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# Biological Study

Safe Harbor 3.0 P18-00179-UP & P20-00217-TM
Planning Commission Hearing Date December 16, 2020

# BIOLOGICAL RESOURCES ANALYSIS FOR THE 665 NAPA VALLEJO HIGHWAY PROJECT SITE APN: 057-110-012 NAPA COUNTY, CALIFORNIA

**July 29, 2019**

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## 1. INTRODUCTION

Monk & Associates, Inc. (M&A) has prepared this biological resources analysis for the proposed 665 Napa Vallejo Highway development site located in Napa County, California (the project site) (Figures 1 and 2). The purpose of our analysis is to provide a description of existing biological resources on the project site and to identify potentially significant impacts that could occur to sensitive biological resources from the construction of a winery and wine storage facility (the project).

Biological resources include common plant and animal species, and special-status plants and animals as designated by the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), National Marine Fisheries Service (NMFS), and other resource organizations including the California Native Plant Society. Biological resources also include waters of the United States and State, as regulated by the U.S. Army Corps of Engineers (Corps), California Regional Water Quality Control Board (RWQCB), and CDFW.

This biological resources analysis also provides mitigation measures for "potentially significant" and "significant" impacts that could occur to biological resources. Whenever possible, upon implementation, the prescribed mitigation measures would reduce impacts to levels considered less than significant pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code §§ 21000 et seq.; 14 Cal. Code Regs §§ 15000 et seq). Accordingly, this report is suitable for review and inclusion in any review being conducted by the County of Napa for the proposed project pursuant to the CEQA.

## 2. PROPERTY LOCATION AND SETTING

The approximately 12.18-acre project site is located in an area zoned as General Industrial: Airport Compatibility Combination District (GI: AC) immediately east of Napa County Airport and west of Highway 29 in Napa County, California (Figures 1 and 2). The parcel is long and narrow with a single-family residence with detached garage and shed on the east side. The project site is currently in the process of being divided by the Devlin Road extension which is currently under construction and the development footprint is restricted to the 9.8-acre western portion. Fagan Creek, an intermittent creek, traverses the project site from east to west and is located mostly on the southern boundary of the proposed development area, but a small portion of the parcel extends south of Fagan Creek. The project would be constructed completely on the north side of Fagan Creek while the portion of the property south of Fagan Creek would be restored and used for riparian floodplain enhancement.

Fagan Creek drains westward from the project site through the Napa County Airport and terminates in the Napa River approximately 2.5 miles to the west of the project site. Figure 3 provides an aerial photograph of the project site that shows the project site features and the surrounding land use. Industrial buildings are located immediately to the north and south of the project site. The Napa County Airport and its developed area occurs immediately to the west of the project site. There is an open field and industrial development to the east of the project site. A small area of the northeast project site boundary borders ruderal fields that are otherwise surrounded by development and Highway 29.

## 3. PROPOSED PROJECT

The County is in the process of constructing the Devlin Road Extension over Fagan Creek, a portion of which is located on the eastern side of this property. The applicant proposes to construct a winery and wine storage facility on the western portion of the property north of Fagan Creek. The project will include two buildings. Building A will be approximately 49,087 square feet in size including storage, bottling, production and office space. Building B will be approximately 16,858 square feet in size and be used exclusively for storage. Covered work areas will be located on the south sides of both Building A (8,796 SF) and Building B (5,975 SF).

The development plan also provides for parking, on-site truck circulation, and general landscape areas. All vehicles will enter from a new access driveway that runs along the northern property line. Trucks will stop at the entry scale as needed and then continue to the loading zone for off load or pick up. Each building has a dedicated loading zone. Trucks will be able to circulate around both buildings. The entrance driveway will be wide enough to accommodate two-way traffic. The Site Development Plan, East and West Portions, for a New Winery & Storage Facility for Safe Harbor 3.0 prepared by Greg LeDoux and Associates, dated July 2019 and the Site Development Exhibit for the 75' Riparian Setback Infringement for Safe Harbor 3.0 prepared by Always Engineering, dated July 2019, are provided as Appendices A and B, respectively.

The winery will be used during harvest for crushing up to 5,000 tons or 850,000 gallons of wine and will provide bulk wine storage and bottling on a year-round basis. The primary client base will be existing wineries that do not have adequate crush facilities or storage on their sites for their product. Bottling services will also be provided. There will be no retail sales and no access for the general public. Individual clients will visit the site on occasion to hold meetings with members of the wine trade, such as their distributors, vendors, restaurants, wine shop owners and similar types of wine buyers. The only signage will be to identify the building as a wine storage facility.

## 4. ANALYSIS METHODS

### 4.1 Background Research

Prior to preparing this biological resource analysis report, M&A researched the most recent version of CDFW's Natural Diversity Database (CNDDB) (RareFind 5 application). The application (CNDDB 2019) for historic and recent records of special-status plant and animal species (that is, threatened, endangered, rare) known to occur in the region of the project site. M&A also searched the 2019 electronic version of the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Plants of California* (CNPS 2001) for records of special-status plants known in the region of the project site. All special-status species records were compiled in tables. M&A examined all known record locations of special-status species to determine if special-status species could occur on the project site or within an area of affect.

### 4.2 Site Investigation

M&A biologists Ms. Christy Owens and Mr. Geoff Monk conducted a general survey of the project site on April 17, 2018 to record biological resources and to assess the likelihood of resource agency regulated areas on the project site. The survey involved searching all habitats on the site and recording all plant and wildlife species observed. M&A cross-referenced the habitats found on the project site against the habitat requirements of local or regionally known special-status species to determine if the proposed project could directly or indirectly impact such species.

### 4.3 Wetland Delineation

On July 5, 2016 and September 22, 2016, M&A biologists Mr. G. Monk and Ms. C. Owens visited the project site to examine potential Corps regulated areas. Mapped features on the project site were determined to meet jurisdictional criteria presented in the Corps' 1987 *Wetlands Delineation Manual* (Corps 1987) and the Corps' regional supplement for the Arid West Region (Corps 2008). A Request for Preliminary Jurisdictional Determination and the Preliminary Aquatic Resources Map (Sheet 1) were submitted to the Corps on and confirmed by Mr. Dan Breen of the Corps on November 1, 2016 verifying the extent of the Corps' jurisdiction on the project site north of Fagan Creek. The portion of the parcel south of Fagan Creek was deemed impassable at the time of the verification owing to high flows in Fagan Creek and construction-related impasses on the south side of Fagan Creek. The portion of the parcel south of Fagan Creek is outside the proposed development footprint. The stamped map and Preliminary Jurisdictional Determination letter are attached (Appendices C and D).

### 4.4 Special-Status Plant Surveys

Special-status plant surveys were conducted on the project site on April 17, May 25, and August 30, 2018 by M&A biologists/qualified botanists Ms. Owens and Ms. Sarah Lynch. Surveys followed USFWS (2000), CDFW (2018), and CNPS (2001) published survey guidelines. These guidelines state that special-status plant surveys should be conducted at the proper time of year when special-status and locally significant plants are both evident and identifiable. The guidelines also state that the surveys be floristic in nature with every plant observed identified to species, subspecies, or variety as necessary to determine rarity status. Finally, these surveys must be conducted in a manner that is consistent with conservation ethics and accepted plant collection and documentation techniques. Following rare plant survey guidelines, surveys must be conducted during the months when special-status plant species from the region are known to be evident and flowering well in advance of any ground-disturbing activities where suitable habitat is present. This may entail repeated floristic surveys to observe all the potential target species during the appropriate floristic period(s).

Following rare plant survey guidelines, M&A conducted surveys during the months when special-status plant species from the region are known to be evident and flowering. During surveys, all areas of the project site were examined by walking systematic transects through potential habitat, and by closely examining any existing microhabitats that could support special-status plants. Nearly all plant species found on the project site were identified to species. All plants were identified to the level required to determine their rarity status. A list of all vascular plant taxa encountered within the project site was recorded in the field. Plants that needed further

evaluation were collected and keyed in the lab. Nomenclature used for plant names follows *The Jepson Manual, 2nd edition* (Baldwin et al. 2012) and changes made to this manual as published on the Jepson Interchange Project website (Jepson Interchange 2019). A list of all vascular plant taxa encountered on the project is attached as Table 1.

### 4.5 California Red-Legged Frog Habitat Assessment and Protocol Surveys

On March 22, 2012, M&A prepared a "California Red-Legged Frog Habitat Assessment" for the Devlin Roadway Extension which extends through the project site including Fagan Creek in a north-south alignment and submitted it to the USFWS. In that report, M&A determined that it could not be determined at an assessment level whether the proposed Devlin Roadway Extension project could impact the California red-legged frog and thus requested authorization from USFWS to conduct "protocol surveys" for the California red-legged frog within the Devlin Road Extension alignment. It should be noted that the Devlin Road extension is currently under construction and includes a bridge that is being constructed over Fagan Creek.

In advance of the construction of the Devlin Road Extension, on April 12, 2012, Ms. Stephanie Jentsch of USFWS authorized M&A permitted biologists to conduct California red-legged frog protocol surveys pursuant to the USFWS's August 2005 *Revised Guidance on Site Assessments and Field Surveys for the California Red-Legged Frog* (survey protocol).

Following the guidelines prescribed in the USFWS's August 2005 *Revised Guidance on Site Assessments and Field Surveys for the California Red-Legged Frog* (survey protocol), M&A conducted two diurnal, and four nocturnal surveys during the 2012 breeding season (January-June), and one diurnal and one nocturnal survey during the non-breeding season (July-September). The survey period extended over a 14-week period (i.e. the time between the first and the last survey was over 14 weeks), and all surveys were conducted at least 7 days apart. M&A's principal biologist Mr. Geoff Monk (federal 10(a) (1) (A) permitted) *participated in all surveys*, each time including one other assistant from M&A. All M&A biologists that conducted the surveys have extensive experience with the California red-legged frog and are biologists authorized by USFWS to work with this species. The diurnal surveys were conducted on May 18, June 8, and August 2, 2012 by M&A principal biologist Mr. Monk and M&A staff. The six nocturnal surveys were conducted on April 30, May 31, June 15, June 22, and June 29, and August 9, 2012 by Mr. Monk and M&A staff. The nocturnal and diurnal surveys were completed on days and nights when weather conditions were favorable for hearing and/or seeing California red-legged frogs (i.e., calm conditions, no rain, and moderate temperatures). *During M&A's surveys, all aquatic habitats within the Devlin Road Extension alignment including the stretch of Fagan Creek within the project site were intensively surveyed.* Notes were made on date, time, weather conditions and wildlife observed.

