Streptopelia decaocto*), rock pigeon (*Columba livia*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), black phoebe (Sayo*rnis nigricans*), Say's phoebe (*Sayornis saya*), savannah sparrow (*Passerculus sandwichensis*), red-winged blackbird (*Agelaius phoeniceus),* and western meadowlark (*Sturnella neglecta*). Other species in taller vegetation and landscaping around the edges of the site and just off-site included California scrub-jay (*Aphelocoma californica*), bushtit (*Psaltriparus minimus*), northern mockingbird (*Mimus polyglottos)*, European starling (*Sturnis vulgaris*), white-crowned sparrow (*Zonotrichia*

[3] Monk & Associates. 2016. Request for a Confirmed/Approved Jurisdictional Determination Aquatic Resources Delineation Report, Giovannoni Property, City of American Canyon, Napa County, California. Letter from Hope Kingma of Monk & Associates to Holly Costa of the San Francisco Regulatory Division of the United States Army Corps of Engineers August 29, 2016.

[4] Helm Biological Consulting. 2021. Protocol-Level Special-Status Plant Survey at the Giovannoni Logistics Center Project, Napa County, California. August 2021.

leucophrys), California towhee (*Melozone crissalis*), house finch (*Haemorhous mexicanus*), and lesser goldfinch (*Spinus psaltria*). Raptors (birds of prey) observed foraging over the grasslands and wetlands of the project site were fairly common during the winter survey and included American kestrel (*Falco sparverius*), white-tailed kite (*Elanus leucurus*), red-tailed hawk (*Buteo jamaicensis*), northern harrier (*Circus hudsonius*), and turkey vulture (*Cathartes aura*).[5]

HBG conducted a spring season site reconnaissance surveys on April 16 and May 24, 2021, on the project site. Many of the bird species observed included species observed during the winter, but additional resident species observed during the April and May visits included ring-necked pheasant (*Phasianus colchicus*), wild turkey (*Meleagris gallopavo*), great blue heron (*Ardea herodia*), great egret (*Ardea alba*), and killdeer (*Charadrius vociferus*). Additional species added during the spring survey included spring arrivals of migrant species. Breeding season raptor observations included foraging northern harrier (a State designated Species of Special Concern for nesting habitat that was also observed foraging over the site in winter), as well as foraging by State listed threatened Swainson's hawk (*Buteo swainsoni*). A California Fully Protected golden eagle (*Aquila chrysaetos*) was also observed over the project site being harassed by the Swainson's hawk and flying low exhibiting foraging behavior. These three special-status raptor species have nested in this part of Napa County in the past, and it is entirely possible these individuals could be nesting somewhere in the vicinity of the project site. HBG drove about 10 miles of local roads surrounding the project site during both the April and May 2021 field reviews to inspect trees for raptor nest structures. No Swainson's hawk nest structures were observed. Additional species observed in the spring survey included cliff swallow (*Petrochelidon pyrrhonota*) and barn swallow (*Hirundo rustica*).

During their biological studies related to the Green Island Road Widening and Devlin Road Extension projects in 2018 and 2019, Monk & Associates observed several species of waterfowl and shorebirds in the on-site seasonal wetlands. These species were not observed during the December 10, 2020, or April 16, 2021, surveys by HBG as surface ponding was lacking on the site then due to the paucity of rain. These species included mallard (*Anas platyrhynchos*), American wigeon (*Anas americana),* greater yellowlegs (*Tringa melanoleuca*), long-billed curlew (*Numenius americanus*), marbled godwit (*Limosa fedoa*), western sandpiper (*Calidris mauri*), and Wilson's snipe (*Gallinago delicata*).

No amphibians were documented on the property by HBG, but Pacific treefrog (*Pseudacris regilla*) was noted by Monk & Associates Biologists while studying the Green Island Road Extension. Reptile sightings at the site by HBG included western fence lizard (*Sceloperus occidentalis);* other reptiles likely include Pacific gopher snake (*Pituophis catenifer)* and common garter snake (*Thamnophis sirtalis elegans)*. Observed evidence of mammals on the site by HBG were black-tailed jackrabbit (*Lepus californicus*), dens of Botta's pocket gopher (*Thomomys bottae*) and California vole (*Microtus californicus*), several California ground squirrels (*Otospermophilus beecheyi*) in a rubble pile in the southwestern portion of the site, and three mule deer (*Odocoileus hemionus*) in the southeastern portion of the property. Monk & Associates apparently observed raccoon (*Procyon lotor*) while conducting studies for the Devlin Road Extension project.[6] Other expected mammals would be those

[5] Huffman-Broadway Group, Inc. 2021. Biological Resources Report, Giovannoni Logistics Center, American Canyon, California. San Rafael, California. 52 pp. plus attachments. Prepared for Buzz Oates Construction, Inc., Sacramento, California. May 2021.

[6] Monk & Associates. 2018. Biological Resource Analysis, Devlin Road/Vine Trail Extension project, City of American Canyon, California. Prepared for GHD Inc., Santa Rosa, California. October 15, 2018

adapted to disturbed, urban environments such as Virginia opossum (*Didelphis virginiana*), deer mouse (*Peromyscus maniculatus*), and striped skunk, (*Mephitis mephitis*).

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) as Species of Concern which face extirpation in California if current population and habitat trends continue, those identified as Fully Protected in the California Fish and Game Code (a designation that provides additional protection to those animals that are rare or face possible extinction), and bird species designated as Bird Species of Conservation Concern by the United States Fish and Wildlife Service (USFWS). These State and federal Species of Concern must be evaluated in the context of evaluation under CEQA. Under Title 14, California Code of Regulations Section 15380, mentioned above, many Biologists and the lead agencies for whom they work evaluate impacts to plant species on California Native Plant Society (CNPS) Lists 1 and 2. Special-status species included in CEQA review also include bat species that have been designated with conservation priority by the Western Bat Working Group.

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 United States Geologic 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. The project site is within the *Cuttings Wharf* 7.5-minute Topographic Quadrangle Map.

Special-Status Plant Species

A list of special-status plants with potential to occur on the project site was developed from the CNDDB. A complete list of special-status plant species occurring in the vicinity of the property is included in the HBG report (Appendix C). The table includes all species of flora mentioned in the CNDDB within approximately 10 miles of the site.

No special-status plants have been mapped on or adjacent the project site. However, according to the CNPS Inventory and the CDFW CNDDB, a number of special-status plant species are known to occur in the project site vicinity. No special-status plants were identified on the project site by Monk & Associates while conducting various studies on the property in 2016, including an aquatic resources delineation and other evaluations conducted during the March to July flowering season of

2016.[7] No special-status plants or milkweed species (*Asclepias* ssp.) were identified on the project site by Helm Biological Consulting while conducting the protocol-level special-status plant survey conducted on April 7, 2021, May 4, 2021, and May 17, 2021.

Special-Status Wildlife

Animal species noted in the CNDDB as occurring within a 10-mile radius of the site, or that are known to occur in the general vicinity based on the knowledge of HBG Biologists, are discussed in in the HBG report (Appendix C). A number of special-status animal species are noted in the CNDDB as occurring in the general vicinity of the project site with habitat requirements similar to the habitats present on the project site. These species include vernal pool fairy shrimp (*Branchinecta lynchi*), California red-legged frog (*Rana draytonii),* western pond turtle (*Emmys marmorata*), Swainson's hawk, golden eagle, northern harrier, burrowing owl (*Athene cunicularia*) and tricolored blackbird (*Aegelaius tricolor*). The CDFW is also concerned over rapid declines in populations of monarch butterflies (*Danuas plexippus*) and a discussion of this species in relation to the proposed project is also discussed in the 2021 HBG report.[8]

None of the other animal species discussed in the table have the potential to occur on the site. This finding is made based on the habitat requirements of species listed in the table and is based on field review of habitats present at the site and the immediate vicinity and an evaluation of the suitability of on-site habitats to support these species.

Wetlands

Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon

Region 1 of the USFWS developed the "Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon" dated December 15, 2005. The recovery plan covers 33 species of plants and animals that occur exclusively or primarily within a vernal pool ecosystem in California and southern Oregon. The recovery plan goals include protecting and conserving intact vernal pools and vernal pool complexes within the recovery planning area to maintain viable populations of listed species and species of concern and prevent additional threats from emerging over time. The recovery plan includes designated "core" areas that are specific sites necessary to recover these endangered or threatened species or to conserve the species of concern addressed in this recovery plan.

The project site is near two core areas referred to as the "Napa River Core Area." One core area is located approximately 2.5 miles northeast of the project site at the Highway 12 and 121 interchange. The second Napa River Core Area is adjacent to the project site near the northwest boundary of the Wetland Preserve area. The project site itself is not within a core area.

The project site does support 0.13-acre of vernal pool habitat located within the 45-acre Wetland Preserve area and 1.13-acres of vernal pool habitat within the Phase 2 project footprint.

[7] Monk & Associates. 2016. Request for a Confirmed/Approved Jurisdictional Determination Aquatic Resources Delineation Report, Giovannoni Property, City of American Canyon, Napa County, California. Letter from Hope Kingma of Monk & Associates to Holly Costa of the San Francisco Regulatory Division of the United States Army Corps of Engineers August 29, 2016.

[8] Huffman-Broadway Group, Inc. 2021. Biological Resources Report, Giovannoni Logistics Center, American Canyon, California. San Rafael, California. 52 pp. plus attachments. Prepared for Buzz Oates Construction, Inc., Sacramento, California. May 2021.

Aquatic Resources Delineation Results

The Aquatic Resources Delineation Map prepared by Monk & Associates was submitted to the San Francisco District of the USACE on August 29, 2016, and was confirmed by letter from the USACE dated November 8, 2016. The wetlands found on the project site as mapped by Monk & Associates and verified by the USACE are provided in Attachment 4 of the HBG report. The mapped areas classified as wetlands exhibited a dominance of hydrophytic vegetation, as well as hydric soils and wetland hydrology. Hydrological indicators in mapped wetlands included the presence of oxidized rhizospheres along living roots (C3), surface soil cracks (B6), algal matting (Biotic Crust B12), aquatic invertebrates (B13), and vegetation suppression (indicating long-term inundation) within these wetland areas. Evidence of hydric soils included Redox Dark Surface F6 and Depleted Matrix F3 as defined in the approved regional supplement for the Arid West Region and the Field Indicators of Hydric Soils in the United States.

The majority of the seasonal wetlands on the project site gradually drain north toward No Name Creek. No Name Creek, within the project site, does not exhibit an ordinary high water mark (OHWM), and is therefore categorized as a seasonal wetland. No Name Creek flows off the project site to the west and enters the adjacent Napa River Core Area before draining into Fagan Slough, a tidal water of the United States. Fagan Slough is tributary to the Napa River, a traditional navigable water that flows to San Pablo Bay. Therefore, the 11.93 acres of seasonal wetlands in the north and southwest corner of the site are regulated as "waters of the United States" pursuant to Section 404 of the Clean Water Act (CWA) and are subject to USACE jurisdiction (see Attachment 4 of the HBG report). Several features in the southeastern portion of the project site are mapped as "isolated" seasonal wetlands since they do not have hydrologic connectivity to any water of the United States. The "isolated" features are contained within discrete topographic depressions, surrounded by uplands and berms that are higher in elevation, thereby isolating these features from any water of the United States. A total of 0.84 acre of "isolated" features that are mapped on the project site are not subject to USACE jurisdiction as shown on Exhibit 6.

The total area of USACE jurisdictional wetlands mapped on the project site is 11.93 acres. The total area of "isolated" wetlands mapped on the project site is 0.84 acre. HBG has determined that the areas mapped as isolated wetlands and not subject to jurisdiction of the USACE under the federal CWA would be subject to the wetland criteria of the State Porter-Cologne Water Quality Control Act and the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB) as a water of the State. A total of 12.77 acres of wetlands would be subject to the regulatory jurisdiction of the San Francisco Bay RWQCB as waters of the State. The portion of the project site along the northern boundary of the site contained within the confines of No Name Creek would be subject to the regulatory jurisdiction of the CDFW under Fish and Game Code Section 1602.

3.3.3 - Regulatory Framework

Federal

Clean Water Act–Section 404

The USACE regulates discharges of dredged or fill material into waters of the United States under Section 404 of the CWA. "Discharge of fill material" is defined as the addition of fill material into waters of the United States, including but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and sub-aqueous utility lines (33 Code of Federal Regulations [CFR] § 328.2(f)). In addition, Section 401 of the CWA (33 United States Code [USC] 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

The USACE and the United States Environmental Protection Agency (EPA) are responsible for implementing the Section 404 program. Section 404(a) authorizes the USACE to issue permits, after notice and opportunity for comment, for discharges of dredged or fill material into waters of United States. Section 404(b) requires that the USACE issue permits in compliance with EPA guidelines, which are known as the Section 404(b)(1) Guidelines. Specifically, the Section 404(b)(1) guidelines require that the USACE only authorize the "least environmentally damaging practicable alternative" and include all practicable measures to avoid and minimize impacts to the aquatic ecosystem. The guidelines also prohibit discharges that would cause significant degradation of the aquatic environment or violate State water quality standards.

Waters of the United States include both wetlands and "other waters of the United States." Wetlands and other waters of the United States are described by the EPA and USACE regulations (40 CFR § 230.3(s) and 33 CFR § 328.3(a), respectively). The EPA and USACE define wetlands as " . . . those areas that are inundated or saturated by surface or groundwater 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" (EPA regulations at 40 CFR § 230.3(t); USACE regulations at 33 CFR § 328.3(b)). Both natural and man-made wetlands and other waters (not vegetated by a dominance of rooted emergent vegetation) are subject to regulation. Waters of the United States include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows.

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 United States is defined by an OHWM in non-tidal waters (33 CFR § 328.3€) and by the high tide line within tidal waters (33 CFR § 328.3(d)). The OHWM is defined by the USACE as "that line on shore

established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR § 328.3(e)). Tidal waters are also under the jurisdiction of the USACE. The landward limits of jurisdiction in tidal waters extend to the high tide line or " . . . when adjacent non-tidal waters of the United States are present, to the limits of jurisdiction for such non-tidal waters" (33 CFR § 328.4(b)). High tide is further defined to include the line reached by spring high tides and other high tides that occur with periodic frequency (33 CFR § 328.3(d)).

Solid Waste Agency of Northern Cook County and Rapanos

In the U.S. Supreme Court decision *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers (SWANCC),* No. 99-1178 (2001)*,* some isolated wetlands may be excluded from the USACE Section 404 jurisdiction because they are (1) non-tidal, (2) non-navigable, (3) not hydrologically connected to navigable waters or adjacent to such waters, and (4) not subject to foreign or interstate commerce. Subsequent to SWANCC, the U.S. Supreme Court decided on *Rapanos v. United States* and *Carabell v. United States*, 126 U.S. 2208 (2006) (herein referred to as Rapanos). In 2007, guidance was given to EPA regions and USACE districts to implement the Supreme Court's decision that addresses the jurisdiction over waters of the United States under the CWA. The Rapanos guidance requires the USACE to conduct detailed analysis of the functions and values of wetlands and other waters of the United States potentially on-site and in some cases off-site, to determine whether there is a nexus to traditional navigable waters and to evaluate the significance of the nexus to the traditional navigable water. Neither the Court nor the recently issued guidance draw a clear line with respect to the geographic reach of jurisdiction, particularly in drainages where flows are ephemeral and where wetlands are adjacent to but not directly abutting relatively permanent water.

Navigable Waters Protection Rule

In 2020, the Trump administration obtained approval of the Navigable Waters Protection Rule (NWPR) that altered the reach of the regulations interpreting the scope of nation's CWA. The NWPR has four categories of jurisdictional waters and 12 categories of excluded waters/features. There is no stand-alone interstate waters category and no case-specific significant nexus analysis. Key changes were made for defining tributary, adjacent wetland, ditches, lakes, ponds, and impoundments. New definitions for defining typical year versus normal, perennial, intermittent, ephemeral, snowpack, and ditches. No change was made to the definition of wetlands or the methodology for defining wetlands. Under the NWPR, waters of the United States includes (1) territorial seas and traditional navigable waters; (2) tributaries; (3) lakes and ponds, and impoundments of jurisdictional waters; and (4) adjacent wetlands.

A ruling in the U.S. District Court for the District of Arizona on August 30, 2021, in the case of *Pascua Yaqui Tribe v. U.S. Environmental Protection Agency,* may result in the Final NWPR being overturned permanently. The EPA and USACE are reviewing the U.S. District Court's order vacating and remanding the NWPR, have halted implementation of the NWPR, and are currently interpreting "waters of the United States" consistent with the pre-2015 waters of the United States definition and EPA and USACE regulatory policies and guidance regime until further notice.

Clean Water Act–National Pollution Discharge Elimination System Requirements

In 1972, the CWA was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments established a framework for regulating municipal, industrial, and construction-related stormwater discharges under the NPDES Program. On November 16, 1990, the EPA published final regulations that establish stormwater permit application requirements for specified categories of industries. The regulations provide that discharges of stormwater from construction projects that encompass one or more acres of soil disturbance are effectively prohibited unless the discharge is in compliance with an NPDES permit.

The State Water Board has developed a general construction stormwater permit to implement the requirements for the federal NPDES permit. The permit requires submittal of a Notice of Intent (NOI) to comply, fees, and the implementation of a Storm Water Pollution Prevention Plan (SWPPP) that specifies Best Management Practices (BMPs) that would prevent construction pollutants from entering stormwater and keep products of erosion from migrating off-site into downstream receiving waters. The Construction General Permit includes post-construction requirements that include no increase in overall site runoff or the concentration of drainage pollutants and requires implementation of Low Impact Development (LID) design features. The Construction General Permit is implemented and enforced by California's nine RWQCBs.

The RWQCBs have also adopted requirements for NPDES stormwater permits for medium and large municipalities, and the State Water Board has adopted a General Permit for the discharge of stormwater from small municipal storm sewer systems. This General Permit requires projects to develop and implement a post-construction Storm Water Management Plan (SWMP) to reduce the discharge of pollutants to the maximum extent practicable.

Federal Endangered Species Act

The United States Congress passed the Endangered Species Act in 1973 to protect those species that are endangered or threatened with extinction. The Endangered Species Act is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend. The Endangered Species Act establishes an official listing process for plants and animals considered in danger of extinction, requires development of specific plans of action for the recovery of listed species, and restricts activities perceived to harm or kill listed species or affect critical habitat (16 USC 1532 and 1536).

The Endangered Species Act prohibits the "take" of endangered or threatened wildlife species. "Take" is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species, or any attempt to engage in such conduct (16 USC 1532). Taking can result in civil or criminal penalties. Federal regulation 50 Code of Federal Regulations 17.3 further defines the term "harm" in the take definition to mean any act that actually kills or injures a federally listed species, including significant habitat modification or degradation. Therefore, the Endangered Species Act is invoked when the property contains a federally listed threatened or endangered species that may be affected by a permit decision.

In the event that listed species are involved and a USACE permit is required for impacts to jurisdictional waters, the USACE must initiate consultation with the USFWS or the National Marine Fisheries Service (NOAA Fisheries) pursuant to Section 7 of the Endangered Species Act (16 USC 1536; 40 CFR § 402). Section 7 of the Endangered Species Act requires federal agencies to ensure that their actions do not jeopardize the continued existence of listed species or adversely modify critical habitat (16 USC 1536). In the regulations found at 50 Code of Federal Regulations 402.2, destruction or adverse modification is defined as a "direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species." Critical habitat is defined in Endangered Species Act Section 3(5)(A) as specific areas within the geographical range occupied by a species where physical or biological features "essential to the conservation of the species" are found and that "may require special management considerations or protection." Critical habitat may also include areas outside the current geographical area occupied by the species that are nonetheless "essential for the conservation of the species." Critical habitat designations identify, with the best available knowledge, those biological and physical features (primary constituent elements) which provide for the life history processes essential to the conservation of the species.

If formal consultation is required, USFWS or NOAA Fisheries will issue a Biological Opinion stating whether the permit action is likely to jeopardize the continued existence of the listed species, recommending reasonable and prudent measures to ensure the continued existence of the species, establishing terms and conditions under which the proposed project may proceed, and authorizing incidental take of the species.

For discretionary permit actions by non-federal entities, Section 10 of the Endangered Species Act provides a mechanism for obtaining take authorization through submittal and approval of a Habitat Conservation Plan that details species impacts, measures to minimize or mitigate such impacts, and funding mechanisms to implement mitigation requirements.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties devised to protect migratory birds and any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. The regulations governing migratory bird permits are in 50 Code of Federal Regulations Part 13 General Permit Procedures and 50 Code of Federal Regulations Part 21 Migratory Bird Permits. Most bird species within California fall under the provisions of the MBTA. Excluded species include non-native species such as house sparrow, starling, and ring-necked pheasant and native game species such as quail.

On December 22, 2017, the United States Department of Interior's Office of the Solicitor issued Memorandum M-37050, which states an interpretation that the MBTA does not prohibit the accidental or "incidental" taking or killing of migratory birds. In response to the Trump administration's attempted changes to the MBTA, eight states, including California, filed suit in September of 2018, arguing that the new interpretation inappropriately narrows the MBTA and should be vacated. On August 11, 2020, the Southern District of New York ruled in favor of the long-standing interpretation of the MBTA to protect migratory birds, reinstating the historical ban on

incidental take. Just days before leaving office, the Trump administration finalized its pullback of MBTA regulations, despite the ruling of the federal court. On his first day in office, President Biden placed Trump's changes to the MBTA on hold, pending further review.

Fish and Wildlife Coordination Act

The USFWS also has responsibility for project review under the Fish and Wildlife Coordination Act. This statute requires that all federal agencies consult with USFWS, NOAA Fisheries, and the State's wildlife agency (CDFW) for activities that affect, control, or modify streams and other water bodies. Under the authority of the Fish and Wildlife Coordination Act, USFWS, NOAA Fisheries, and the CDFW review applications for permits issued under Section 404 and provide comments to the USACE about potential environmental impacts.

USFW–S-Survey Guidelines for the Listed Large Branchiopods

The USFWS has published recovery plans for vernal pool species in Southern California and in Northern California and southern Oregon. These recovery plans list actions that will assist in the recovery of the vernal pool species, which include separate actions to develop survey guidelines and to conduct directed species status surveys or monitoring surveys.

The USFWS issued *Survey Guidelines for the Listed Large Branchiopods* dated May 31, 2021. These guidelines were created to provide a method to best detect the presence of the listed large branchiopods in a vernal pool or similar wetland feature. The guidelines are issued as guidance to Section 10(a)(1)(A) permittees. Because taking (killing, injuring, harming, or harassing) endangered or threatened species is strictly prohibited under the Endangered Species Act, a Section 10(a)(1)(A) recovery permit must be obtained prior to initiating any surveys or studies that might result in the take of endangered or threatened large branchiopods. These guidelines provide a survey method for wet season and dry season surveys.

State

Section 401 of the Federal Clean Water Act/Porter-Cologne Water Quality Control Act

Pursuant to Section 401 of the federal CWA, projects that require a USACE permit for the discharge of dredge or fill material must obtain water quality certification that confirms a project complies with State water quality standards before the USACE permit is valid. State water quality is regulated/administered by the California State Water Resources Control Board (State Water Board) and its nine RWQCBs. A water quality certification from a RWQCB must be consistent with not only the CWA, but with CEQA, the California Endangered Species Act (CESA), and the State Water Board requirement to protect beneficial uses of waters of the State.

The State also maintains independent regulatory authority over the placement of waste, including fill, into waters of the State under the Porter-Cologne Water Quality Control Act. Waters of the State are defined more broadly than "waters of the United States" to mean "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code § 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" and all surface waters that are not "waters of the United States" (e.g., non-jurisdictional wetlands; groundwater; and the territorial seas).

The State Water Boards *State Wetland Definition and Procedures for Discharges of Dredge of Fill Material to Waters of the State* adopted April 2, 2019 (the Procedures) along with the *Implementation Guidance for the Procedures* dated April 2020 (the Implementation Guidance) defines a wetland as an area that under normal circumstances, (1) has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation. The Procedures, along with the Implementation Guidance, state that the permitting authority (e.g., RWQCB) shall rely on any wetland area delineation from a final aquatic resource report verified by the USACE. If the USACE does not require an aquatic resource delineation report, an applicant must submit a delineation of all waters, but these delineations shall be verified by RWQCB's staff during application review. Similarly, if the USACE does not require a delineation, but similar information is prepared for the CDFW, the applicant can submit that information to the RWQCB, which shall determine if it is sufficient for the RWQCB's purposes. In addition, as a matter of policy, the State Water Board/RWQCBs consider wetlands and waters determined to be non-jurisdictional by the USACE/EPA under SWANCC or Rapanos guidance or the NWPR to remain jurisdictional as waters of the State subject to State Water Board/RWQCB jurisdiction.