It should be noted that in 2011, surveys were also conducted for California red-legged frog the year prior to the formal protocol survey of the Devlin Road Extension alignment and surrounding areas. Surveys were conducted in Fagan Creek on June 22, September 28th, and November 1, 2011**.** During these surveys, Mr. Monk carefully surveyed Fagan Creek up to a pond in Fagan Creek immediately downstream of the Eagle Vines Golf Course approximately 0.7 mile upstream of the project area. Notes were maintained on observed amphibians. Finally, Mr. Monk

again conducted diurnal surveys of Fagan Creek on July 5, 2016 and September 22, 2016, prior to conducting a detailed wetland delineation of the parcel to update the 2012 protocol surveys.

M&A biologists conducted surveys by first listening for calling frogs, then slowly and quietly walking along Fagan Creek and ponds occurring approximately ¼ mile upstream of the project site. M&A biologists scanned the channel and banks for California red-legged frogs. During the nocturnal surveys, medium-power, hand-held lights were used in combination with binoculars to illuminate the potential habitat areas and to reflect any eye-shine that may be present. In addition, during diurnal surveys the upstream ponds were dipnetted to inventory amphibian larvae that were present.

## 5. RESULTS OF RESEARCH AND PROJECT SITE ANALYSES

### 5.1 Topography and Hydrology

An intermittent creek, Fagan Creek, enters the project site at the east end of the project site, and for the most part flows along the southern boundary in a westerly direction before exiting the project site at the western end (Figure 3). Most of the project site occurs on the north side of Fagan Creek. While relatively level, the project site slopes slightly (at 2 to 4 percent grades) from east to west. Rainfall sheet flows across the parcel to the offsite section of Fagan Creek just beyond the western project boundary. On the south side of Fagan Creek, the project site also slopes slightly from east to west and water sheet flows across the property to Fagan Creek in the southwestern portion of the project site. Elevations range from a maximum elevation of approximately 63 feet above sea level on the eastern side of the project site to approximately 43 feet above sea level on the western side of the project site. Owing to slope across the project site water sheet flows overland across the site but largely lacks the residence time necessary for wetland characteristics to develop. Both the northern and southern portions of the project site sheet flow west before entering Fagan Creek. Fagan Creek flows northeast from the project site to Fagan Slough and then ultimately flows to the Napa River approximately 2.26 miles east of the project site (Figure 2).

### 5.2 Plant Communities and Associated Wildlife Habitats

M&A biologists examined the habitats and characterized the vegetation present on the project site. The residential home on the east side of the project site supports remnant ornamental plants that include firethorn (*Pyracantha angustifolia*), lily-of-the-Nile (*Agapanthus orientalis*) and calla lily (*Zantedeschia aethiopica*). In addition, coyote brush (*Baccharis pilularis*) is scattered throughout the easternmost portion of the project site as it is a vigorous woody species that often colonizes disturbed areas. Three plant communities were identified on the project site: ruderal vegetation, riparian woodland and seasonal wetland. A complete list of plant species observed on the project site is presented in Table 1. Nomenclature used for plant names follows *The Jepson Manual* Second Edition (Baldwin 2012) and changes made to this manual as published on the Jepson Interchange Project website (http://ucjeps.berkeley.edu/interchange/index.html). Table 2 is a list of wildlife species observed on the project site. Nomenclature for wildlife follows CDFW's *Complete list of amphibian, reptile, bird, and mammal species in California* (2016) and any changes made to species nomenclature as published in scientific journals since the publication of CDFW's list.

### 5.2.1 RUDERAL VEGETATION

Ruderal (weedy) communities are assemblages of plants that thrive in waste areas, roadsides and other sites that have been disturbed by human activity. Typically, the hardpacked soils of roadsides, parking lots, industrial areas and construction sites support communities of ruderal species.

Ruderal vegetation occurs north and south of Fagan Creek. This plant community is mowed annually or more often for fire control as large commercial warehouses and an active railroad spur border the site immediately to the north. Dominant non-native grass species observed on the project site include: soft chess (*Bromus hordeaceus*), rip-gut brome (*Bromus diandrus*), slender wild oat (*Avena barbata*), hare barley (*Hordeum murinum* ssp. *leporinum*), Italian ryegrass (*Festuca perennis*) and rattail fescue (*Festuca myuros*). Dominant non-native forb species observed on the project site include: common vetch (*Vicia sativa*), cutleaf geranium (*Geranium dissectum*), poison hemlock (*Conium maculatum*), prickly lettuce (*Lactuca serriola*), bindweed (*Convolvulus arvensis*), fennel (*Foeniculum vulgare*), bristly ox-tongue (*Helminthotheca echioides*), chicory (*Cichorium intybus*), California bur clover (*Medicago polymorpha*), oyster plant (*Tragopogon porrifolius*), Italian thistle (*Carduus pycnocephalus* ssp. *pycnocephalus*) and several species of dock (*Rumex crispus* and *R. pulcher*). Other non-native grass and forb species observed within ruderal habitat on the project site include tall wheat grass (*Elymus ponticus*), and Harding grass (*Phalaris aquatica*), Mayweed (*Anthemis cotula*), purple starthistle (*Centaurea calcitrapa*), long-beaked hawkbit (*Leontodon saxitilis*), milk thistle (*Silybum marianum*), several species of mustard (*Brassica nigra*, *Hirschfelda incana* and *Sinapis arvensis*) and of filaree as well (*Erodium botrys*, *E. moschatum* and *E. cicutarium*)

The project site's ruderal habitat provides food and cover for a variety of wildlife species. Most species on the project site were common animals that are adapted to living in association with man. Wildlife species found on the project site include raccoon (*Procyon lotor*), Botta's pocket gopher, black-tailed hare (*Lepus californicus*), western fence lizard (*Sceloporus occidentalis*), American crow (*Corvus brachyrhynchos*), European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), and house finch (*Carpodacus mexicanus*).

### 5.2.2 FAGAN CREEK WITH ASSOCIATED RIPARIAN WOODLAND

An intermittent creek, Fagan Creek, flows through the southern portion of the project site (see Sheet 1) and is approximately 90 feet wide from top of bank to top of bank. The active flow channel of Fagan Creek averages approximately 13 feet wide between ordinary high water marks (OHWMs). The creek is incised approximately 10 feet down below attending site grades. No other adjacent seasonal wetlands were mapped along Fagan Creek owing to rapid percolation through the relatively sandy/silty alluvial soils that comprise the banks.

This intermittent creek supports a relatively dense riparian canopy cover on the project site. The overstory is primarily dominated by native riparian tree species such as arroyo willow (*Salix lasiolepis*) , red willow (*Salix laevigata*) and California walnut (*Juglans hindsii*) with scattered individuals of California bay (*Umbellularia californica*) , Fremont's cottonwood (*Populus fremontii*), California sycamore (*Platanus racemosa*), coast live oak (*Quercus agrifolia*), Goodding's black willow (*Salix gooddingii*) and sandbar willow (*Salix exigua*) occurring in

association with these dominant species. On the project site, the riparian shrub layer is comprised of Himalayan blackberry (*Rubus armeniacus*) along with other associated woody species including coyote brush (*Baccharis pilularis* ssp. *consanguinea*) and California blackberry (*Rubus ursinus*). The herbaceous understory is on the banks is composed of creeping wildrye (*Elymus triticoides* ssp. *triticoides*), Santa Barbara sedge (*Carex barbarae*), common horsetail (*Equisetum arvense*), perennial pepperweed (*Lepidium latifolium*), hairy willow-herb (*Epilobium ciliatum*), tall flatsedge (*Cyperus eragrostis*), brown-headed rush (*Juncus phaeocephalus*), Baltic rush (*Juncus balticus*), California mugwort (*Artemisia douglasiana*), sneezeweed (*Helenium puberulum*), lemon balm (*Melissa officinale*), pennyroyal (*Mentha pulegium*), spearmint (*Mentha spicata*) and English ivy (*Hedera helix*). Owing to heavy shading and extended hydrology that results in vegetation growth suppression, little vegetation grows in the channel bottom which is largely dry by late summer. Those species that do occur along the edge of the channel and within the channel bottom include watercress (*Nasturtium officinale*), few-seed bittercress (*Cardamine oligosperma*), false waterpepper (*Persicaria hydropiperoides*), Dallis grass (*Paspalum dilatatum*) and rabbit's foot grass (*Polypogon monspeliensis* and *P. interruptus*)

Riparian woodland is considered to be one of the more valuable wildlife habitats of temperate climates. Thus, CDFW and the RWQCB frequently cite ordinances that protect riparian woodlands. The mixture of willows, walnut and bay along with the dense cover of shrubby understory vegetation provide wildlife with many different food sources, nesting opportunities and cover from predators. Wildlife observed in the riparian woodlands onsite includes song sparrow (*Melospiza melodia*), black phoebe (*Sayornis nigricans*), northern mockingbird (*Mimus polyglottos*), bushtit (*Psaltriparus minimus*), California towhee (*Pipilo crissalis*), and Nuttall's woodpecker (*Picoides nuttallii*). American beaver (*Castor canadensis*) tracks/gnawings were detected along the creek banks, and mosquito fish (*Gambusia affinis*) were observed in Fagan Creek. In addition, northern river otter (*Lontra canadensis*) tracks and scat piles have been found both up and downstream of the project site.

### 5.2.3 SEASONAL WETLAND

Seasonal wetlands are habitats that may appear dry in the summer and fall months, but by the first winter rains become inundated and hold water for a period of a few days to several weeks or months at a time. Seasonal wetlands are able to hold water for long duration typically due to the presence of impervious soils and/or confining topography such as topographic low areas. Owing to soils with high clay content or that otherwise are mostly or partially impervious, any time depressional topography occurs or is created through man's activities, such areas often trap seasonal rainfall over short to long durations of the winter and spring. Such areas eventually are dominated by seasonal wetland plants and otherwise persist as seasonal wetlands.

One potential seasonal wetland was mapped on the south side of Fagan Creek, outside the limits of the Corps' confirmed map and outside the development envelope. M&A determined that there is an occluded soil layer (i.e. a claypan) approximately 6 inches below the soil surface of this mapped potential wetland. The occluded layer is regarded as a perched aquitard that results in prolonged soil saturation. Thus, soils exhibit redoximorphic properties including mottles and oxidized rhizopheres, meeting two of the three parameters required to be regarded by the Corps as "wetland." The third parameter is that this area supports a dominance of hydrophytic vegetation (wetland vegetation) meeting the third criterion required to demonstrate the area is

likely "wetland" that would be subject to Clean Water Act regulation. This mapped potential wetland supports 100 percent cover of California aster (*Symphyotrichum chilense*), a facultative (FAC) wetland species.