The Procedures along with the Interim Guidance also include procedures for the submission, review, and approval of applications for activities that could result in the discharge of dredged or fill material to any waters of the State and include elements of the CWA Section 404(b)(1) Alternatives Analysis Guidelines, thereby bringing uniformity to the State Water Board regulation of discharges of dredged or fill material to all waters of the State. Typically, the USACE requires a CWA 404(b)(1) Alternatives Analysis for wetland impacts greater than 0.50 acre. The Procedures require an alternatives analyses to be completed in accordance with a three-tier system. The level of effort required for an alternatives analysis within each of the three tiers shall be commensurate with the significance of the impacts resulting from the discharge.

The State Water Board has also developed a general construction stormwater permit to implement the requirements of the federal NPDES permit. Projects approved by a RWQCB must, therefore, include the pre-construction requirement for a SWPPP and the post-construction requirement for a SWMP.

California Endangered Species Act

The State of California enacted CESA in 1984. The CESA is similar to the Endangered Species Act but pertains to State listed endangered and threatened species. CESA requires State agencies to consult with the CDFW when preparing CEQA documents. CESA generally prohibits the taking of State listed endangered or threatened plant and wildlife species; however, for projects resulting in impacts to State listed species, the CDFW may authorize take through issuance of an Incidental Take Permit (ITP) pursuant to Section 2081 of the California Fish and Game Code. Section 2081 requires preparation of mitigation plans in accordance with published guidelines that require, among other things, measures

to fully mitigate impacts to State listed species. The CDFW exercises authority over mitigation projects involving State listed species, including those resulting from CEQA mitigation requirements. No authorization of take under Section 2081 is permitted for species listed in State statutes as Fully Protected Species. Where Fully Protected Species are involved, projects must be designed to avoid all take of the species. The CDFW cannot issue an ITP until the CEQA Lead Agency has provided documentation in the form of a Notice of Determination that the proposed project has complied with CEQA.

California Department of Fish and Wildlife–Lake and Streambed Alteration Agreement

Section 1602 of the California Fish and Game Code requires any person, governmental agency, or public utility proposing any activity that will divert or obstruct the natural flow or change the bed, channel or bank of any river, stream, or lake, or proposing to use any material from a streambed, to first notify the CDFW of such proposed activity. Based on the information contained in the notification form and a possible field inspection, the CDFW may propose reasonable modifications in the proposed construction as would allow for the protection of fish and wildlife resources. Upon request, the parties may meet to discuss the modifications. If the parties cannot agree and execute a Lake and Streambed Alteration Agreement, then the matter may be referred to arbitration. The CDFW cannot issue a Streambed Alteration Agreement until CEQA compliance has been achieved, usually through the CEQA Lead Agency providing documentation in the form of a Notice of Determination that the Lead Agency has complied with CEQA by preparing a negative declaration or Environmental Impact Report (EIR).

CDFW's regulations implementing the Fish and Game Code 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 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. 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*.[9] In making jurisdictional determinations, the 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 mentioned in the Fish and Game Code provisions governing Lake and Streambed Alteration Agreement, but the CDFW often asserts 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.

[9] California Department of Fish and Game (CDFG). 1994. A Field Guide to Lake and Streambed Alteration Agreements. Sacramento, California. November 1, 1994.

California Department of Fish and Wildlife–Fish and Game Code Section 3503, 3503.5, and 3513.

The State of California also incorporates the protection of nongame birds and birds of prey, including their nests, in Sections 3503, 3503.5, and 3513 of the California Fish and Game Code. Under Fish and Game Code Section 3503.5, it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird. Fish and Game Code Section 3503.5 makes it unlawful to take or possess birds of prey (hawks, eagles, vultures, owls) or destroy their nests or eggs. In December of 2018, California issued new guidance specifying that State law includes "a prohibition on incidental take of migratory birds, notwithstanding any federal reinterpretation of the Migratory Bird Treaty Act" by the Department of Interior.

California Department of Fish and Wildlife–Sensitive Plant Communities

The CDFW has designated special-status natural communities which are considered rare in the region, rank as threatened or very threatened, support special-status species, or otherwise receive some form of regulatory protection. Sensitive plant communities are those natural plant communities identified in local or regional plans, policies, ordinances, regulations, or by the CDFW that provide special functions or values. Documentation pertaining to these communities, as well as special-status species (including Species of Special Concern), is kept by the CDFW as part of the 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 the CDFW on their List of California Natural Communities Recognized by the CNDDB. Impacts to sensitive natural communities must be considered and evaluated under CEQA.

California Department of Fish and Wildlife–Species of Special Concern

The CDFW tracks species in California whose numbers, reproductive success, or habitat may be threatened. Species that may be considered for review are included on a list of "Species of Special Concern" developed by the CDFW. Even though these species may not be formally listed under the Endangered Species Act or CESA, such plant and wildlife species must be evaluated during the CEQA review of development projects, and mitigation should be developed to prevent significant impacts to such species.

California Department of Fish and Wildlife–Fully Protected Animal Species

The classification of Fully Protected was an effort by California Legislature in the 1960s to identify and provide additional protection to those animals that were rare or faced possible extinction. Protection of Fully Protected Species is described in four sections of the Fish and Game Code (Fish and Game Code [FGC] §§ 3511, 4700, 5050, and 5515). These statutes prohibit take or possession of Fully Protected Species at any time. The CDFW is unable to authorize incidental take of Fully Protected Species when activities are proposed in areas inhabited by these species, except pursuant to an approved Natural Community Conservation Plan. Most Fully Protected Species have also been listed as threatened or endangered species under State endangered species laws and regulations. Permits may be issued for the take of Fully Protected Bird species for necessary scientific research and relocation of the species for the protection of livestock (as per California FGC § 3511(a)(1)).

California Department of Fish and Wildlife–Swainson's Hawk Nesting Survey Guidelines

For locating nesting Swainson's hawk, the CDFW recommends using the "*Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*" dated May 31, 2000. This set of survey recommendations was developed by the Swainson's Hawk Technical Advisory Committee to maximize the potential for locating nesting Swainson's hawk, and thus, reducing the potential for nest failures as a result of project activities/disturbances. In summary, surveys should be conducted in a manner that maximizes the potential to observe the adult Swainson's hawk, as well as the nest/chicks. To meet the CDFW recommendations for mitigation and protection of Swainson's hawk, surveys should be conducted for a 0.5-mile radius around all project activities, and if active nesting is identified within the 0.5-mile radius, consultation with the CDFW to determine nesting buffers is required under these guidelines. The guidelines provide specific recommendations regarding the number of surveys based on when the proposed project is scheduled to begin and the time of year the surveys are conducted.

California Department of Fish and Wildlife–Special-status Native Plant Survey Protocol

For conducting botanical surveys to detect special-status plant species, the CDFW developed survey protocols identified in "*Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*" dated March 20, 2018. Botanical field surveys provide information used to determine the potential environmental effects of proposed projects on special-status plants as required by law (e.g., CEQA, CESA, and the Endangered Species Act). According to the protocol, botanical field surveys should be conducted in a manner which maximizes the likelihood of locating special-status plants and sensitive natural communities that may be present. Botanical field surveys should be floristic in nature, meaning that every plant taxon that occurs in the project area is identified to the taxonomic level necessary to determine rarity and listing status. "Focused surveys" that are limited to habitats known to support special-status plants or that are restricted to lists of likely potential special-status plants are not considered floristic in nature and are not adequate to identify all plants in a project area to the level necessary to determine whether they are special-status plants.

California Department of Fish and Wildlife–Staff Report on Burrowing Owl Mitigation

The CDFW issued survey protocols for conducting burrowing owl breeding and nonbreeding season surveys and pre-construction surveys in the *Staff Report on Burrowing Owl Mitigation* dated March 7, 2012.

In summary, for breeding season surveys a minimum of four survey visits shall be conducted: (1) at least one site visit between February 15 and April 15, and (2) a minimum of three survey visits, at least 3 weeks apart, between April 15 and July 15, with at least one visit after June 15. The survey shall be conducted in all portions of the project site that fit the description of habitat in Appendix A of the staff report. Surveys shall be walked in straight-line transects spaced 7 meters to 20 meters apart, adjusting for vegetation height and density. At the start of each transect and, at least, every 100 meters, the surveyor shall scan the entire visible project area for burrowing owl using binoculars and record all potential burrows used by burrowing owl as determined by the presence of one or more burrowing owl, pellets, prey remains, whitewash, or decoration. For nonbreeding season

surveys, the methods described above for breeding season surveys shall be followed, but at least four visits shall be spread evenly and conducted throughout the nonbreeding season.

Pre-construction surveys, referred to as "take avoidance surveys" in the staff report, are intended to detect the presence of burrowing owl on a project site at a fixed period in time and inform necessary take avoidance actions. Take avoidance surveys may detect changes in owl presence such as colonizing burrowing owl that have recently moved onto the site, migrating owl, resident burrowing owl changing burrow use, or young of the year that are still present and have not dispersed. In summary, survey methodology for pre-construction surveys should be conducted no less than 14 days prior to initiating ground disturbance activities.

California Native Plant Society

The CNPS, a nongovernmental organization, has no regulatory authority but provides information that is often used by regulatory bodies. The CNPS maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California. Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review, especially for those plant species including in Lists 1 and 2. The following identifies the definitions of the CNPS listings:

- **Rank 1A:** Plants presumed extirpated in California and either rare or extinct elsewhere.
- **Rank 1B:** Plants Rare, Threatened, or Endangered in California and elsewhere.
- **Rank 2A:** Plants presumed extirpated in California but more common elsewhere.
- **Rank 2B:** Plants Rare, Threatened, or Endangered in California, but more common elsewhere.
- **Rank 3:** Plants about which more information is needed.
- **Rank 4:** Watch List: Plants of limited distribution.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan sets forth the following goals, objectives, and policies relevant to biological resources on the project site:

Goal 8 Protect and preserve the significant habitats, plants and wildlife that exist in the City and its Planning Area.

Objective 8.1 Maintain data and information regarding areas of significant biological value within the Planning Area to facilitate resource conservation and the appropriate management of development.

Policy 8.1.1 Acquire and maintain the most current information available regarding the status and location of sensitive biological elements (species and natural communities) within the City and, as appropriate, within the Sphere of Influence and Urban Limit Line.

Policy 8.1.4 Regularly monitor and review developments proposed within the City's Planning Area to assess their impacts on local biological resources and to recommend appropriate mitigation measures that the developer and/or government agency can implement.

Objective 8.2 Balance the preservation of natural habitat areas, including coastal saltmarsh, mixed hardwood forest, oak savanna, and wetland and riparian habitats, with new development in the City.

Policy 8.2.1 Land use applications for developments located within sensitive habitats, including coastal saltmarsh, mixed hardwood forest, oak savanna, and riparian habitats (see Figure 8-1) [General Plan], or with areas potentially occupied by vernal pools (see Figure 8-2) [General Plan] shall be accompanied by sufficient technical background data to enable an adequate assessment of the potential for impacts on these resources, and possible measures to reduce any identifiable impacts. In addition to examining Figure 8-1 [General Plan] for information on these sensitive habitats, an on-site assessment shall be conducted by a City approved qualified Biologist to determine whether sensitive habitats exist on-site, in instances where the potential for significant impacts exists, the applicant must submit a Biological Assessment Report prepared by a qualified professional.

Objective 8.3 Protect natural drainages and riparian corridors within the American Canyon Planning Area.

Policy 8.3.1 Review proposed developments in wetlands and riparian habitats to evaluate their conformance with the following policies and standards:

a. The development plan shall fully consider the nature of existing biological resources and all reasonable measures shall be taken to avoid significant impacts, including retention of sufficient natural open space and undeveloped buffer zones.

b. Development shall be designed and sited to preserve watercourses, riparian habitat, vernal pools, and wetlands in their natural condition, unless these actions result in an unfeasible project, in which case habitat shall be replaced in accord with subsection "g" (below).

c. Where riparian corridors are retained, they shall be protected by an adequate buffer with a minimum 100-foot protection zone from the edge of the tree, shrub, or herb canopy (see Policy 8.3.2).

d. Development shall incorporate habitat linkages (wildlife corridors) to adjacent open spaces, where appropriate and feasible.

e. Development shall incorporate fences, walls, vegetative cover, or other measures to adequately buffer habitat areas, linkages, or corridors from built environment.

f. Roads and utilities shall be located and designed such that conflicts with biological resources, habitat areas, linkages or corridors are avoided where feasible.

g. Future development shall utilize appropriate open space or conservation easements in order to protect sensitive species or their habitats.

h. Future development shall mitigate unavoidable adverse impacts to waters of the United States, wetlands, and riparian habitats (pursuant to the federal Clean Water Act and the California Fish and Game Code, Section 1600 *et seq*.) by replacement on an in-kind basis. Furthermore, replacement shall be based on a ratio determined by the California Department of Fish and Wildlife and/or United States Army Corps of Engineers in order to account for the potentially diminished habitat values of replacement habitat. Such replacement should occur on the original development site, whenever possible. Alternatively, replacement can be affected, subject to State and federal regulatory approval, by creation or restoration of replacement habitats elsewhere (off-site but preferably within the City's Planning Area), protected in perpetuity by provision for an appropriate conservation easement or dedication.