### 5.3 Wildlife Corridors

Wildlife corridors are linear and/or regional habitats that provide connectivity to other natural vegetation communities within a landscape fractured by urbanization and other development. Wildlife corridors have several functions: 1) they provide avenues along which wide-ranging animals can travel, migrate, and breed, allowing genetic interchange to occur; 2) populations can move in response to environmental changes and natural disasters; and 3) individuals can recolonize habitats from which populations have been locally extirpated (Beier and Loe 1992). All three of these functions can be met if both regional and local wildlife corridors are accessible to wildlife. Regional wildlife corridors provide foraging, breeding, and retreat areas for migrating, dispersing, immigrating, and emigrating wildlife populations. Local wildlife corridors also provide access routes to food, cover, and water resources within restricted habitats.

The proposed project will not interfere with the movement of native wildlife. The project site is currently largely undeveloped, and the entire site serves as a local wildlife corridor. However, since the project site is surrounded by development it limits its value as a regional wildlife corridor and likely does not provide long-ranging wildlife an avenue to interact with others of its species over long distance. The proposed project will not affect the three major, regional north-south wildlife movement routes identified in Napa County: the Western Mountains, the Napa River, and the Blue Ridge-Berryessa Natural Area.

Its function as a local wildlife corridor is to provide small and medium sized mammals with a place to forage and look for mates, rest, and roost. None of the wildlife corridor habitat is unique or rare in the vicinity or region of the project site, and there are no significant or unique wildlife species (e.g., special-status animals) that are known to use the project site. The local wildlife corridor functions will not change significantly with the addition of the proposed development as Fagan Creek and its associated riparian vegetation, which bisect the project site, will remain largely intact; thus, will still provide local wildlife access to, from, and through the property after it is developed. In particular, the riparian habitat associated with Fagan creek can act as a movement corridor for migrating birds and year-round by resident birds; this function will remain unaffected. The project as currently proposed would not adversely impact wildlife movement corridors.

## 6. SPECIAL-STATUS SPECIES DEFINITION

### 6.1 Definitions

For purposes of this analysis, special-status species are plants and animals that are legally protected under the California and Federal Endangered Species Acts (CESA and FESA, respectively) or other regulations, and species that are considered rare by the scientific community (for example, the CNPS). Special-status species are defined as:

- plants and animals that are listed or proposed for listing as threatened or endangered under the CESA (Fish and Game Code §2050 *et seq*.; 14 CCR §670.1 *et seq*.) or the FESA (50 CFR 17.12 for plants; 50 CFR 17.11 for animals; various notices in the Federal Register [FR] for proposed species);

- plants and animals that are candidates for possible future listing as threatened or endangered under the FESA (50 CFR 17; FR Vol. 64, No. 205, pages 57533-57547, October 25, 1999); and under the CESA (California Fish and Game Code §2068);

- plants and animals that meet the definition of endangered, rare, or threatened under the California Environmental Quality Act (CEQA) (14 CCR §15380) that may include species not found on either State or Federal Endangered Species lists;

- Plants occurring on Ranks 1A, 1B, 2A, 2B, 3, and 4 of CNPS' electronic *Inventory* (CNPS 2001). The CDFW recognizes that Ranks 1A, 1B, 2A and 2B of the CNPS inventory contain plants that, in the majority of cases, would qualify for State listing, and CDFW requests their inclusion in EIRs. Plants occurring on CNPS Ranks 3 and 4 are "plants about which more information is necessary," and "plants of limited distribution," respectively (CNPS 2001). Such plants may be included as special-status species on a case by case basis due to local significance or recent biological information (more on CNPS Rank species below);

- migratory nongame birds of management concern listed by U.S. Fish and Wildlife Service (Migratory Nongame Birds of Management Concern in the United States: The list 1995; Office of Migratory Bird Management; Washington D.C.; Sept. 1995);

- animals that are designated as "species of special concern" by CDFW (2017);

- Animal species that are "fully protected" in California (Fish and Game Codes 3511, 4700, 5050, and 5515).

- Bat Species that are designated on the Western Bat Working Group's (WBWG) Regional Bat Species Priority Matrix as: "RED OR HIGH." This priority is justified by the WBWG as follows: "Based on available information on distribution, status, ecology, and known threats, this designation should result in these bat species being considered the highest priority for funding, planning, and conservation actions. Information about status and threats to most species could result in effective conservation actions being implemented should a commitment to management exist. These species are imperiled or are at high risk of imperilment."

In the paragraphs below we provide further definitions of legal status as they pertain to the special-status species discussed in this report or in the attached tables.

Federal Endangered or Threatened Species. A species listed as Endangered or Threatened under the FESA is protected from unauthorized "take" (that is, harass, harm, pursue, hunt, shoot, trap)

of that species. If it is necessary to take a Federal listed Endangered or Threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from the USFWS prior to initiating the take.

State Threatened Species. A species listed as Threatened under the state Endangered Species Act (§2050 of California Fish and Game Code) is protected from unauthorized "take" (that is, harass, pursue, hunt, shoot, trap) of that species. If it is necessary to "take" a state listed Threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from CDFW prior to initiating the "take."

California Species of Special Concern. These are species in which their California breeding populations are seriously declining and extirpation from all or a portion of their range is possible. This designation affords no legally mandated protection; however, pursuant to the CEQA Guidelines (14 CCR §15380), some species of special concern could be considered "rare." Pursuant to its rarity status, any unmitigated impacts to rare species could be considered a "significant effect on the environment" (§15382). Thus, species of special concern must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency.

CNPS Rank Species. The CNPS maintains an "Inventory" of special status plant species. This inventory has four lists of plants with varying rarity. These lists are: Rank 1, Rank 2, Rank 3, and Rank 4. Although plants on these lists have no formal legal protection (unless they are also state or federal listed species), CDFW requests the inclusion of Rank 1 species in environmental documents. In addition, other state and local agencies may request the inclusion of species on other lists as well. The Rank 1 and 2 species are defined below:

- Rank 1A: Presumed extinct in California;
- Rank 1B: Rare, threatened, or endangered in California and elsewhere;
- Rank 2A: Plants presumed extirpated in California, but more common elsewhere;
- Rank 2B: Rare, threatened, or endangered in California, but more common elsewhere.

All of the plants constituting Rank 1B meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act) of the Fish and Game Code, and are eligible for state listing (CNPS 2001). Rank 2 species are rare in California, but more common elsewhere. Ranks 3 and 4 contain species about which there is some concern, and are reviewed by CDFW and maintained on "watch lists."

Additionally, in 2006 CNPS updated their lists to include "threat code extensions" for each list. For example, Rank 1B species would now be categorized as Rank 1B.1, Rank 1B.2, or Rank 1B.3. These threat codes are defined as follows:

- .1 is considered "seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)";
- .2 is "fairly endangered in California (20-80% of occurrences threatened)";
- .3 is "not very endangered in California (less than 20% of occurrences threatened or no current threats known)."

Under the CEQA review process only CNPS Rank 1 and 2 species are considered since these are the only CNPS species that meet CEQA's definition of "rare" or "endangered." Impacts to Rank 3 and 4 species are not regarded as significant pursuant to CEQA.

Fully Protected Birds. Fully protected birds, such as the white-tailed kite and golden eagle, are protected under California Fish and Game Code (§3511). Fully protected birds may not be "taken" or possessed (i.e., kept in captivity) at any time.

## 6.2 Potential Special-Status Plants on the Project Site

Figure 4 provides a graphical illustration of the closest known records for special-status species within 3 miles of the project site and helps readers visually understand the number of sensitive species that occur in the vicinity of the project site. No special-status plants have been mapped on or adjacent the project site. However, according to the CNPS *Inventory* and CDFW's CNDDB, a total of 18 special-status plant species are known to occur in the region of the project site (Table 3). Most of these plants occur in specialized habitats such as woodland, chaparral and marshes or swamps.

Special-status plant surveys were conducted on April 17, May 25, and August 30, 2018 by M&A biologists/qualified botanists Ms. Owens and Ms. Sarah Lynch. ***No special-status plant species were found on the project site during appropriately-timed surveys. As such, there would be no impacts to special-status plants from the proposed project.***

## 6.3 Potential Special-Status Animals on the Project Site

Figure 4 provides a graphical illustration of the closest known records for special-status species within 3 miles of the project site and helps readers visually understand the number of sensitive species that occur in the vicinity of the project site. No special-status animal records have ever been mapped on or adjacent to the project site. However, a total of 22 special-status animal species are known to occur in the region of the project site (Table 4). Due to the presence of suitable habitat and/or the sensitivity of eight (8) of the listed special-status animal species known to occur in the area. we further discuss these species below.

### 6.3.1 STEELHEAD-CENTRAL CALIFORNIA COST DPS

There are 15 distinct groups, or evolutionarily significant units (ESUs), of steelhead trout (*Oncorhynchus mykiss*) in Washington, Oregon, Idaho and California. The Central California Coast ESU was listed as a threatened species on August 18, 1997, and its threatened status was reaffirmed on January 5, 2006. The ESU includes all naturally spawned anadromous steelhead populations below natural and man-made impassable barriers in California streams from the Russian River (inclusive) to Aptos Creek (inclusive), and the drainages of San Francisco, San Pablo, and Suisun Bays eastward to Chipps Island at the confluence of the Sacramento and San Joaquin Rivers. Also included in the ESU are populations in tributary streams to Suisun Marsh including Suisun Creek, Green Valley Creek, and an unnamed tributary to Cordelia Slough (commonly referred to as Red Top Creek), excluding the Sacramento-San Joaquin River Basin. *The project site does not fall within Central California Coast Steelhead Critical Habitat (Department of Commerce, 2005)*

Steelhead are the anadromous (i.e. fish species born in freshwater that migrate to the ocean for most of their adult phase) form of rainbow trout, a salmonid species native to western North America and the Pacific Coast of Asia. Steelhead are similar to some Pacific salmon in their life cycle and ecological requirements. They are born in fresh water streams, where they spend their first 1-3 years of life. They then emigrate to the ocean where most of their growth occurs. After spending between one to four growing seasons in the ocean, steelhead return to their native fresh water stream to spawn. Unlike Pacific salmon, steelhead do not necessarily die after spawning, and are able to spawn more than once. In California, most steelhead spawn from December through April in small streams and tributaries where cool, well oxygenated water is available year-round.

The closest occurrence of steelhead is part of the Central California Coast Distinct Population Segment (DPS) of steelhead (*Oncorhynchus mykiss irideus*) which is federally listed as threatened. It has no special State status. The occurrence is located 2.4 miles south of the project site (CNDDB Occurrence No. 4), in North Slough at Eucalyptus Drive and within the central California ESU. Steelhead are also known from Suscol Creek, located approximately 1.8 miles north of the project site (Department of Commerce, 2005). Steelhead have not been recorded in Fagan Creek, and surveys indicate that this creek is likely not used by anadromous fish (Leidy *et. al.* 2003). On January 31, 2012 M&A principal biologist, Mr. Geoff Monk, called Mr. Jonathon Koehler, Senior Biologist with the Napa County Resources Development Department (RCD) that routinely monitors steelhead and salmon populations in tributaries in Napa County. Mr. Koehler stated that he knows Fagan Creek and does not believe it supports steelhead (or Chinook salmon). Finally, M&A checked the Napa County Baseline Data Report and there is no indication or evidence provided in this report that suggests Fagan Creek supports listed fish species. As such, ***M&A concludes that the proposed project will not adversely affect steelhead (or Chinook salmon) and thus, the proposed project will not result in significant impacts to this species pursuant to the CEQA.***

### 6.3.2 California Red-Legged Frog

The California red-legged frog was federally listed as threatened on May 23, 1996 (Federal Register 61: 25813-25833) and as such is protected pursuant to the Federal Endangered Species Act. On March 16, 2010, the USFWS issued the final designation for California red-legged frog Critical Habitat (USFWS 2010). *The project site is located approximately 2.1 miles southwest of mapped Critical Habitat Unit SOL-2 and 1.9 miles northwest of mapped Critical Habitat Unit SOL-2* (Figure 5)*. It is not within mapped critical habitat.* The California red-legged frog is also a state "species of special concern."

The California red-legged frog is typically found in ponds, slow-flowing portions of perennial and intermittent streams that maintain water in the summer months. This frog is also found in hillside seeps that maintain pool environments or saturated soils throughout the summer months. Populations probably cannot be maintained if all surface water disappears (i.e., no available surface water for egg laying and larval development habitat). Larval California red-legged frogs require 11-20 weeks of permanent water to reach metamorphosis (i.e., to change from a tadpole into a frog), in water depths of 10 to 20 inches (USFWS 2002). Riparian vegetation such as willows and emergent vegetation such as cattails are preferred red-legged frog habitats, though not necessary for this species to be present. Populations of California red-legged frog will be

reduced in size or eliminated from ponds supporting non-native species such as bullfrog, Centrarchid fish species (such as sunfish, bluegill, or largemouth bass), and signal and red swamp crayfish (*Pacifastacus leniusculus* and *Procambarus clarkii*, respectively), all of which are known California red-legged frog predators. However, the presence of these non-native species does not preclude the presence of the California red-legged frog.

California red-legged frogs use both aquatic and upland habitats for migration and dispersal. The USFWS' *Recovery Plan for the California Red-Legged Frog* states that California red-legged frog overland excursions via uplands can vary between 0.25 mile up to 3 miles during the course of a wet season, and that frogs "have been observed to make long-distance movements that are straight-line, point to point migrations rather than using corridors for moving in between habitats" (USFWS 2002). The information presented in the USFWS' Recovery Plan was obtained in part from a publication by Bulger et al. (2003).

Bulger et al. (2003) studied 19 radio tagged California red-legged frogs in Santa Cruz County and found that "*most migrating individuals moved to the nearest pond to breed, and to the nearest pond or stream after breeding. The three exceptions to this pattern all resided in the same pond (not used for breeding) during the summer and then migrated to breed in a pond 2800 m distant."* Bulger et al. (2003) further stated that that their data showed *that "there is a relatively small segment of the adult population that is liable to migrate in any given year, and that most adults are resident year around at favorable breeding sites."* Data on migration rates from this study indicate that *"more than 75% of the adult population is resident at permanent aquatic sites over the course of a year." "Moreover, 90% of the radio-tagged frogs that were not migrating between aquatic sites remained within 60 m of water at all times and the farthest any non-migrating frog moved from water was 130 m."* For frogs that did migrate, Bulger et al. (2003) *reported that most migrating frogs moved overland in approximately straight lines to target sites without apparent regard to vegetation type or topography.* Bulger et al. (2003) also states that *they did not locate individual frogs daily,* and that they "*do not have tightly bounded data on numbers of days spent moving versus resting"...* Thus, to an extent straight line migrations were determined by using departure and final resting/breeding locations.

Working in Point Reyes National Seashore on the coast of California, Fellers and Kleeman (2007) radio-tagged 115 California red-legged frogs in the greater Olema Valley [in Marin County] and determined that "*the median distance moved from breeding sites was 0 m, but for the 36 frogs that moved ≥ 30 m, the median was 150 m (range = 30-1400 m). In many cases, frogs almost certainly moved more than the straight-line distance between sites. This was confirmed with individuals that were located in transit. Presumed distance moved for those frogs that moved ≥ 30 m was 185 m (median, range = 30-1400 m)*."

As reported by Fellers and Kleeman (2007), migrations of California red-legged frogs that were radio-tagged to determine movements were conducted at study sites near the Pacific Ocean where summer fog and high relative humidity reduce the risk of desiccation for dispersing amphibians. Bulger et al. (2003) studies similarly were conducted near the Pacific Ocean where summer fog and relative humidity are much higher than in inland populations of the California red-legged. In locations that are characterized by hot and seasonally dry climates, desiccation mortality likely influences movements of the California red-legged to a greater extent. Tatarian

(2005) studied an inland population of California red-legged frogs in eastern Contra Costa County where the climate is far drier than the coastal environment. Tatarian (2005) found that all movements of California red-legged frog started after the first 0.5 cm of rain in the fall, with more terrestrial movements being made in the fall pre-breeding season (57%) than in the winter breeding season (32%) or spring post-breeding season (11%). Tatarian (2007) also found that California red-legged frogs moved greater average distances aquatically (84.6 m) than terrestrially (27.7 m). Greater terrestrial distances were moved in the pre-breeding season (35.2 m) than in the breeding season (15.5 m) or post-breeding season (16.3 m) with the majority of movements occurring for only one of the three 4-day survey periods. The majority of frogs (57%) were position faithful within a pool, indicating they did not migrate at all. These data likely suggest that long forays across the landscape that occur by a small percentage of breeding frogs in coastal populations are less likely in dry inland locations where the threat of desiccation is much higher.

The CNDDB search resulted in records for several occurrences of California red-legged frog in the vicinity of the project site. A relatively new occurrence of California red-legged frog is the closest known record to the project site, located in North Slough east of SR-29, approximately 1.3 mile southeast of the project site (Occurrence Number 1062) (Figure 4). A single frog was identified in an isolated side pool along North Slough in 2008. A second occurrence for this species has been recorded near the east end of South Napa Junction Road approximately 2.2 miles southeast of the project site (Occurrence Number 896). At this location, a single frog was found in a man-made concrete basin adjacent to a quarry pond. Neither of these record locations are in the same watershed as the project site.

There are no records for California red-legged frog in Fagan Creek, its tributaries, or the headwaters of the tributaries. No frogs of any species have ever been observed in Fagan Creek on the project site. Only the Sierran tree frog (*Pseudacris sierra*) has been heard during multiple surveys of this stretch of Fagan Creek on the project site. Up and downstream of the project site, besides Sierran tree frog, no frog species has been observed during surveys except the bullfrog (*Rana catesbeiana*). In November of 2011, M&A biologists observed a large number (approximately 80 individuals) of bullfrog sub-adults and metamorphs in a large pool below the outlet culvert from the Chardonnay Country Club upstream of the project site on the east side of Highway 29.

During M&A's 2012 protocol surveys, no California red-legged frog adults, larvae, or eggs were observed in Fagan Creek, in any upland areas on the project site, or in the ponds upstream from the project site. In addition, California red-legged frog predators including northern river otter (*Lontra canadensis*), red swamp crayfish, raccoon, and California roach were also present in Fagan Creek.

During M&A's protocol surveys no California red-legged frogs were observed or heard on the project site. More to the point, at no time did M&A ever see or hear any amphibian adult or larvae on or within 300 feet of the project site. M&A concludes that the California red-legged frog does not use this creek owing to a complete absence of sightings of this species (no adults, larvae, or metamorphs) during surveys, an abundance of California red-legged frog predators

including river otter, bullfrogs, red swamp crayfish, and raccoon, and California roach, and the fact that there is insufficient cover for red-legged frogs to escape these predators.

The fact that M&A did not find a single amphibian on or adjacent to the project site in several years of surveys is indicative of the unsuitability of Fagan Creek in the project site's industrial setting. Boral Stone immediately adjacent to Fagan Creek operates 24 hours a day and is exceptionally noisy with pneumatic gas pipes that hiss consistently but intermittently, and with fork lifts and other trucks that continuously load and unload products, and from a broadcast communication system that is loud enough that workers can hear orders over the continuous noise. In addition, high voltage lights light up the creek channel on and adjacent to the project site through all hours of the night. Combined with 100 percent shaded conditions (all amphibians like some sunlight), the project site surroundings do not seem conducive to supporting even common amphibians. The fact that not even the nearly cosmopolitan Sierran tree frog was observed on the project site lends evidence to M&A's finding that conditions present on the project site do not support the California red-legged frog.

After completion of the 2012 protocol surveys, M&A concluded that there are no California red-legged frogs on or near the project site. In addition, for several reasons, M&A also concluded that it is unlikely that the project site would be used as dispersal habitat by this frog. First, the project site is approximately 1.3 miles away from the closest known California red-legged frog record, beyond the one-mile distance the USFWS prescribes in its survey protocol to address dispersal. Second, all known records within this portion of Napa County are east of Highway 29 (which runs north/south) while the project site is well west of this highway. Highway 29 is very heavily travelled at all hours of the day and is a considerable overland geographic barrier to frog dispersal. An unusually small and long culvert that is 300 to 400 feet long passes Fagan Creek under Highway 29 and conceivably could allow amphibian passage, but it would be passage to unsuitable habitats for California red-legged frog. Fagan Creek is tributary to the brackish and tidally influence Napa River approximately 2.5 miles west of the project site. Red-legged frogs would not survive nor be expected to occur in the Napa River. Finally, there is extensive commercial development between Highway 29 and the project site, and surrounding the project site, separating the project site from known extant populations of the California red-legged frog. Any one of the foregoing characteristics largely bars the California red-legged frog from dispersing to the project site; considered together, they afford a sound basis for M&A's conclusion that the project site does not support California red-legged frog.

Based on this information, it is M&A's conclusion that California red-legged frogs are not present on or adjacent to the project site. M&A further conclude that ***based upon our survey data and our research, that the proposed project would have no effects on the California red-legged frog***. Accordingly, it is M&A's conclusion that no further actions are warranted with respect to the California red-legged frog for the proposed project.

#### 6.3.3 WESTERN POND TURTLE

The western pond turtle (*Actinemys marmorata*) is a California "species of special concern." In April of 2015, the USFWS issued a 90-day finding on a petition to list this species under FESA. In September 2016, M&A spoke with USFWS' Sacramento Field Office and was told that they "hope to finish a 12-month finding in the fiscal year of 2021" (G. Tarr, USFWS, Sacramento

Field Office, pers. comm. with S. Lynch of M&A, September 21, 2016). Until the western pond turtle is formally listed it is not afforded the protections of FESA.