Policy 8.3.5 Establish a network of open spaces along the City's natural drainages and riparian corridors and link significant biological habitats. Any recreational use of these areas shall be designed to avoid damaging sensitive habitat areas.

Policy 8.3.6 Preserve and integrate the City's natural drainages in new development, as opposed to their channelization or undergrounding, emphasizing opportunities for the development of pedestrian paths and greenbelts along their lengths throughout the City.

Objective 8.4 Protect local vernal pools as well as the habitats of endangered species living within American Canyon's Planning Area.

Policy 8.4.1 Require that development plans incorporate all reasonable mitigation measures to avoid significantly impacting vernal pools for projects located within American Canyon's Planning Area.

Policy 8.4.2 Preserve, where possible, the habitat of several in-fact endangered species, including those shown on Figure 8-2 and listed in Table 8-1, as well as those that may be considered by the City in the future.

Policy 8.4.3 Encourage activities that improve the biological value and integrity of the City's natural resources through vegetation restoration, control of alien plants and animals, and landscape buffering.

3.3.4 - Methodology

Biological Resources Report

The description of the biological setting for the property is based on field visits to the site by HBG Senior Environmental Scientist, Gary Deghi, Senior Wetland Scientist, Robert Perrera, and Wildlife Biologist, Emilie Strauss, between December of 2020 and April of 2021. In addition, HBG independently reviewed and incorporated a number of studies previously prepared for the proposed project by other consultants and conducted additional specialized studies using species experts as part of work in preparing this document.

Previously prepared biological studies pertaining to the site included an aquatic resources delineation prepared by Monk & Associates and surveys for federally listed vernal pool brachiopods conducted by both LSA Associates and Monk & Associates.[10,11,12] HBG included a habitat assessment for the federally listed threatened California red-legged frog prepared by Dr. Mark Jennings and a botanical field surveys, floristic in nature, were conducted by Dr. Brent Helm during the 2021 flowering season. These floristic surveys were conducted when the plants of interest were in bloom or otherwise visible.[13,14] Also relevant to the biological evaluation were Biological Resource Reports prepared by Monk & Associates for two separate Initial Study/Mitigated Negative Declarations (IS/MNDs) prepared by the City of American Canyon for projects with project boundaries either shared with or adjacent to the project site. These include Biological Resource Reports for the Devlin Road Extension project and the Green Island Road Reconstruction and Widening project.[15,16]

Aquatic Resources Delineation

Monk & Associates conducted an aquatic resources delineation on the project site in 2016. Field work for the delineation was conducted during the period of April 15 to May 26, 2016. Monk & Associates Biologists used the USACE 1987 Wetlands Delineation Manual in conjunction with the regional supplement for the Arid West Region to prepare this wetland delineation. A jurisdictional determination request and the Aquatic Resources Delineation Map were prepared in compliance with the USACE 2016 Minimum Standards for Acceptance of Aquatic Resources Delineation Reports and the 2016 Updated Map and Drawing Standards for the South Pacific Division Regulatory Program.[17]

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[10] Monk & Associates. 2016. Request for a Confirmed/Approved Jurisdictional Determination Aquatic Resources Delineation Report, Giovannoni Property, City of American Canyon, Napa County, California. Letter from Hope Kingma of Monk & Associates to Holly Costa of the San Francisco Regulatory Division of the United States Army Corps of Engineers August 29, 2016.

[11] LSA Associates. 2016. Results of 2016 Dry Season Listed Branchiopod Surveys for the Giovannoni Property and Devlin Road/Vine Trail Extension, Napa County, California, (USFWS Reference No. 2012-TA-0388). November 23, 2016.

[12] Monk & Associates. 2017. Vernal Pool Branchiopod Surveys on the Giovannoni Property and the Devlin Road and Vine Trail Extension project site, City of American Canyon, Napa County, California. United States Fish and Wildlife Service File No. 2012-TA-0388. Prepared for United States Fish and Wildlife Service, Sacramento Field Office. March 31, 2017.

[13] Jennings, Mark. 2021. Habitat Assessment for the California Red-legged Frog at the Proposed Giovannoni Logistics project site, American Canyon, California. Prepared by Rana Resources for Huffman-Broadway Group, Inc. March 11, 2021.

[14] Helm, Brent. 2021. Protocol Level Special Status Native Plant Surveys at the Giovannoni Logistic Center Project, Napa County, California. Prepared by Helm Biological Consulting. August 9, 2021.

[15] Monk & Associates. 2018. Biological Resource Analysis, Devlin Road/Vine Trail Extension project, City of American Canyon, California. Prepared for GHD Inc., Santa Rosa, California. October 15, 2018.

[16] Monk & Associates. 2019. Biological Resources Analysis, Green Island Road Reconstruction and Widening project, City of American Canyon, California. Prepared for City of American Canyon, California.

[17] Monk & Associates. 2016. Request for a Confirmed/Approved Jurisdictional Determination Aquatic Resources Delineation Report, Giovannoni Property, City of American Canyon, Napa County, California. Letter from Hope Kingma of Monk & Associates to Holly Costa of the San Francisco Regulatory Division of the United States Army Corps of Engineers August 29, 2016.

Vegetation, hydrology, and soils information were taken at 142 data points. Data points were mapped using a Trimble Pro-XR Global Positioning System (GPS) having sub-meter accuracy. The delineation map was made from the GPS files using ArcMap 10.2. All spatial data were projected into the California State Plane, NAD 83 coordinate system, Zone 2. Using GPS technology, the boundaries (within 30 inches) of each delineated wetland was transferred to an aerial photograph of the project site.

3.3.5 - Thresholds of Significance

Appendix G to the CEQA Guidelines is a sample Initial Study checklist that includes questions for determining whether impacts to biological resources are significant. These questions reflect the input of planning and environmental professionals at the Governor's Office of Planning and Research (OPR) and the California Natural Resources Agency, based on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. They also reflect the requirements of laws other than CEQA that protect biological resources (e.g., the federal CWA, the Porter-Cologne Water Quality Control Act, the Endangered Species Act and CESA, and the Natural Community Conservation Planning Act). As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G. The City has chosen to do so for this project.

Additional guidance on the significance of biological resource impacts is found in CEQA Guidelines Section 15065, subdivision (a)(1), which provides that a lead agency shall find that a project may have a significant effect on the environment if "[t]he project has the potential to: . . . substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; [or]substantially reduce the number or restrict the range of an endangered, rare or threatened species[.]" The "mandatory findings of significance" are also found in the Appendix G sample Initial Study checklist, though near the end.

In light of the foregoing, the proposed project would have a significant effect related to biological resources if the proposed project would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.

c) Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan.

g) Substantially reduce the habitat of a fish or wildlife species.

h) Cause a fish or wildlife population to drop below self-sustaining levels.

i) Threaten to eliminate a plant or animal community.

j) Substantially reduce the number or restrict the range of an endangered, rare or threatened species.

3.3.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Special-Status Species

Impact BIO-1:	**The proposed project could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.**

Impact Analysis

Phases 1 and 2

Special-status Plants

A determination regarding whether special-status plant species are present in proposed development areas can only be made based on systematic rare plant surveys conducted during the flowering period of target plant species. HBG retained Dr. Brent Helm of Helm Biological Consulting, a division Tansley Team, Inc., to conduct botanical surveys for the presence of special-status plant species with the potential to occur at the site. These botanical surveys utilized CDFW protocols identified in "*Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*" dated March 20, 2018.

A 10-mile radius search using the CNDDB was generated to determine special-status plant species that may be near the project site. Helm Biological Consulting determined 23 special-status plant species were associated with habitats that are known to occur the project site. Helm Biological Consulting conducted botanical surveys during the spring of 2021 and survey dates were chosen based on when the special-status plants would be in bloom or otherwise visible. Field surveys for special-status plants incorporated floristic survey methods, as recommended by CDFW protocols. Floristic survey methods require identification of all plant species located on-site. Each species encountered was identified to the extent necessary to determine whether it had any legally

protected status. Floristic surveys were conducted to ensure that special-status plant species were not inadvertently overlooked because they were not targeted for surveys.

Based on the Helm Biological Consulting botanical survey results, no special-status plant species occur on the project site. Therefore, no impacts to special-status species would occur from construction of the proposed project. No mitigation is warranted for special-status plants.

Special-status Animals

Monarch Butterfly

No trees are present on the project site so there is no possibility for the presence of a monarch butterfly overwintering site at the project site. Several Biologists, including most recently Helm Biological Consulting, have studied the site or portions of the site, and none have reported the presence of milkweed plants of the genus *Asclepias*[18] that serve as the larval host plant for monarchs. No suitable habitat for monarch butterflies is found on the site, therefore, no potentially significant impacts to monarch butterflies would result from construction of the proposed project.

Vernal Pool Fairy Shrimp

LSA Inc. conducted dry season vernal pool fairy shrimp surveys in summer of 2016, and Monk & Associates, Inc. conducted wet season vernal pool fairy shrimp surveys in winter of 2016-2017. Survey methods were conducted in accordance with the USFWS revised *Survey Guidelines for the Listed Large Branchiopods (May 31, 2015).* No vernal pool fairy shrimp were observed during the dry or wet season surveys. Based upon completed surveys using these guidelines for vernal pool fairy shrimp, it is clear that the federally listed threatened vernal pool fairy shrimp does not occur on the project site. Therefore, no impacts to vernal pool fairy shrimp would result from construction of the proposed project. No mitigation is warranted for vernal pool fairy shrimp for the proposed project.

California Red-legged Frog

A habitat assessment prepared for the project site by Rana Resources found that the project site lacks habitat necessary to support the California red-legged frog. All records of the California red-legged frog from the CNDDB in the project area are from areas east of State Route (SR) 29, which forms a barrier to potential movements of the California red-legged frog onto the site. Additionally, the project site is completely isolated from all areas to the east by SR-29 by urban infrastructure, and there are no hydrologic connections with any stream channels off-site to the east of SR-29. Finally, there is no suitable breeding or rearing habitat for California red-legged frog on-site due to the shallow and ephemeral nature of the seasonal wetlands and the lack of any suitable riparian vegetation for cover. California red-legged frog do not occupy the project site, and the proposed project would have no significant impacts on California red-legged frogs. No mitigation is warranted for this species for the proposed project.

Western Pond Turtle

Suitable habitat for western pond turtle does not occur on the site due to the shallow and ephemeral nature of the seasonal wetlands, which are inundated for only about 3 to 4 months out of the year and even less in drought years. Surrounding uplands of suitable shrub/woodlands and

[18] Helm Biological Consulting. 2021. Protocol-Level Special-Status Plant Survey at the Giovannoni Logistics Center Project, Napa County, California. August 2021.

appropriate basking sites are also lacking. Western pond turtle does not occupy the project site. No impacts to western pond turtle would result from development of the proposed project. Mitigation measures for western pond turtle are not warranted for the proposed project.

Swainson's Hawk

There are no trees located on the project site, and no large trees capable of supporting nesting by Swainson's hawk in the immediate project vicinity. The non-native grasslands and seasonal wetlands and swales found on the property provide suitable foraging habitat for Swainson's hawk that may nest away from the project site. Swainson's hawk was observed foraging on the site during surveys conducted in April and May 2021. Development of the proposed project would remove some foraging area for this species. Development of the proposed project would also provide and preserve in perpetuity approximately 45 acres of open space that would include habitat currently suitable for foraging by the Swainson's hawk as indicated by the observation of a Swainson's hawk foraging in the site in spring 2021. The adjacent Napa Logistics Park Project has preserved 37 acres of grassland and wetlands in perpetuity that provides foraging habitat for Swainson's hawk. Between these two preservation areas abutting and directly adjacent to the project site approximately 82 acres of suitable habitat would be available for the Swainson's hawk. In addition there are several large open space preserves within 2 and 5 miles of the project site that combined provide approximately 2,000 acres of suitable foraging habitat. Based upon the limited number of Swainson's hawk records within a 10-mile radius of the project site, there is sufficient foraging habitat in and within the vicinity of the project site. Based upon the limited number of known Swainson's hawk to occur within a 10 mile radius of the project site and the acreage of existing foraging habitat currently protected, the proposed project would not result in significant impacts to foraging habitat directly, indirectly, or cumulatively, therefore no mitigation is warranted for Swainson's hawk foraging habitat.

Although eucalyptus and other large trees located within about 0.25 mile from the project site provide potential nesting habitat, no nesting by Swainson's hawk (or any raptor species) was noted during surveys for nesting Swainson's hawk conducted by Helm Biological Consulting in April and May 2021. If an active Swainson's hawk nest is found on or adjacent to the project site or within the area of influence of the project site (which is generally considered within 1,000 feet), the CDFW could require that project-related disturbance at active nest sites be reduced or eliminated during the period from March 1—September 15.[19] If Swainson's hawk was found to be nesting within a zone of influence during the construction period, potential impacts to this species could occur, including disturbance to nesting birds and possible mortality of adults and/or young. If the qualified Raptor Biologist[20] determines nest disturbances are anticipated to occur that could result in mortality of adults and/or young, a Fish and Game Section 2081 ITP authorization would be required. Pre-construction nesting surveys, as described in MM BIO-1a, are warranted to ensure that the proposed project will not impact Swainson's hawk. With the implementation of this mitigation

[19] California Department of Fish and Wildlife (CDFW). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. May 31, 2000. 4 pages.

[20] A qualified Raptor Biologist is an individual who shall have a minimum of 5 years of academic and professional experience in biological sciences and be able to recognize raptor species that may be present at and near the project site and be familiar with the foraging and nesting habits and behaviors of these species.

measure any potential impacts to nesting Swainson's hawk would be reduced to less than significant levels.

Golden Eagle

There are no trees located on the project site, and no large trees capable of supporting nesting by golden eagle in the immediate vicinity of the project site; however, the non-native grasslands and seasonal wetlands and swales found on the property provide suitable foraging habitat for golden eagle that may nest away from the project site. A single golden eagle was observed exhibiting foraging behavior on the site in spring 2021. Although eucalyptus and other large trees located within about 0.25 mile from the project site provide potential nesting habitat, no nesting by golden eagle (or any raptor species) was noted during surveys for nesting Swainson's hawk conducted by Helm Biological Consulting in April and May 2021.

As golden eagle has been known to nest in the general area of the City of American Canyon, future nesting in suitable nest trees as close as about 0.25 mile from the project site cannot be ruled out. If a golden eagle were found to be nesting within a zone of influence of the project site during the construction period, potential impacts to this species from the proposed project could occur, including disturbance to nesting birds and possible mortality of adults and/or young. Pre-construction surveys for golden eagle, as described in Mitigation Measure (MM) BIO-1b, are warranted to ensure that construction activities do not result in impacts to nesting individuals of this species. With the implementation of this mitigation measure any potential impacts to nesting golden eagle would be reduced to less than significant levels.

Northern Harrier

Suitable nesting habitat for the northern harrier (a State Designated Species of Special Concern) occurs within the non-native grasslands and seasonal wetlands and swales found within the project site. Northern harrier individuals were observed foraging over the project site during both winter and spring (breeding) seasons during surveys conducted by Helm Biological Consulting. If a northern harrier were found to be nesting on the project site during the construction period, potential impacts to this species from the proposed project could occur, including disturbance to nesting birds and possible mortality of adults and/or young. Nesting by northern harrier has not been documented on the project site, but nesting by this species at the site is possible. Pre-construction surveys for northern harrier, as described in MM BIO-1c, are warranted to ensure that construction activities do not result in impacts to nesting harriers. With the implementation of this mitigation measure any potential impacts to nesting northern harriers would be reduced to less than significant levels.

Burrowing Owl

A small number of burrowing owl have been recorded in the CNDDB within the general project vicinity, with the nearest reports from as close as about 1.7 miles north of the project site and about 2.5 miles south.[21] No burrowing owl or occupied California ground squirrel burrows were observed on the project site during a field reviews conducted by Helm Biological Consulting in December 2020 and April and May 2021 or during previous biological studies conducted by Monk & Associates, LSA

[21] California Department of Fish and Wildlife (CDFW). 2020. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed May 2021.

Associates, or Rana Resources. The only observed ground squirrel were from the area around the perimeter of Clark's Rocks. It remains possible that ground squirrel could establish colonies on the site in the future prior to project construction, providing new occupiable habitats for burrowing owl. As a result, future use of the site by burrowing owl cannot be ruled out. Therefore, the proposed project shall implement MM BIO-1d to ensure that no burrowing owl would be impacted by construction activities.

Tricolored Blackbird

No impact to tricolored blackbird nesting colonies would occur as a result of the development of the project site. Although tricolored nesting colonies have been documented about 0.25 mile from the project site as recently as 1993, Helm Biological Consulting has concluded that vegetative characteristics of preferred nesting habitat for tricolored blackbird does not occur at the project site. Suitable nesting habitat for tricolored blackbird does not occur within the project site, therefore, no impacts to tricolored blackbird nesting colonies would result from implementation of the proposed project.

Conclusion

Implementation of these mitigation measures would avoid the "take" of Swainson's hawk and golden eagle defined by CESA; avoid disturbing a northern harrier or burrowing owl active nest, and avoid harming a burrowing owl during the nonbreeding season if it is occupying a burrow within the project site, thus reducing potential impacts to a level considered less then significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-1a Pre-construction surveys for Swainson's hawk shall be conducted in the project site vicinity prior to initiation of project construction activities. These pre-construction surveys shall include investigation of all potential nesting trees within a half-mile radius around all project activities and shall be completed for at least two survey periods immediately prior to commencement of project construction. Surveys shall follow California Department of Fish and Wildlife (CDFW) guidelines for conducting surveys for Swainson's hawk that were developed by the Swainson's Hawk Technical Advisory Committee to maximize the potential for locating nesting Swainson's hawk and reduce the potential for nest failures due to project activities and/or disturbances.

If no nesting Swainson's hawk are found during the first non-optional survey period starting March 20, then project construction may commence. If during the third surveys (April 5–April 20) Swainson's hawk are found to be nesting in the project vicinity and construction has commenced, it shall be assumed the Swainson's hawk commenced nesting and thus the Swainson's hawk are habituated to the ambient level of noise and disturbance emanating from the project site.

If Swainson's hawk are found to be nesting within 1,000 feet of the project site, a non-disturbance buffer shall be established to keep all construction activities a minimum of 1,000 feet from the nest site. The CDFW shall be consulted regarding the adequacy of the buffer established by the qualified Raptor Biologist. At that time the necessity for acquiring a Fish and Game Section 2081 Incidental Take Permit (ITP) authorization would be determined. An ITP authorization shall be required if there is a valid concern the project activities would result in the "take" of an adult Swainson's hawk, eggs, or nestlings.

No disturbance such as construction or earthmoving activity shall occur within the established buffer zone until it is determined by a qualified Raptor Biologist that the young have fledged or that the nesting cycle is complete based on monitoring of the active nest by a qualified Biologist.

MM BIO-1b No more than 30 days prior to the first ground disturbance activity, pre-construction golden eagle nesting surveys shall be conducted in the project site vicinity. Pre-construction surveys shall include investigation of all potential nesting trees within a 0.5-mile radius around all project activities. If active golden eagle nests are identified within any trees within a 0.5-mile radius of the project site, a qualified Raptor Biologist shall establish a protection buffer at a minimum of 1,000 feet that is adequate to ensure noise or activity from the proposed project would not cause nest disturbance or young or adult bird mortality. Buffer zones may vary in size as some golden eagles are more acclimated to disturbance than others. Size of buffer zone may be modified by the qualified Raptor Biologist considering the type of construction activity that may occur and the behavioral factors and extent that golden eagle may have acclimated to disturbance. No construction or earthmoving activity shall occur within the established buffer zone until it is determined by a qualified Raptor Biologist that the young golden eagles have fledged or that the nesting cycle is complete based on monitoring of the active nest by a qualified Biologist.

MM BIO-1c Prior to ground disturbance, a pre-construction nesting survey shall be conducted for northern harrier if construction is scheduled during the nesting season (February 1 through September 1). To determine whether northern harrier is nesting on-site, a qualified Raptor Biologist(s) shall conduct walking transects through the project site grassland habitat searching for nests. An active northern harrier nest must be protected by implementing a minimum 500-foot radius buffer zone around the nest marked with orange construction fencing. If an active nest is located outside of the project site, the buffer shall be extended onto the project site and demarcated where it intersects the project site. Size of buffer zone could be modified considering the type of construction activity that may occur, physical barriers between the construction site and active nest, and the behavioral factors and extent that northern harrier may have acclimated to disturbance. No construction or earthmoving activity shall occur within the established buffer zone until it is determined by a qualified Raptor Biologist that the young have fledged or that the

nesting cycle is otherwise determined to be complete based on monitoring of the active nest by a qualified Biologist.

MM BIO-1d Prior to any ground disturbance, pre-construction surveys for burrowing owl shall be conducted. The pre-construction surveys shall be conducted within 2 weeks prior to the onset of any ground-disturbing activities. Surveys shall be conducted by a qualified Biologist following California Department of Fish and Wildlife (CDFW) 2012 staff report survey methods and Biologist qualifications to establish the status of burrowing owl on the project site.

- If burrowing owl are found to occupy the project site during the nonbreeding season (September 1 to January 31), occupied burrows shall be avoided by establishing a no-disturbance buffer zone a minimum of 100 feet around the burrow. Buffers may be adjusted to address site-specific conditions using the impact assessment approach described in the CDFW 2012 staff report. If a qualified Raptor Biologist determines the location of an occupied burrow/s may be impacted even with a 100-foot buffer, or the burrow(s) are in a location(s) on the project site where a buffer cannot be established without preventing the proposed project from moving forward, then a passive relocation effort may be instituted to relocate the individual(s) out of harm's way pursuant to a Burrowing Owl Exclusion Plan prepared in accordance with the CDFW 2012 staff report.
- If burrowing owl are found to be present during the breeding season (February 1 to August 31), the proposed project ground-disturbing activities shall follow the CDFW 2012 staff report recommended avoidance protocol whereby occupied burrows shall be avoided with a no-disturbance buffer.

Level of Significance After Mitigation

Less than significant impact.

Sensitive Natural Communities or Riparian Habitat

Impact BIO-2:	**The proposed project could have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.**

Impact Analysis

Phases 1 and 2

The proposed project development east of Devlin Road would impact approximately 0.496 acre of palustrine emergent wetlands and the proposed Phase 2 project west of Devlin Road would impact approximately 2.57 acres of seasonal wetlands and 1.13 acres of vernal pools for a total of 3.70 acres of wetland impacts. Plans for wetland mitigation, including the preservation of an approximately 45-acre Wetland Preserve to include existing 7.58 acres of seasonal wetlands and 0.13 acre of vernal pools as well as established/created seasonal wetlands and vernal pools intended to offset wetland impacts of buildout development of the project site. To offset the loss of the 0.496 acre of seasonal

wetland impacts from Phase 1, and 2.57 acres of seasonal wetlands and 1.13 acres of vernal pools from Phase 2, and to ensure there is no-net loss of wetland or vernal pool area, the applicant shall establish/create 0.992 acre of seasonal wetlands (2:1 ratio) for Phase 1 concurrent with project construction, and 2.57 acres of seasonal wetlands (1:1 ratio) and of 1.13 acres of vernal pool wetlands (1:1 ratio) for Phase 2 at least 1 year prior to the start of Phase 2 construction, on the 45-acre Wetland Preserve. The established/created wetlands shall be monitored for a minimum of 5 years to ensure the wetlands meet the USACE's and RWQCB's definition of a wetland.

The portion of the project site along the northern boundary contained within the confines of No Name Creek would be subject to the regulatory jurisdiction of the CDFW under Fish and Game Code Section 1602. As the area of No Name Creek is contained within the approximately 45-acre Wetland Preserve, no impacts to the palustrine emergent wetland swale/seasonal wetland associated with No Name Creek would occur from either Phase 1 proposed project in the area east of Devlin Road or Phase 2 project west of Devlin Road. No impacts would occur to areas that would be subject to CDFW jurisdiction under Fish and Game Code Section 1602, therefore, there would be no requirement to obtain a Streambed Alteration Agreement from the CDFW.

Conclusion

Implementation of these mitigation measures would offset permanent impacts to the palustrine emergent wetlands and vernal pools and ensure there is no-net loss of wetland area, thus reducing potential impacts to a level considered less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-2 To offset the loss of the 0.496 acre of seasonal wetland impacts from Phase 1, and 2.57 acres of seasonal wetlands and 1.13 acres of vernal pools from Phase 2, and to ensure there is no-net loss of wetland area, the applicant shall establish/create 0.992 acre of palustrine emergent wetlands (2:1 ratio) for Phase 1 concurrent with project construction, and 2.57 acres of seasonal wetlands (1:1 ratio) and 1.13 acres of vernal pool wetlands (1:1 ratio) for Phase 2 at least 1 year prior to the start of Phase 2 construction, on the 45-acre Wetland Preserve. The established/created wetlands shall be monitored for a minimum of 5 years to ensure the wetlands meet the USACE's and RWQCB's definition of a wetland.