The western pond turtle is a habitat generalist, inhabiting a wide range of fresh and brackish, permanent and intermittent water bodies from sea level to about 4,500 feet above sea level (USFWS 1992). Typically, this species is found in ponds, marshes, ditches, streams, and rivers that have rocky or muddy bottoms. This turtle is most often found in aquatic environments with plant communities dominated by watercress, cattail, and other aquatic vegetation. It is a truly aquatic turtle that usually only leaves the aquatic site to reproduce and to overwinter. Recent field work has demonstrated that western pond turtles may overwinter on land or in water or may remain active in water during the winter season; this pattern may vary considerably with latitude, water temperature, and habitat type and remains poorly understood (Jennings and Hayes 1994).

The pond turtle also requires upland areas for burrowing habitat where it digs nests and buries its eggs. These nests can extend from 52 feet to 1,219 feet from watercourses (Jennings and Hayes 1992), however most pond turtles nest in uplands within 250 meters of water (Bury, unpublished). Upland nest sites are usually found in areas with sparse vegetation. Sunny, barren, and undisturbed (not disked) land provides optimal habitat, while shady riparian habitat and planted agricultural fields do not provide suitable habitat (op. cit.). Eggs are typically laid from March to August (Zeiner et. al. 1988), with most eggs being laid in May and June. Hatchlings will stay in the nest until the following April (Bury, unpublished). Predators of juvenile pond turtles include the non-native bullfrog (*Lithobates catesbeiana*) and Centrarchid fish (sunfish). This turtle is most visible between April and July when it can be observed basking in the sun. In areas where the water is very warm during these months; however, it will bask in the warm water and will be more difficult to observe. It eats plants, insects, worms, fish and carrion (Stebbins 2003).

The closest CNDDB record for western pond turtle is located approximately 1.3 miles southwest of the project site (CNDDB Occurrence No. 552). Within the project site boundary Fagan Creek with its dense riparian cover does not provide basking sites, a critical component of western pond turtle aquatic habitats.  for the western pond turtle. Regardless, owing to the wildlife corridor value of Fagan Creek and the possibility that a western pond turtle could pass through the area of the project site, the presence of this turtle cannot be ruled out. As such, the proposed project could result in impacts to potentially occupied upland nesting habitat ***These impacts would be regarded as a potentially significant adverse impact pursuant to CEQA.*** Mitigation is prescribed below that will reduce impacts to this species to a level considered less than significant pursuant to CEQA (see Impacts and Mitigation Measures described below).

#### 6.3.4 NORTHERN HARRIER

The northern harrier (*Circus cyaneus*) is a California "species of special concern." This raptor, its eggs/young are also protected pursuant to California Fish and Game Codes §§3503 and 3503.5, Northern harriers build grass-lined nests on the ground within dense, low-lying vegetation in a variety of habitats, though they are typically found nesting in grassland near marsh habitats. They usually nest on level to near level ground. This species is particularly vulnerable to ground predators while nesting, and is subject to disturbance by agricultural practices.

The closest nesting record for this species is located on Coon Island in the Napa River, 3.5 miles west of the project site (Occurrence No. 29). The grassland community on the north side of the project site provides suitable foraging and nesting habitat for the northern harrier. The northern harrier is not known to nest on the project site. However, as it is a mobile species that frequently changes nesting locations and could nest on the project site in the future, preconstruction nesting surveys should be conducted before earth-moving activities commence on the project site.

Because the project site is wedged between industrial buildings and developed areas, it is unlikely to be used for nesting by northern harriers. That said, out of an abundance of caution, a qualified raptor biologist should conduct a nesting survey for all birds including the northern harrier to determine if a nest site could be impacted either directly or indirectly by the proposed project.

If any bird active bird nest if found that could be affected by the project the qualified biologist should establish a non-disturbance buffer so that direct take will not occur, and the project otherwise remains in compliance with the Federal Migratory Bird Treaty Act and Fish and Game Codes that protect nesting birds. ***Because impacts to nesting northern harriers cannot be ruled out at this time, impacts are regarded as potentially significant. The Impacts and Mitigation Measures that follow in sections below address these impacts.***

#### 6.3.5 SWAINSON'S HAWK

The Swainson's hawk is a state listed threatened species afforded protection pursuant to the California Endangered Species Act (CESA). While it has no special federal status, it is protected from direct take under the Federal Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-711). Swainson's hawks, their nests, eggs, and young are also protected under California Fish and Game Code (§3503, §3503.5, §3513, and §3800). Finally, pursuant to CEQA, this hawk would be considered "rare" and impacts to its nest sites would be regarded as significant.

The Swainson's hawk is generally a summer visitor to California. In the fall months, most Swainson's hawks migrate to South America before returning to the United States to breed once again in the late spring. There is a small population of Swainson's hawks that remain resident in California year-round. The nesting population of Swainson's hawks in California was reduced considerably over historical nesting populations by the time it was afforded protections pursuant to the CESA in 1984. Since that time, the nesting population of Swainson's hawk has significantly recovered in California, as have other raptor species that were previously protected both as State and Federal listed species. Both the peregrine falcon (*Falco peregrinus* ssp. *anatum*) and the bald eagle (*Haliaeetus leucocephalus*) were similarly listed species under both the State and Federal Endangered Species Acts but have both been delisted owing to population recovery. The Swainson's hawk nesting population also likely has greatly recovered but, owing to the absence of a thorough population census in California since the species was listed by the CDFW, it remains protected pursuant to the CESA.

The Swainson's hawk inhabits open to semi-open areas at low to middle elevations in valleys, dry meadows, foothills, and level uplands (Kochert 1986). It nests almost exclusively in trees and will nest in almost any tree species that is at least 10 feet tall (Schmutz et. al. 1984). Nests are constructed in isolated trees that are dead or alive along drainages and in wetlands, or in

windbreaks in fields and around farmsteads (Palmer 1988). Swainson's hawks occasionally nest in shrubs, on telephone poles, and on the ground. In the Central Valley of California, the majority of Swainson's hawk nests and territories are associated with riparian systems and nests are commonly found in cottonwoods and oaks (Schlorff et. al. 1984). They have also been documented nesting in eucalyptus (*Eucalyptus* spp.), black walnut (*Juglans hindsii*), black locust (*Robinia pseudoacacia*), almond (*Prunus dulcis*), Osage orange (*Maclura pomifera*), Arizona cypress (*Cupressus arizonica*) and pine (*Pinus* spp.) (CNDDB records).

Foraging habitats include alfalfa fields, fallow fields, beet, tomato, and other low-growing row or field crops, dry-land and irrigated pasture, and rice land when not flooded (CDFG 1994). The Swainson's hawk generally forages in open habitats with short vegetation containing small mammals, reptiles, birds, and insects. Its primary prey in the Central Valley is California meadow vole (*Microtus californicus*). Agricultural areas are often preferred over more natural grassland habitats due to larger prey populations. However, in the coast ranges of California where Swainson's hawk nesting populations have been recovering from their population lows in the 1980s when this hawk was not previously found nesting, these hawks use primarily grasslands and ruderal habitats for foraging. During the nesting season, Swainson's hawks usually forage within two miles of their nests. Swainson's hawk does not require habitats that contain many perches because it most often searches for prey aerially; therefore, it can occupy habitats with few or no perches except the nest tree (James 1992).

The closest known Swainson's hawk record to the project site is approximately 0.5-mile to the northeast (CNDDB Occurrence No. 2744). There is suitable Swainson's hawk nesting habitat within the riparian corridor of Fagan Creek that flows through the project site and Swainson's hawks have been observed flying over the area. However, using California Department of Fish and Wildlife's Swainson's hawk survey guidelines (CDFG 2000), M&A conducted formal nesting surveys for Swainson's hawks including all potential habitats within a half mile of the Napa Logistics Phase II project site which is just south of the project site and included within the half-mile survey radius. Swainson's hawk nesting surveys were conducted April 5 and June 10, 2016 and April 4 and June 13, 2018; no Swainson's hawks or evidence of nesting was observed within a zone of influence of the Napa Logistics Park Phase 2 project site during these surveys. Nonetheless, because the Swainson's hawk is a mobile species and its nesting population has been greatly expanding in the coast ranges of central California, at this time it cannot be ruled out as nesting within a zone of influence of the proposed project.

If any bird active bird nest if found that could be affected by the project the qualified biologist should establish a non-disturbance buffer so that direct take will not occur, and the project otherwise remains in compliance with the Federal Migratory Bird Treaty Act, Fish and Game Codes that protect nesting birds, and in this instance CESA protected species such as the Swainson's hawk. ***Because impacts to nesting Swainson's hawks cannot be ruled out at this time, impacts are regarded as potentially significant. The Impacts and Mitigation Measures that follow in sections below address these impacts.***

#### 6.3.6 SALT MARSH COMMON YELLOWTHROAT

The saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*) is a California species of special concern. This large warbler species is found in freshwater marshes, coastal swales,

riparian thickets, brackish marshes, salt marshes, and the edges of disturbed weed fields and grasslands that border these wet habitats. In the San Francisco Bay region, about 60 percent of the population breeds in brackish marsh, 20 percent breeds in riparian woodland, 10 percent in freshwater marsh, 5 percent in salt marsh, and 5 percent in upland vegetation (Hobson et al. 1986). Nests are well concealed, mostly on or near the ground in grass tussocks, low herbaceous vegetation, cattails, rushes, and bushes generally to about five feet above the ground, though many are below six inches (Shuford 1993).

The closest known record for this species is located 1.7 miles west of the project site (CNDDB Occurrence No. 37). Fagan Creek provides suitable nesting habitat for salt marsh common yellowthroat. Typically, this species favors dense tules, cattails and willow scrub which does not characterize the mature tree-dominated riparian corridor of Fagan Creek. Additionally, this species was never observed onsite during multiple years of site surveys. Nonetheless, a preconstruction nesting survey should be conducted before earth-moving activities commence on the project site. If common saltmarsh yellowthroat were found nesting on the project site, an adequate buffer would have to be established around the nesting site until the nesting cycle ended, typically in August.

If any bird active bird nest if found that could be affected by the project the qualified biologist should establish a non-disturbance buffer so that direct take will not occur, and the project otherwise remains in compliance with the Federal Migratory Bird Treaty Act and Fish and Game Codes that protect nesting birds. ***Because impacts to the nesting salt marsh common yellow throat cannot be ruled out at this time, impacts are regarded as potentially significant. The Impacts and Mitigation Measures that follow in sections below address these impacts.***

#### 6.3.7 TRICOLORED BLACKBIRD

Tricolored blackbird (*Agelaius tricolor*) is a California "species of special concern" but has no federal status. Active nests, eggs, and young are also protected pursuant to Fish and Game Code §3503.