Level of Significance After Mitigation

Less than significant impact.

Wetlands and Jurisdictional Features

Impact BIO-3:	**The proposed project could have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.**

Impact Analysis

Phases 1 and 2

Region 1 of the USFWS developed the "Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon" dated December 15, 2005. The recovery plan covers 33 species of plants and animals that occur exclusively or primarily within a vernal pool ecosystem in California and southern Oregon. The recovery plan goals include protecting and conserving intact vernal pools and vernal pool complexes within the recovery planning area to maintain viable populations of listed species and species of concern and prevent additional threats from emerging over time. The recovery plan includes designated "core" areas that are specific sites necessary to recover these endangered or threatened species or to conserve the species of concern addressed in this recovery plan.

The project site is near two core areas referred to as the "Napa River Core Area." One core area is located approximately 2.5 miles northeast of the project site at the Highway 12 and 121 interchange. The second Napa River Core Area is adjacent to the project site near the northwest boundary of the Wetland Preserve area.

The project site itself is not within a core area and does not support vernal pool complexes that support plants and animals targeted in the USFWS recovery plan, therefore no direct adverse impacts to the Napa River Core Area would occur as a result of implementation of Phases 1 and 2. Phase 1 of the proposed project would preserve, in perpetuity, approximately 45 acres along the northern boundary. The 45-acre Wetland Preserve supports 7.58 acres of seasonal wetlands and 0.13 acre of vernal pools but would also include establishment/creation of approximately 3.56 acres of seasonal wetlands and 1.13 acres of vernal pools. Once the 45-acre Wetland Preserve is placed under a conservation easement, the additional wetlands are established/created, and an endowment to manage the land is funded, this 45-acre Wetland Preserve may provide beneficial impacts, long-term in duration, to the adjacent Napa River Core Area and recovery plan by providing protected wetland and vernal pool habitat within close proximity to the Napa River Core Area that may be suitable, once wetlands are established/created for the listed species and species of concern addressed in the recovery plan.

Based on the project site being located outside of the Napa River Core Area, the absence of listed species targeted in the recovery plan, and the proposed preservation of the Wetland Preserve, no adverse impacts to the Napa River Core Area would occur from construction of the proposed project. No mitigation is warranted for the Napa River Core Area.

Phase 1

Development of Phase 1 of the proposed project within the area east of Devlin Road would result in impacts to wetlands subject to USACE jurisdiction as a water of the United States and subject to San Francisco Bay RWQCB jurisdiction as a water of the State. Grading activities associated with the proposed project would result in the permanent placement of fill material (soil) into 0.496 acre of palustrine emergent wetlands considered waters of the State; refer to Exhibit 3.3-3. Of this 0.496 acre of impacts to waters of the State, the USACE has determined 0.492 acre are isolated and not considered waters of the United States. Therefore, the proposed project would also impact 0.004 acre of palustrine emergent wetlands considered waters of the United States. The City of American Canyon processed a separate Nationwide Permit for impacts to 0.21 acre on the 8.3-acre project site for the Devlin Road/Vine Trail Extension project.

An enumeration of the wetland impacts within the proposed project development is detailed in Table 3.3-1.

Table 3.3-1 Wetland Impacts

Isolated Wetland (IW)	Square Feet/Acres
IW-2	97/0.002
IW-3	229/0.005
IW-4	3117/0.072
IW-5	17019/0.391
IW-6	935/0.022
USACE Jurisdictional Wetlands	
W-89	189/0.004
Total	**21,586/0.496**
Source: Huffman-Broadway Group, Inc. 2021.	

Grading activities would result in the permanent placement of fill material (soil) into 0.496 acre of palustrine emergent wetlands considered waters of the State under the Porter-Cologne Water Quality Control Act. Of the 0.496 acre of waters of the State, the USACE has determined 0.492 acre are isolated and not considered waters of the United States under the federal CWA, so the proposed project would also impact the remaining 0.004 acre of palustrine emergent wetlands considered waters of the United States. These impacts would require that the applicant apply for and obtain a Nationwide Permit from the USACE for discharge within 0.004 acre of wetlands under CWA Section 404 jurisdiction along with an accompanying Section 401 Water Quality Certification from the San Francisco Bay RWQCB. The applicant would also need to apply for and obtain a separate Waiver of Waste Discharge from the San Francisco Bay RWQCB for impacts to 0.496 acre of waters of the State, as described in MM BIO-3a. Exhibit 3.3-4 depicts the Wetlands Mitigation Plan.

Phase 2

The development of the remaining 85.9-acre area on the west side of the Devlin Road Extension, which consists of Phase 2 of the proposed project, would impact approximately 2.57 acres of seasonal wetlands and 1.13 acres of vernal pool wetlands considered both waters of the State and waters of the United States, assuming buildout of Phase 2; refer to Exhibit 3.3-5. Impacts to approximately 3.7 acres of wetlands for a possible Phase 2 project would require that the applicant submit a separate application for an Individual Permit from the USACE to include a plan to compensate for wetland losses as well as a detailed alternatives analysis under the Section 404(b)(1) guidelines to include a detailed evaluation of both on-site and off-site alternatives for the proposed project. Such a development on the Phase 2 portion of the project site would also require a CWA Section 401 Water Quality Certification from the San Francisco Bay RWQCB for the USACE permit to be valid and would also require a Waiver of Waste Discharge Requirements for San Francisco Bay RWQCB pursuant to the Porter-Cologne Water Quality Control Act, as described in MM BIO-3b.

As described in MM BIO-3d, a detailed Wetland Mitigation and Monitoring Plan shall be prepared and submitted to the San Francisco Bay RWQCB for review as part of the process for obtaining a permit from the agency. The Wetland Mitigation and Monitoring Plan includes the preservation of the approximately 45-acre Wetland Preserve as well as the creation of approximately 3.56 acres of palustrine emergent wetlands and 1.13 acres of vernal pools within the Wetland Preserve.

Conclusion

Implementation of these mitigation measures would offset permanent impacts in-kind to the palustrine emergent wetland and in-kind to the vernal pools and ensure there is no-net loss of wetland area, thus reducing potential impacts to a level considered less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-3a Prior to issuance of the Phase 1 grading permit, the project applicant shall apply for and obtain a Nationwide Permit from the San Francisco District of the United States Army Corps of Engineers (USACE) for discharge within 0.004 acre of wetlands/waters of the United States under Clean Water Act (CWA) Section 404 jurisdiction. For the USACE permit to be valid, the applicant shall apply for and obtain the accompanying Section 401 Water Quality Certification from the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). The applicant shall apply for and obtain a separate Waiver of Waste Discharge Requirements from the San Francisco Bay RWQCB for impacts to 0.496 acre of wetlands/waters of the State. To offset the loss of 0.496 acre of permanent wetland impacts and to ensure there is no-net loss of wetland area, the applicant shall establish/create 0.992 acre of wetlands (2:1 ratio), prior to or concurrent with the start of construction, on the 45-acre Wetland Preserve. The established/created wetlands shall be monitored for a minimum of 5 years to ensure the wetlands meet the USACE's and RWQCB's definition of a wetland. The applicant shall implement the terms of the approved permit(s).

MM BIO-3b Prior to issuance of the Phase 2 grading permit, the project applicant shall apply for and obtain an Individual Permit from the San Francisco District of the United States Army Corps of Engineers (USACE) for the placement of fill material within approximately 3.7 acres of wetlands/waters of the United States under Clean Water Act (CWA) Section 404 jurisdiction. For the USACE permit to be valid, the applicant shall apply for and obtain the accompanying Section 401 Water Quality Certification from the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). The applicant shall apply for and obtain a separate Waiver of Waste Discharge Requirements from the San Francisco Bay RWQCB for the discharge of fill material within approximately 3.7 acres of waters of the State. To offset the loss of 3.7 acres of permanent wetland impacts and to ensure there is no-net loss of wetland area or permanent loss of functions and values, the applicant shall establish/create 2.57 acres of seasonal wetlands (1:1 ratio) and 1.13 acres of vernal pools (1:1 ratio), at a minimum of 1 year prior to the start of construction, on the 45-acre Wetland Preserve. The

established/created wetlands and vernal pools shall be monitored for a minimum of 5 years to ensure the wetlands meet the USACE's and RWQCB's definition of a wetland. The applicant shall implement the terms of the approved permit(s).

MM BIO-3c Prior to issuance of the Phase 1 grading permit, a Wetland Mitigation and Monitoring Plan shall be prepared and submitted to the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB) for review as part of the process for obtaining a permit from the agency. The Wetland Mitigation and Monitoring Plan shall address the loss of 0.496 acre of wetlands impact due to Phase 1 of the proposed project as well as the potential loss of approximately 3.7 acres of wetlands that as part of Phase 2. The Wetland Mitigation and Monitoring Plan shall include in irrevocable instrument (e.g., deed restriction or conservation easements) that shall restrict use of both the 0.992 acre of created wetlands for Phase 1 as well as approximately 3.7 acres of additional wetlands created for Phase 2. The Wetland Mitigation and Monitoring Plan shall also include a long-term endowment that would be fully funded by the proposed project to manage approximately 45-acre open space preserve and created wetlands in perpetuity. If additional wetland mitigation lands are required to compensate for wetland impacts associated with Phase 2, wetlands shall be established/created at a minimum 1:1 ratio (1 acre established/created for every acre permanently impacted) on appropriate mitigation land, approved by the RWQCB and United States Army Corps of Engineers (USACE), within the Phase 2 project site's Hydraulic Unit Code (HUC) 10 watershed. The established/created wetlands shall be monitored for a minimum of 5 years to ensure the wetlands meet the USACE's and RWQCB's definition of a wetland. The applicant shall implement the terms of the approved permit(s).

MM BIO-3d Prior to issuance of the Phase 1 and Phase 2 grading permit, a Wetland Mitigation and Monitoring Plan shall be submitted to the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB) for review as part of the process for obtaining a permit from the agency. The Wetland Mitigation and Monitoring Plan shall be prepared in accordance with the Subpart J–Compensatory Mitigation for Losses of Aquatic Resources outlined in the California State Water Resources Control Board (State Water Board) Procedures, and in accordance with the State Water Board *Implementation Guidance* dated April 2020, and in accordance with the United States Army Corps of Engineers (USACE) Compensatory Mitigation Rule (33 Code of Federal Regulations Part 332)

The basic objective of the Wetland Mitigation and Monitoring Plan is to ensure that project wetland impacts, and compensatory mitigation proposed to offset the wetland impacts, shall provide a no-net-loss of area of wetlands, and wetlands established/created shall be in-kind to the wetlands impacted. In summary, the Wetland Mitigation and Monitoring Plan shall at a minimum:

1. Preserve 7.58 acres of existing seasonal wetlands and 0.13 acre of vernal pools within the 45-acre Wetland Preserve.

2. Establish within the Wetland Preserve approximately 0.992 acre of seasonal wetlands in advance of or concurrent with implementation of Phase 1 impacts to 0.496 acre of palustrine emergent wetlands at a 2:1 ratio.
3. Establish within the Wetland Preserve approximately 2.57 acres of seasonal wetlands and 1.13 acres of vernal pools in advance of implementation of future Phase 2, assuming Phase 2 is built out, to address the potential maximum losses of approximately 3.7 acres of wetlands that may occur.
4. Provide financial assurances to ensure a high level of confidence that the compensatory mitigation shall be successfully completed, in accordance with applicable performance standards.
5. Design ecological performance standards to assess whether the Wetland Mitigation and Monitoring Plan is achieving the overall objectives, so that it can be objectively evaluated to determine whether it is developing into the desired resource type (vernal pool, seasonal wetland e.g.), and attaining any other applicable metrics such as acres, number of native plant species, water saturation and/or ponding depth etc.
6. Monitor the site for a duration necessary to determine whether the Wetland Mitigation and Monitoring Plan is meeting the performance standards. Established palustrine emergent wetlands and vernal pools typically develop quickly on soils with clay restrictive horizon. The 45-acre Wetland Preserve does have a clay restrictive layer approximately 8–18 inches below the surface therefore a 5-year monitoring period would be sufficient to determine whether performance standards are met. This monitoring period may be extended if performance standards are not met due to how the wetlands were constructed or natural events such as severe droughts.
7. Protect the approximately 45-acre Wetland Preserve in perpetuity using a conservation easement, and provide an endowment sufficient to fund the Long-Term Management Plan.
8. An overall assessment of the condition of the wetlands that shall be permanently impacted by the proposed project shall be conducted using the California Rapid Assessment Method (CRAM) for depressional wetlands, or a hybrid approach based on CRAM. Each similar wetland type that may be impacted shall be assessed to describe the floristic community and record the native and non-native dominant plants within the vernal pool and palustrine emergent wetlands. Physical structure such as topographic complexity and physical features that may provide habitat for aquatic species (e.g., boulders, woody debris etc.) shall be recorded and used to design the created/established wetlands. The purpose of this assessment is to ensure the design of the wetlands shall provide habitat that is similar to the wetlands being impacted to ensure the impacted wetlands are mitigated in-kind.

Performance Standards

Performance Standards shall include at a minimum the following:

Years 1, 2, 3, 4 and 5 Performance Standards for Wetland Hydrology

Each year wetland hydrology shall be measured during the winter when surface and/or subsurface hydrology would be observable. A minimum of 1 data point shall be taken in each of the established/created wetlands. In addition, wetland hydrologic indicators shall be recorded each spring during the vegetation monitoring period.

Year 1:

Performance standard would be met for Year 1-5 if:

- The created wetlands remain inundated to a minimum depth of 0.5 inch or greater for at least 7 days and/or saturated for at least 14 days and/or at least one primary or two secondary wetland hydrology indicators listed in the *Arid West Region Wetland Determination Data Forms* are recorded.

Contingency Measures:

If the annual performance standard is not being met for any given monitoring year the Permittee shall prepare an analysis of the cause(s) of failure and, if determined necessary, implement remedial action. If the Plan Area has not met the performance standard, the Permittee's maintenance and monitoring obligations shall continue until the RWQCB and CDFW give final project confirmation. Remedial action may include re-grading to achieve wetland hydrology, which would improve hydric soil formation.

Years 1, 2, 3, 4, and 5 Performance Standards for Increase in Colonization of Wetland Vegetation

Each year during the spring or early summer wetland vegetation cover shall be measured by conducting a site visit and recording absolute cover and dominant plant species observed within the wetland buffer area. A minimum of 1 data point shall be taken in each of the established/created wetlands. The colonization of wetland vegetation shall be measured by determining overall absolute plant cover values each year. This shall be accomplished by measuring absolute cover values within a 5-foot radius sample plot at each data point. Performance Standards for each monitoring year are listed below.

Year 1:

Performance standard would be met for Year 1 if:

- At least one hydrophytic plant species colonizes the established/created seasonal wetlands and vernal pools; and
- The average absolute cover of wetland vegetation within an established/created seasonal wetlands and vernal pools is 5 percent or greater.

Year 2:

Performance standard would be met for Year 2 if:

- At least one hydrophytic plant species colonizes the established/created seasonal wetlands and vernal pools; and
- The average absolute cover of wetland vegetation within an established/created seasonal wetlands and vernal pools is 10 percent or greater.

Year 3:

Performance standard would be met for Year 3 if:

- At least two hydrophytic plant species colonizes the established/created seasonal wetlands;
- At least two native hydrophytic plant species colonizes the established/created vernal pools and at least one is a vernal pool habitat indicator species; and
- The average absolute cover of wetland vegetation within an established/created seasonal wetlands and vernal pools is 20 percent or greater and comprised of native and naturalized species.

Year 4:

Performance standard would be met for Year 4 if:

- At least two hydrophytic plant species colonize the established/created seasonal wetlands.
- At least two native hydrophytic plant species colonizes the established/created vernal pools and at least one is a vernal pool habitat indicator species.
- The average absolute cover of wetland vegetation within an established/created seasonal wetland and vernal pool is 30 percent or greater.
- Invasive wetland plant species do not comprise greater than 5 percent of the total absolute cover. Invasive plants shall be defined as species rated as “high” by California Invasive Plant Council (Cal-IPC).

Year 5:

Performance standard would be met for Year 5 if:

- At least two hydrophytic plant species documented during the CRAM assessment for the palustrine emergent wetlands impacted on the Phase 1 project site colonize the established/created seasonal wetlands.
- At least two native vernal pool habitat indicator species documented during the CRAM assessment for the vernal pool on the Phase 2 project site colonizes the established/created vernal pools.
- The average absolute cover of wetland vegetation within the established/created seasonal wetland (non-vernal pool wetlands) is 40 percent or greater; and the average absolute cover of wetland vegetation within the established/created vernal pools is 40 percent or greater of which greater than 50 percent of the vegetation cover consists of two or more dominate native vernal pool habitat indicator plants.

- Invasive wetland plant species do not comprise greater than 5 percent of the total absolute cover. Invasive plants shall be defined as species rated as "high" by Cal-IPC.

Contingency Measures:

If the annual performance standard is not being met for any given monitoring year the Permittee shall prepare an analysis of the cause(s) of failure and, if determined necessary, implement remedial action. Remedial action may include hydroseeding with native species, or addition of supplemental topsoil or mulch to promote growth.

Year 5 No-Net-Loss Performance Standard for Phase 1 Impacts

Performance standard would be met for Year 5 when;

- A wetland delineation is performed and verified by the USACE and confirms a minimum of 0.992 acre of wetlands have been established/created within the Wetland Preserve.

Year 5 No-Net-Loss Performance Standard for Phase 2 Impacts

The Phase 2 no-net-loss performance standard would be measured when an application for the Phase 2 project is submitted to the RWQCB and USACE, and the Phase 2 project is approved. Once Phase 2 has been approved by the RWQCB and USACE, this performance standard may be modified depending on the level of wetland impacts authorized by the RWQCB and USACE, meaning this performance standard may decrease if the wetlands impacted for Phase 1 are less than 3.7 acres.

Performance standard would be met for Year 5 when;

- A wetland delineation is performed and verified by the USACE and confirms a minimum of 2.57 acres of seasonal wetland and 1.13 acres of vernal pools have been established/created within the Wetland Preserve.

Year 5 Long-Term Protection and Long-Term Funding

Performance standard would be met for Year 5 once:

- The Wetland Preserve has been placed under a conservation easement; and
- A long-term financing mechanism (e.g., non-wasting endowment, trusts, contractual arrangement etc.) to fund implementation of the long-term management of the Wetland Preserve has been secured.

Level of Significance After Mitigation

Less than significant impact.

Fish and Wildlife Movement Corridors

Impact BIO-4:	**The proposed project could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.**

Impact Analysis

Phases 1 and 2

Although a number of wildlife species, including a variety of bird species that potentially include special-status species, were observed on the property during field surveys, neither the development of the proposed project would result in significant impacts to movement of any native resident or migratory fish or wildlife species, migratory wildlife corridors or use of wildlife nursery sites on the site. Mitigation measures to address impacts to sensitive habitats, most notably seasonal wetlands and vernal pools, are included herein that include the preparation and implementation of a detailed Compensatory Wetland Mitigation Plan. The site design includes the preservation of the approximately 45-acre Wetland Preserve that will preserve 7.58 acres of existing seasonal wetlands and 0.13 acre of existing vernal pools but would also include creation of approximately 3.56 acres of additional seasonal wetlands and 1.13 acres of vernal pools.

Any species of fauna that may be displaced during preparation of the site for development of the proposed project should find nearby available habitats, including habitats within the approximately 45-acre Wetland Preserve or adjacent and adjacent 37-acre preserve for the Napa Logistics project on the adjacent property. The major wildlife corridor along No Name Creek will remain unaffected as the entirety of No Name Creek shall be incorporated into the Wetland Preserve. The proposed project would not result in substantial change in animal populations at the site, nor would it cause a fish or wildlife population to drop below self-sustaining levels.

Nesting Birds

Nesting bird species protected by the federal MBTA or California Fish and Game Code could be impacted during project construction. Work related to construction involving the removal of vegetation during the February 1 to August 1 breeding season of birds could result in mortality of nesting avian species if they are present. Many species of raptors (birds of prey) and non-raptors are sensitive to human incursion and construction activities, and it is necessary to ensure that nesting bird species are not present in the vicinity of construction sites. Therefore, the proposed project shall implement MM BIO-4 in order to reduce any potential impacts to nesting birds to less than significant levels.

Water Quality

Construction activities for Phase 1 of the proposed project will occur in within 0.496 acre of wetlands subject to State jurisdiction and in close proximity to areas within the upper reaches of No Name Creek. Construction of Phase 2 may affect 3.7 acres of wetlands, including vernal pools, near No Name Creek. However, water quality impacts with implications to use of No Name Creek as a wildlife movement corridor would not be significant for several reasons. The requirement for the implementation of a SWPPP, with identification of proper construction techniques and BMPs, would be required and would provide assurance that water quality of nearby waterways is not affected by on-site construction activities. In particular, silt fence and straw wattles would be installed along portions of the project site to maintain levels of water pollutants migrating off-site. In addition, vegetation would only be cleared from the permitted construction footprint. Areas cleared of vegetation, pavement, or other substrates should be stabilized as quickly as possible to prevent erosion and runoff.

Grading, excavation, placement of fill material, and other ground-disturbing activities associated with construction activities within the project site would not promote erosion that would allow elevated levels of sediment to wash into aquatic areas downstream, including No Name Creek, where such pollutants could result in potential impacts to fish and wildlife resources. Indirect impacts to resident animal populations in downstream areas would not result from the proposed project due to elevated turbidity levels from increased sedimentation or increases in other contaminants in stormwater runoff.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-4 If construction occurs during the breeding season of migratory and resident birds (February 1 to August 31), a qualified Biologist shall conduct a pre-construction breeding bird survey in areas of suitable habitat within 15 days prior to the onset of construction activity. Nesting bird surveys shall cover the proposed project footprint and adjacent areas. If bird nests are found, appropriate buffer zones shall be established around all active nests to protect nesting adults and their young from direct or indirect impacts related to project construction disturbance. Size of buffer zones shall be determined per recommendations of the qualified Biologist based on-site conditions and species involved. At a minimum a 1,000-foot buffer shall be established for nesting Swainson's hawk and golden eagle; 500-foot buffer for nesting northern harriers; 250-foot buffer for nesting accipiters; and minimum 50-foot buffers shall be established for nesting passerines and all other non-raptor or passerine nesting birds. Buffer zones shall be maintained until it can be documented that either the nest has failed, or the young have fledged.

Level of Significance After Mitigation

Less than significant impact.

Local Policies or Ordinances

Impact BIO-5:	**The proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.**

Impact Analysis

Phases 1 and 2

No trees are present on the project site and, therefore, no tree removal would occur. The proposed project would not conflict with any local policies related to protection of natural resources.

All work for the proposed project would take place consistent with biological requirements of the General Plan and Zoning Ordinance of the City of American Canyon. The Biological Resources Report provides the detailed assessment of biological resources required by General Plan Policies 8.1.1 and 8.1.4. Studies of sensitive biological resources have been either conducted by HBG as part of the attached Biological Resources Report or were conducted by other consultants and independently

reviewed and incorporated into the Biological Resources Report, consistent with General Plan Policy 8.2.1. Studies conducted by HBG include a protocol Phase 1 Habitat Assessment for the federally listed threatened California red-legged frog, surveys for State listed threatened Swainson's hawk and rare plant surveys conducted by Dr. Brent Helm during the 2021 flowering season. Studies conducted by others include wet and dry season protocol surveys for the federally listed threatened vernal pool fairy shrimp and rare plant surveys. The proposed project results in impacts to palustrine emergent wetlands and vernal pool wetlands and the applicant has prepared a conceptual plan to mitigate for these wetlands consistent with General Plan Policy 8.3.1.a, which requires the development plan to consider the nature of existing biological resources and all reasonable measures to avoid significant impacts, including retention of sufficient natural open space and undeveloped buffer zones; General Plan Policy 8.3.1.h, which requires in summary developments shall mitigate unavoidable adverse impacts to waters of the United States, wetlands, and riparian habitats by replacement on an in-kind basis and such replacement should occur on the original development site, whenever possible, and; General Plan Policy 8.4.3, which encourages activities that improve the biological value and integrity of the City's natural resources through vegetation restoration, control of alien plants and animals, and landscape buffering. The wetland mitigation would be accomplished through establishment of an approximately 45-acre Wetland Preserve within the project site to include preserving 7.58 acres of existing seasonal wetlands and 0.13 acres of vernal pools and establishment/creation of an additional approximately 3.56 acres of seasonal wetlands and 1.13 acres of vernal pools to compensate in-kind for permanent impacts to seasonal wetlands from the proposed project.