A gregarious species, the tricolored blackbird is typically found near freshwater, particularly near marsh habitat, but also can be found nesting in open areas distant from large wetlands. Loss of wetland habitats is regarded as the principal factor responsible for this species population decline (Beedy, 1992). Nesting colonies are typically found in stands of cattail (*Typha* spp.) and bulrush (*Scirpus* spp.), although they are also known to utilize blackberry patches (*Rubus* sp.) and thistle clumps (*Cirsium* spp. and *Cynara* spp.) adjacent to water. M&A's principal biologist, Mr. G Monk, has observed tricolored blackbirds nesting in black mustard (*Brassica nigra*) in Alameda County. Flooded lands, margins of ponds, and grassy fields in summer and winter provide typical foraging habitat for this species. The closest record for this species for this species is associated a man-made pond approximately 0.6-mile southeast of the project site (CNDDB Occurrence No. 194). This species may nest or forage in the riparian vegetation along Fagan Creek on the project site, although this is not likely since the project site is wedged in between large industrial buildings. Typically, tricolored blackbirds nest in more open areas.

If any active bird nest if found that could be affected by the project the qualified biologist should establish a non-disturbance buffer so that direct take will not occur, and the project otherwise

remains in compliance with the Federal Migratory Bird Treaty Act and Fish and Game Codes that protect nesting birds. ***Because impacts to the nesting tricolored blackbirds cannot be ruled out at this time, impacts are regarded as potentially significant. The Impacts and Mitigation Measures that follow in sections below address these impacts.***

## 7. REGULATORY FRAMEWORK FOR NATIVE WILDLIFE, FISH, AND PLANTS

This section provides a discussion of those laws and regulations that are in place to protect native wildlife, fish, and plants. Under each law we discuss its pertinence to the proposed project.

### 7.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) forms the basis for the federal protection of threatened or endangered plants, insects, fish and wildlife. FESA contains four main elements, they are as follows:

Section 4 (16 USCA §1533): Species listing, Critical Habitat Designation, and Recovery Planning: outlines the procedure for listing endangered plants and wildlife.

Section 7 (§1536): Federal Consultation Requirement: imposes limits on the actions of federal agencies that might impact listed species.

Section 9 (§1538): Prohibition on Take: prohibits the "taking" of a listed species by anyone, including private individuals, and State and local agencies.

Section 10: Exceptions to the Take Prohibition: non-federal agencies can obtain an incidental take permit through approval of a Habitat Conservation Plan.

In the case of salt water fish and other marine organisms, the requirements of FESA are enforced by the National Marine Fisheries Service (NMFS). The USFWS enforces all other cases. Below, Sections 9, 7, and 10 of FESA are discussed since they are the sections most relevant to the proposed project.

Section 9 of FESA as amended, prohibits the "take" of any fish or wildlife species listed under FESA as endangered. Under Federal regulation, "take" of fish or wildlife species listed as threatened is also prohibited unless otherwise specifically authorized by regulation. "Take," as defined by FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." "Harm" includes not only the direct taking of a species itself, but the destruction or modification of the species' habitat resulting in the potential injury of the species. As such, "harm" is further defined to mean "an act which actually kills or injures wildlife; such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR 17.3). A December 2001 decision by the 9th Circuit Court of Appeals (Arizona Cattle Growers' Association, Jeff Menges, vs. the U.S. Fish and Wildlife Service and Bureau of Land Management, and the Southwest Center for Biological Diversity) ruled that the USFWS must show that a threatened or endangered species is present on a project site and that it would be taken by the project activities. According to this ruling, the

USFWS can no longer require mitigation based on the probability that the species could use the site. Rather they must show that it is actually present.

Section 9 applies to any person, corporation, federal agency, or any local or State agency. If "take" of a listed species is necessary to complete an otherwise lawful activity, this triggers the need to obtain an "incidental take permit" either through a Section 7 Consultation as discussed further below (for federal actions or private actions that are permitted or funded by a federal agency such as the Corps), or through Section 10 of FESA which requires preparation of a Habitat Conservation Plan (HCP) (for state and local agencies, or individuals, and projects without a federal "nexus"; for example, projects that do not need a Corps permit).

Section 7(a)(2) of the Act requires that each federal agency consult with the USFWS to ensure that any action authorized, funded or carried out by such agency is not likely to jeopardize the continued existence of an endangered or threatened species or result in the destruction or adverse modification of critical habitat for listed species. Critical habitat designations mean: (1) specific areas within a geographic region currently occupied by a listed species, on which are found those physical or biological features that are essential to the conservation of a listed species and that may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by a listed species that are determined essential for the conservation of the species.

The Section 7 consultation process only applies to actions taken by federal agencies that are considering authorizing discretionary projects. Section 7 is by and between the NMFS and/or the USFWS and the federal agency contemplating a discretionary approval (that is, the "federal nexus agency," for example, the Corps or the Federal Highway Administration). Private parties, cities, counties, etc. (i.e., applicants) may participate in the Section 7 consultation *at the discretion of the federal agencies conducting the Section 7 consultation*. The Section 7 consultation process is triggered by a determination of the "action agency" – that is, the federal agency that is carrying out, funding, or approving a project - that the project "may affect" a listed species or critical habitat. If an action is likely to adversely affect a listed species or designated critical habitat, formal consultation between the nexus agency and the USFWS/NMFS is required. As part of the formal consultation, the USFWS/NMFS may resolve any issues informally with the nexus agency or may prepare a formal Biological Opinion assessing whether the proposed action would be likely to result in "jeopardy" to a listed species or if it could adversely modify designated critical habitat. If the USFWS/NMFS prepares a Biological Opinion it will contain either a "jeopardy" or "non-jeopardy" decision. If the USFWS/NMFS concludes that a proposed project would result in adverse modification of critical habitat or would jeopardize the continued existence of a federal listed species (that is, it will issue a jeopardy decision), the nexus federal agency would be most unlikely to authorize its discretionary permit. If the USFWS/NMFS prepares a "non-jeopardy" Biological Opinion, the nexus federal agency may authorize the discretionary permit making all conditions of the Biological Opinion conditions of its discretionary permit. A non-jeopardy Biological Opinion constitutes an "incidental take" permit that allows applicants to "take" federally listed species while otherwise carrying out legally sanctioned projects.

For non-federal entities, for example private parties, cities, counties that are considering a discretionary permit, Section 10 provides the mechanism for obtaining take authorization. Under Section 10 of FESA, for the applicant to obtain an "incidental take permit," the applicant is required to submit a "conservation plan" to the USFWS or NMFS that specifies the impacts that are likely to result to federally listed species, and the measures the applicant will undertake to minimize and mitigate such impacts, and the funding that will be available to implement those steps. Conservation plans under FESA have come to be known as "habitat conservation plans" or "HCPs" for short. The terms incidental take permit, Section 10 permit, and Section 10(a)(1)(B) permit are used interchangeably by the USFWS. Section 10(a)(2)(B) of FESA provides statutory criteria that must be satisfied before an incidental take permit can be issued.

#### 7.1.1 Responsible Agency

FESA gives regulatory authority to the USFWS for federally listed terrestrial species and non-anadromous fish. The NMFS has regulatory authority over federally listed marine mammals and anadromous fish.

#### 7.1.2 Applicability to the Proposed Project

There are no federally-listed anadromous fish species known to occur in Fagan Creek, which bisects the project site. Further, as no impacts to the channel of Fagan Creek (i.e. aquatic habitat) are proposed, there are no impacts to federally-listed anadromous fish species anticipated.

There are no records for California red-legged frogs in Fagan Creek, its tributaries, or the headwaters of the tributaries. M&A conducted informal surveys in 2011 and protocol-level surveys in 2012 along the stretch of Fagan Creek that bisects the project site. During these surveys, no frogs of any species were observed in Fagan Creek on or near the project site. M&A attributes the absence of frogs in Fagan Creek to a healthy population of river otters that frequently hunt up and down this creek and that have voracious appetites for frogs of any species. Other potential California red-legged frog predators observed in Fagan Creek include red swamp crayfish and raccoons. Upstream of the project site, east of Highway 29, ponds associated with golf courses that were surveyed by M&A in 2012 were found to support Sierran tree frog (*Pseudacris sierra*) and American bullfrog (*Rana catesbeiana*), and western toads (*Bufo borealis*).

The fact that M&A did not find a single amphibian on or adjacent to Fagan Creek where it flows through the project site during multiple years of surveys is indicative of the overall unsuitability of Fagan Creek in the project site's industrial setting. Boral Stone immediately adjacent to Fagan Creek operates 24 hours a day and is exceptionally noisy with pneumatic gas pipes that hiss consistently but intermittently, and with fork lifts and other trucks that continuously load and unload products, and from a broadcast communication system that is loud enough that workers can hear orders over the continuous noise. In addition, high voltage lights light up the creek channel on and adjacent to the project site through all hours of the night. Combined with the nearly 100 percent shaded conditions (all amphibians like some sunlight), the project site surroundings do not seem conducive to supporting even most common amphibians.

After completion of the 2012 protocol surveys, M&A concluded that there are no California red-legged frogs on or near the project site. In addition, for several reasons, M&A also concluded

that it is unlikely that the project site would be used as dispersal habitat by the California red-legged frog.

The project site approximately 1.3 miles from the closest known California red-legged frog record, beyond the one-mile distance the USFWS prescribes in its survey protocol to address dispersal. Please note that all known California red-legged frog records in the area of the project site are east of Highway 29 (which runs north/south) while the project site is well west of this highway. Highway 29 is very heavily travelled at all hours of the day and night, and is a considerable overland geographic barrier to California red-legged frog dispersal. An unusually small and long culvert that is 300 to 400 feet long passes Fagan Creek under this highway and conceivably could allow amphibian passage, but it would be passage to unsuitable habitats for the California red-legged frog. Fagan Creek is tributary to the brackish and tidally influence Napa River approximately 2.5 miles west of the project site. California red-legged frogs would not survive nor be expected to occur in the Napa River. Finally, there is extensive commercial development between Highway 29 and the project site, and surrounding the project site, separating the project site from known extant populations of the California red-legged frog. Any one of the foregoing characteristics largely bars California red-legged frogs from dispersing to the project site; considered together, they afford a sound basis for M&A's conclusion that the project site does not support the California red-legged frog.