Level of Significance Before Mitigation

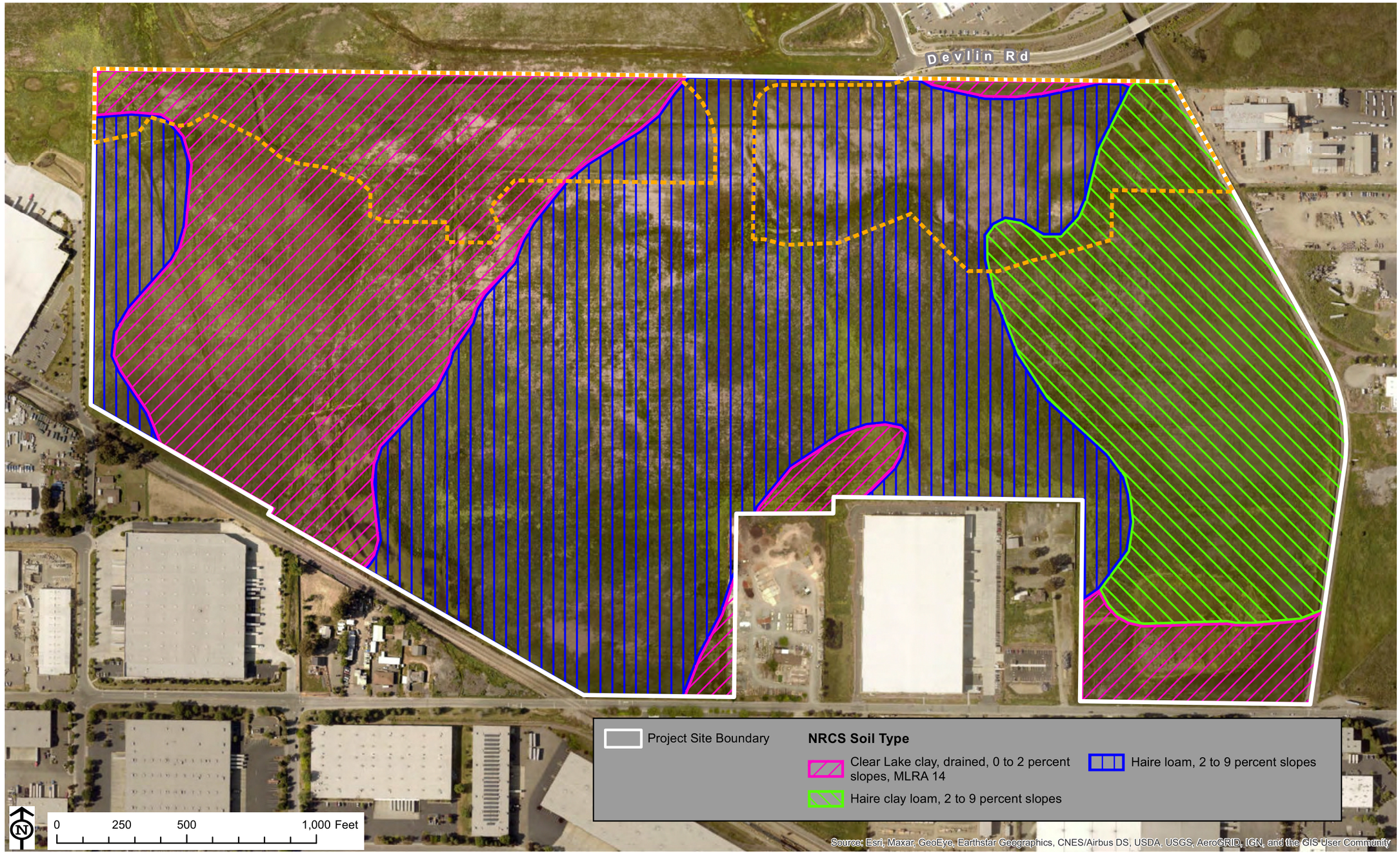
Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.



Source: Huffman-Broadway Group, Inc., Environmental Regulatory Consultants (May 2021). Imagery Source: County of Napa 6/19/2018.

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Exhibit 3.3-1
Soils Map

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Source: Huffman-Broadway Group, Inc., Environmental Regulatory Consultants. Imagery Source: Maxar.

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Exhibit 3.3-2
Plant Communities

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CITY OF AMERICAN CANYON
GIOVANNONI LOGISTICS CENTER PROJECT
ENVIRONMENTAL IMPACT REPORT

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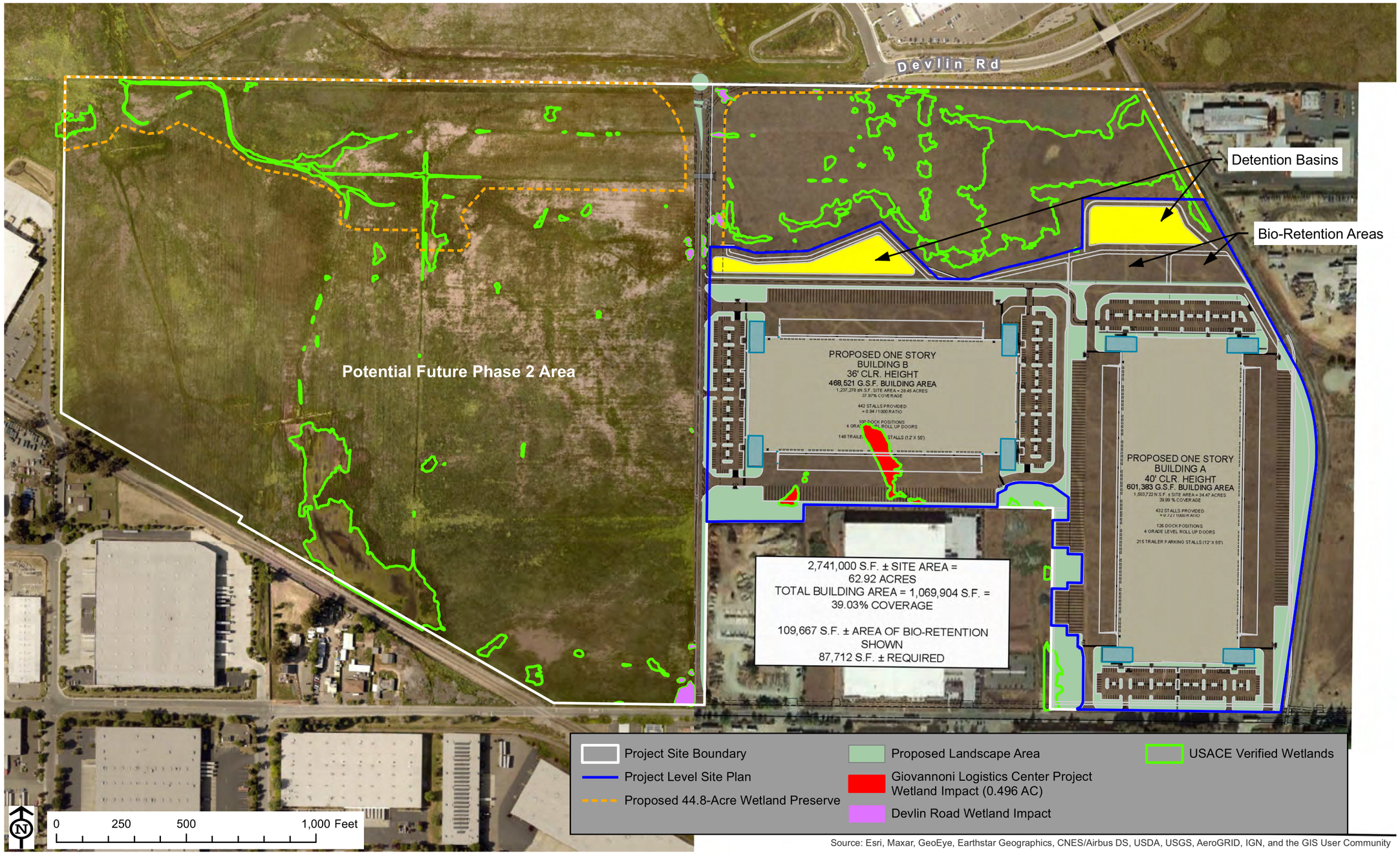

Source: Huffman-Broadway Group, Inc., Environmental Regulatory Consultants (May 2021). Imagery Source: County of Napa 6/19/2018.

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Exhibit 3.3-3
Phase 1 Wetland Impacts

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Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Source: Huffman-Broadway Group, Inc., Environmental Regulatory Consultants (May 2021). Imagery Source: County of Napa 6/19/2018.

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Exhibit 3.3-4
Wetland Mitigation Plan

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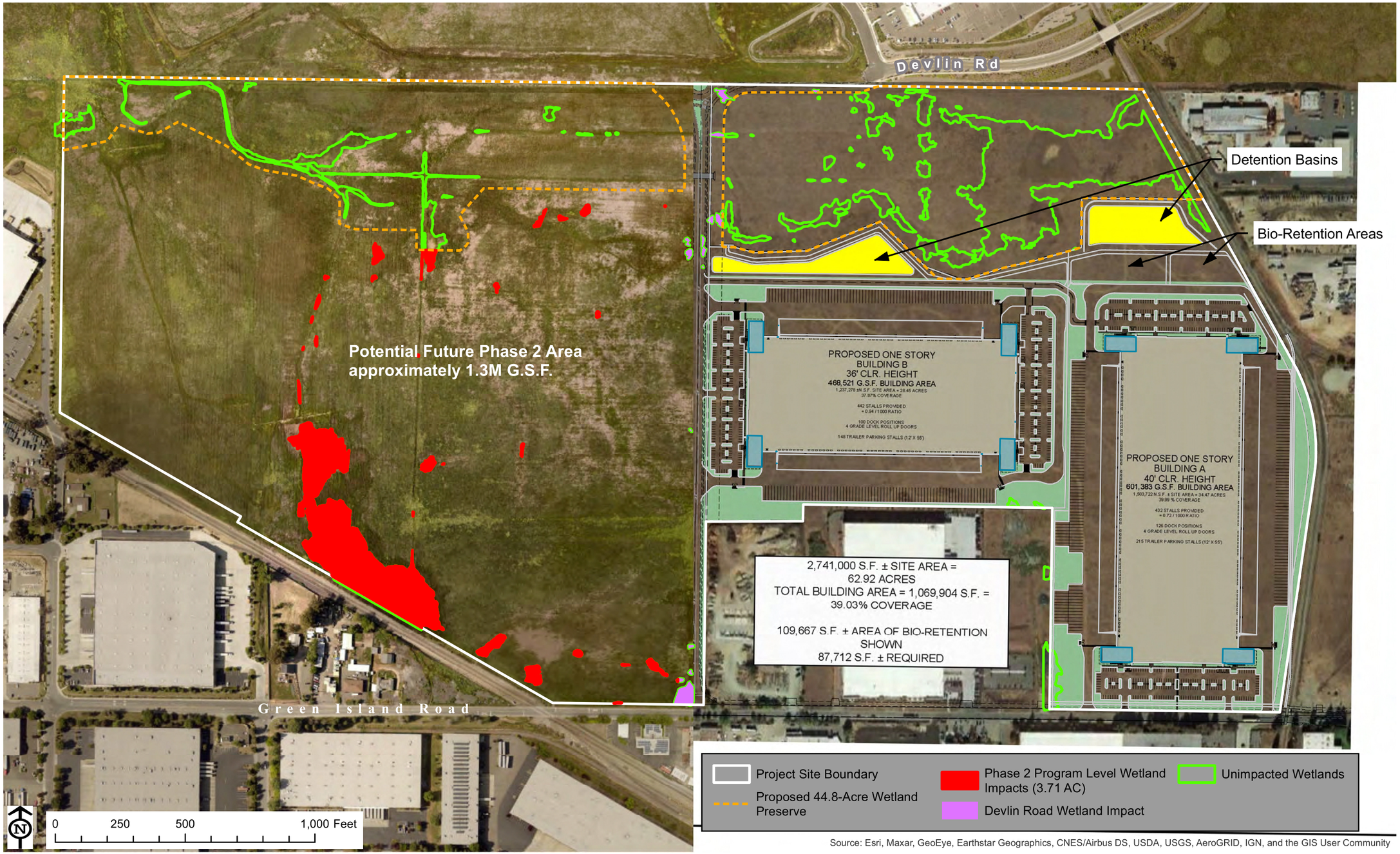

Source: Huffman-Broadway Group, Inc., Environmental Regulatory Consultants (May 2021). Imagery Source: County of Napa 6/19/2018.

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Exhibit 3.3-5
Phase 2 Wetland Impacts

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