Based on this information, it is M&A's conclusion that the California red-legged frog is not present on or adjacent to the project site. ***Accordingly, the project will not impact the California red-legged frog.***

## 7.2 Federal Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (16 U.S.C. §§ 703-712, July 3, 1918, as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989) makes it unlawful to "take" (kill, harm, harass, shoot, etc.) any migratory bird listed in Title 50 of the Code of Federal Regulations, Section 10.13, including their nests, eggs, or young. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, wading birds, seabirds, and passerine birds (such as warblers, flycatchers, swallows, etc.).

### 7.2.1 Applicability to The Proposed Project

White-tailed kite, red-tailed hawk, northern harrier, Cooper's hawk, sharp-shinned hawk, Swainson's hawk and American kestrel could nest on or within a zone of influence of the project site. These raptors (birds of prey) are protected by the Migratory Bird Treaty Act. As long as there is no direct mortality of species protected pursuant to this Act caused by development of the site, there should be no constraints to development. To comply with the Migratory Bird Treaty Act, all active nest sites would have to be avoided while migratory birds are nesting. Upon completion of any active nesting, the project could commence as otherwise planned. Please review specific requirements for avoidance of active bird nests in the Impacts and Mitigations section below.

## 7.3 California Endangered Species Act

### 7.3.1 Section 2081 of the California Endangered Species Act

In 1984, the state legislated the CESA (Fish and Game Code §2050). The basic policy of CESA is to conserve and enhance endangered species and their habitats. State agencies will not approve private or public projects under their jurisdiction that would impact threatened or endangered species if reasonable and prudent alternatives are available. Because CESA does not have a provision for "harm" (see discussion of FESA, above), CDFW considerations pursuant to CESA are limited to those actions that would result in the direct take of a listed species.

If CDFW determines that a proposed project could impact a State listed threatened or endangered species, CDFW will provide recommendations for "reasonable and prudent" project alternatives. The CEQA lead agency can only approve a project if these alternatives are implemented, unless it finds that the project's benefits clearly outweigh the costs, reasonable mitigation measures are adopted, there has been no "irreversible or irretrievable" commitment of resources made in the interim, and the resulting project would not result in the extinction of the species. In addition, if there would be impacts to threatened or endangered species, the lead agency typically requires project applicants to demonstrate that they have acquired "incidental take" permits from CDFW and/or USFWS (if it is a Federal listed species) prior to allowing/permitting impacts to such species.

If proposed projects would result in impacts to a State listed species, an "incidental take" permit pursuant to §2081 of the Fish and Game Code would be necessary (versus a Federal incidental take permit for Federal listed species). CDFW will issue an incidental take permit only if:

1) The authorized take is incidental to an otherwise lawful activity;
2) the impacts of the authorized take are minimized and fully mitigated;
3) measures required to minimize and fully mitigate the impacts of the authorized take:
    a) are roughly proportional in extent to the impact of the taking on the species;
    b) maintain the project applicant’s objectives to the greatest extent possible; and,
    c) capable of successful implementation; and,
4) adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with, and the effectiveness of, the measures.

If an applicant is preparing a habitat conservation plan (HCP) as part of the federal 10(a) permit process, the HCP might be incorporated into the §2081 permit if it meets the substantive criteria of §2081(b). To ensure that an HCP meets the mitigation and monitoring standards in Section 2081(b), an applicant should involve CDFW staff in development of the HCP. If a final Biological Opinion (federal action) has been issued for the project pursuant to Section 7 of the federal Endangered Species Act, it might also be incorporated into the §2081 permit if it meets the standards of §2081(b).

No §2081 permit may authorize the take of a species for which the Legislature has imposed strict prohibitions on all forms of “take.” These species are listed in several statutes that identify “fully protected” species and “specified birds.” *See* Fish and Game Code §§ 3505, 3511, 4700, 5050, 5515, and 5517. If a project is planned in an area where a “fully protected” species or a “specified bird” occurs, an applicant must design the project to avoid all take.

Fish and Game Code §2080.1 allows an applicant who has obtained a "non-jeopardy" federal Biological Opinion pursuant to Section 7 of the FESA, or who has received a federal 10(a) permit (federal incidental take permit) pursuant to the FESA, to submit the federal opinion or permit to CDFW for a determination as to whether the federal document is "consistent" with CESA. If after 30 days CDFW determines that the federal incidental take permit is consistent with state law, and that all state listed species under consideration have been considered in the federal Biological Opinion, then no further permit or consultation is required under CESA for the project. However, if CDFW determines that the federal opinion or permit is not consistent with CESA, or that there are state listed species that were not considered in the federal Biological Opinion, then the applicant must apply for a state CESA permit under Section 2081(b). Section 2081(b) is of no use if an affected species is state-listed, but not federally listed.

State and federal incidental take permits are issued on a discretionary basis and are typically only authorized if applicants are able to demonstrate that impacts to the listed species in question are unavoidable, and can be mitigated to an extent that the reviewing agency can conclude that the proposed impacts would not jeopardize the continued existence of the listed species under review. Typically, if there would be impacts to a listed species, mitigation that includes habitat avoidance, preservation, and creation of endangered species habitat is necessary to demonstrate that projects would not threaten the continued existence of a species. In addition, management endowment fees are usually collected as part of the agreement for the incidental take permit(s). The endowment is used to manage any lands set-aside to protect listed species, and for biological mitigation monitoring of these lands over (typically) a five-year period.

#### 7.3.2 Applicability to The Proposed Project

No state-listed plant or animal species would likely be impacted by the proposed project (Tables 1 and 2 respectively). While unlikely to be impacted by the proposed project, the Swainson's hawk is known to nest 0.5-mile north of the project in a small clump of Eucalyptus trees. If this hawk were to be found nesting on or within a zone of influence of the project site, the project would be required to implement avoidance measures to ensure that it would not be impacted by the project. If the Swainson's hawk nest were close enough to the project site that "take" could occur of eggs or young in the nest, the applicant would be required to obtain an Incidental Take Permit from the CDFW pursuant to Section 2081 of the Fish and Game Code. See Impacts and Mitigation Section below for greater detail.

### 7.4 California Fish and Game Code § 3503, 3503.5, 3511, and 3513

California Fish and Game Code §3503, 3503.5, 3511, and 3513 prohibit the "take, possession, or destruction of birds, their nests or eggs." Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered "take." Such a take would also violate federal law protecting migratory birds (Migratory Bird Treaty Act).

All raptors (that is, hawks, eagles, owls) their nests, eggs, and young are protected under California Fish and Game Code (§3503.5). Additionally, "fully protected" birds, such as the white-tailed kite (*Elanus leucurus*) and golden eagle (*Aquila chrysaetos*), are protected under California Fish and Game Code (§3511). "Fully protected" birds may not be taken or possessed (that is, kept in captivity) at any time.

#### 7.4.1 APPLICABILITY TO THE PROPOSED PROJECT

Although unlikely, raptors known from the area of the project site that could be impacted by the project if they were found nesting on our immediately adjacent to the project site include American kestrel (*Falco sparverius*), white-tailed kite (*Elanus leucurus*), northern harrier, Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), and Swainson's hawk. Preconstruction nesting surveys would have to be conducted for these species to ensure that there is no direct take of these birds including their eggs, or young. Any active nests that were found during preconstruction surveys would have to be avoided by the project. Suitable non-disturbance buffers would have to be established around nest sites until the nesting cycle is complete. ***Impacts to nesting birds including raptors are regarded as potentially significant.*** With implementation of mitigation measures that include establishing nest protection buffers, potential impacts to nesting birds could be mitigated to levels regarded as *less than significant.* More specifics on surveys methods and establishing protective nesting buffers are provided below in the Impacts and Mitigations section.

### 7.5 Napa Valley Business Park Specific Plan

The overall objective of the Napa Valley Business Park Specific Plan and EIR is to guide and facilitate development of the designated 2,945-acre Napa Valley Business Park as the principal unincorporated location for industrial development. The specific plan was initially adopted on July 26, 1986 and amended through October 22, 2013. Under subsection E, Natural and Cultural Resources, of the Land Use Element (Section V), natural resource protection policies have been established in this specific plan to protect 1) planning area native streams from water quality degradation and from alterations/obstructions which might create flood hazards; and 2) to protect planning area riparian areas.

#### 7.5.1 WATERCOURSES

Under Subsection E of the Land Use Element (Section V), the ordinance identifies those streams that are subject to review due to their potential for disturbance to riparian vegetation or obstruction of stream flows. The following specific plan standards, subject to Section V(H) of this specific plan, shall apply to the primary creeks (i.e. Suscol, Sheehy, Fagan and the unnamed primary creek south of the airport).

a) All wetland and stream habitats shall be protected in their natural state, except that encroachment into setback corridors listed below in Subsection (b) may be permitted through the modification procedure set forth in Section V(H) and in the Napa County Code. Approval of any encroachment into stream corridor setbacks shall be based on provision of on-site wetland and/or stream restoration enhancement measures that result in substantial environmental benefits as determined on a case-by-case basis by the decision maker. The extent of encroachment allowed, if any, shall be based on the extent of enhancement exceeding the minimum standards established by this specific Napa County Code.

b) Unobstructed setback corridors shall be maintained in conjunction with the watercourses to facilitate movement of wildlife and to provide visual amenities. No development shall occur in the following setbacks:

1) Suscol Creek: 150 feet from the top of bank;
2) Fagan Creek: 75 feet from the top of bank; and
3) Sheehy Creek and the unnamed primary creek south of the airport: distance set at the discretion of the Napa County Flood Control and Water Conservation Section and the California Department of Fish and Game (now the California Department of Fish and Wildlife) (CDFW).

c) All plans for drainage improvements shall be reviewed by the County and CDFW prior to approval of projects. Plans shall provide specific measures for the alleviation of flooding effects, erosion and sedimentation control, and the correction of onsite ponding.

d) Developers shall be required to submit erosion and sedimentation control plans for implementation prior to construction. The plans shall specify types of erosion control methods, schedule for implementation, and location of sediment control structures. Sediment control plans shall specify that sediment loads shall not increase in excess of 10 percent of background levels.

e) Alterations or improvements to the watercourses shall be designed to maintain or enhance aesthetic qualities of the channel through preservation of existing vegetation and introduction of new landscaping. Where warranted, plantings of native species shall be introduced into the open space corridor to increase cover and enhance wildlife habitat. The CDFW shall be consulted regarding appropriate selection and use of plant materials to ensure successful growth and wildlife adaptation.

f) Grading operations should be restricted to the dry season between April 15$^{th}$ and October 15$^{th}$.

g) Grading shall be performed early enough to stabilize exposed soil surfaces (hydromulching or another suitable method) and revegetated prior to the onset of the rainy season or November 1$^{st}$ of each year, whichever occurs first.

7.5.1.1 Applicability to the Project

There will be minor encroachments into the 75-foot setback from Fagan Creek as required in Section V(E) of the Napa Valley Business Park Specific Plan from impermeable surface (3,923 square feet, 0.09-acre), rock-lining/riprap associated with the construction of bioretention and treatment features and from the installation of two 12-inch stormwater outfalls on the bank of Fagan Creek (4,160 square feet, 0.10-acre). As such, the applicant is requesting a modification to the development standard through procedures outlined Section V(H) of the Specific Plan and in the Napa County Code [Ordinance No. 18.44.210(D)] which allows for variation to the GI development standards.

Specifically, the applicant is asking for a modification to the 75-foot stream setback for Fagan Creek. To mitigate for impacts within the stream setback, an additional 0.42-acre of floodplain on the south side of Fagan Creek that is beyond the required 75-foot setback will be preserved in perpetuity via perpetual conservation deed restriction. This preservation will facilitate the

preservation and expansion via natural recruitment of the Fagan Creek riparian corridor. ***This will provide for creek corridor preservation mitigation that is at a ratio of greater than 2:1 (preservation to impacts over and above the 75-foot setback which would also be preserved area).***

There will be approximately 0.30-acre of temporary disturbance from installation of bioretention, stormdrain pipe and the two outfalls on the banks of Fagan Creek which will subsequently revert to natural habitat. However, these areas of temporary disturbance within the 75-foot setback have been minimized to the extent possible, maintaining a disturbance width no greater on average than 15 feet. Nonetheless, a California native riparian planting plan will also be prepared, in consultation with the CDFW, to ensure there is a net gain of riparian habitat, mitigating for impacts within the 75-foot creek setback at a greater than 2:1 mitigation to impacts ratio. Upon installation of the hydromodification and treatment basins, which will develop wetland habitat, all temporarily disturbed soils within the 75-foot setback will be seeded with a California native seed mix. Through permanent preservation of additional floodplain area south of Fagan creek that is outside of the 75-foot setback, and with the enhancement of the Fagan Creek riparian corridor, implementation of the project will serve to enhance the Fagan Creek riparian corridor preserving a wider setback area than required in Section V(E). Grading operations in the setback will be 1) restricted to the dry season or weather permitting, by requested work window modification granted by the County and appropriate resource agencies, 2) done in such a way as to facilitate the revegetation of disturbed soils prior to the rainy season, and 3) via an implementation of a Stormwater Pollution Prevention Plan (SWPPP) and Stormwater Management Plan (SWMP). Avoided sensitive creek areas and associated riparian habitat will be protected from both construction and post development impacts.

***Impacts within the 75-foot stream setback are significant impacts but would be reduced to levels regarded as less than significant with implementation of mitigation.*** See the Impacts and Mitigation Measures for further details.

#### 7.5.2 Existing Vegetative Stands

Preservation of existing stands of mature native and naturalized vegetation is a primary goal of the plan. Preservation of existing mature trees and shrubs should be a prime consideration in the design of all development plans. This applies particularly to stands of eucalyptus and native oaks that are scattered throughout the planning area. A tree protection ordinance should be formulated and adopted by the County, incorporating the following standards for application to all developments:

a) All existing trees (exclusive of riparian areas unless proposed for development) and sizes should be shown on all site plans. Tree removal should be subject to the approval of the designated County agency, which should specify suitable specimen replacement trees.

b) Development under the drip line of oak trees should be subject to special consideration by the designated agency, as oak trees can be damaged by pavement and water. Landscape plans should incorporate preservation techniques.

c) Any limbs, trunks, or exposed roots damaged during construction should be painted immediately with a good grade of "tree paint". Limbs and roots larger than 3 inches should not be cut without the approval of the designated agency.

d) Surveys for rare or endangered vernal pool plants should be required for projects in the grassland areas. Appropriate mitigation plans should be developed on a project-by-project basis if vernal pools or associated rare and endangered plants are found on the project site.

#### 7.5.2.1 Applicability to the Project

Special-status plant surveys were conducted on the project site in 2018 using all recommended resource agency survey guidelines and *no special-status plant species were found*. Per the stamped jurisdictional map from the Corps, there are no wetlands on the project site within the limits of the delineation or the proposed development envelope (Appendix C and D). The proposed project involves the construction of two 12-inch stormwater outfalls, below top of bank but above the ordinary high water mark of Fagan Creek. Construction of these stormwater outfalls would result in unavoidable impacts to 699 square feet of riparian vegetation on the project site. These impacts include the removal of two arroyo willows and the limbing of the canopy of one black walnut and two red willows as well as the removal of non-native Himalayan blackberry bushes. A California native riparian planting plan will be prepared to ensure no net loss of riparian habitat and bank stabilization. Further, the south side of the property, adjacent to Fagan Creek, will be preserved in perpetuity via deed restriction and will constitute the preservation of an additional 0.42-acre of floodplain beyond the required 75-foot setbacks and will facilitate the potential expansion of the Fagan Creek riparian corridor by natural recruitment. ***Impacts to riparian woodland will be reduced to less than significant with implementation of mitigation.*** See the Impacts and Mitigation Measures for further details.

### 7.5.3 Site Development Standards Implementation Procedures

A property owner may apply for a modification of the following site development standards through the use permit process:

1) required rear and side yard setbacks;
2) landscaping;
3) parking requirements, including use of shared parking, or time of day/traffic management strategies;
4) stream setbacks;
5) provision of sidewalks along public streets;
6) such other site development standards as are set forth in this Specific Plan or in Title 18 of the Napa County Code.

The Planning Commission may modify the above site development standards applicable to a project if the following site-specific findings can be met:

1) The proposed modifications comply with the variation procedure requirements of Title 18 of the Napa County Code (Section 18.40.250 or 18.44.210, as applicable based on subject property zoning);
2) The proposed modifications, considered together with site specific mitigation measures and restoration where necessary, will provide superior overall aesthetic, environmental, and/or economic benefit than the minimum development standards set forth in the Specific Plan; and
3) The proposed modifications are consistent with applicable airport safety regulations.

A modified development standard approved pursuant to this Section H shall prevail over any inconsistent site development standard provided for in this Specific Plan or in Title 18 of the Napa County Code.

#### 7.5.4 APPLICABILITY TO THE PROJECT

There will be minor encroachments into the 75-foot setback from Fagan Creek from impermeable surface (3,923 square feet, 0.09-acre), rock-lining of downslope sides of the bioretention features (4,025 square feet, 0.09-acre) and the rock-slope protection (RSP) for two outfalls on the banks of Fagan Creek (134 square feet). As such, the applicant is requesting a modification to the development standard through procedures outlined Section V(H) and in the Napa County Code [Ordinance No. 18.44.210(D)] which allows for variation to the GI development standards. Specifically, the applicant is asking for a modification to the 75-foot stream setback for Fagan Creek as provided for in the procedures outlined above. To mitigate for impacts within the stream setback, a portion of the south side of the property, adjacent to Fagan Creek, will be preserved in perpetuity via deed restriction and will constitute the preservation of an additional 0.42-acre of floodplain beyond the required 75-foot setback from Fagan Creek. This preservation will facilitate the potential expansion of the Fagan Creek riparian corridor by natural recruitment. ***This will provide for a mitigation to impacts ratio of greater than 2:1 for the effects of the construction of a minimal amount of impermeable surface, two biotreatment/detention features and two 12-inch stormwater outfalls on the banks of Fagan Creek within the 75-foot setback.***

In total, there will be approximately 0.30-acre of temporary disturbance from installation of two bioretention basins, two stormdrain pipes, and two 12-inch stormwater outfalls within the 75-foot Fagan Creek setback. The bioretention features will take on wetland appearances, and the stormwater outfalls are likely to be covered with herbaceous creek vegetation within a year or two after they are constructed and thus retain both the inherent aesthetic and wildlife habitat value/functions of the Fagan Creek corridor and a natural buffer. Impacts within the 75-foot setback from the construction of the two stormwater outfalls have been minimized to the extent possible, maintaining a disturbance width no greater on average than 15 feet. Nonetheless, a California native riparian planting plan will be implemented as part of the project to ensure no net loss of riparian habitat and bank stabilization, mitigating for impacts to riparian habitat at a 2:1 mitigation to impacts ratio. All disturbed soils within the 75-foot setback will be seeded with a California native seed mix ensuring that after the project is constructed that disturbed soils will be stabilized to minimize the potential effects of erosion.

Through preservation of additional floodplain area south of Fagan creek and enhancement of the Fagan Creek riparian corridor, this development plan will result in an aesthetically and environmentally superior development project compared to projects that implement minimum development standards as specified in the Airport Industrial Area Specific Plan (i.e. the Napa Valley Business Park Specific Plan). Also, the proposed development remains consistent with applicable airport safety regulations. ***Impacts within the 75-foot stream setback will be reduced to less than significant with implementation of mitigation.*** See the Impacts and Mitigation Measures for further details.

## 7.6 Napa County Ordinances

### 7.6.1 Floodplain and Riparian Zone Management Ordinance

Napa County's Floodplain and Riparian Zone Management Ordinance No. 16.04.750 places restrictions on activities within riparian zones, as follows:

A. The proposed activity will not, with regard to the riparian zones along a channel, remove more than the following:

   1. A native tree eighteen inches DBH per one hundred linear feet of riparian zone on each side of the floodplain, or

   2. Three native trees twelve inches DBH per one hundred linear feet of riparian zone on each side of the floodplain, or

   3. Six native trees six inches DBH per one hundred linear feet of riparian zone on each side of the floodplain, or

   4. Five hundred square feet of vegetation in riparian zones beyond ten feet from the top of the bank, or

   5. The temporary removal of a portion of riparian vegetation not more than fifteen feet wide beyond ten feet from the top of the bank, where replanting of such strip is a part of the project; and

B. The proposed activity will not involve the locating of any facility or structure within ten feet from the top of the bank; and

C. Will not result in a cut or fill slope that would remain unprotected by slope reseeding and bank stabilization replanting at the end of the project, thereby making the slope susceptible to erosion.

### 7.6.2 Applicability to the Project

The proposed project involves the construction of two outfalls, below top of bank but above the ordinary high water mark, that will discharge treated stormwater into Fagan Creek, and will incur unavoidable impacts to 699 square feet of riparian vegetation on the project site. These impacts include the removal of two arroyo willows and the limbing of the canopy of 1 black walnut and two red willows as well as the removal of non-native Himalayan blackberry bushes. To compensate for these impacts, the south side of the property, adjacent to Fagan Creek, will be preserved in perpetuity via a conservation deed restriction that will result in the preservation of an additional 0.420-acre of floodplain beyond the required 75-foot setback from Fagan Creek. This preservation will facilitate the likely expansion of the Fagan Creek riparian corridor by natural recruitment. Further, a California native riparian planting plan will be prepared and implemented on the north side of Fagan Creek to ensure no net loss of riparian habitat and to promote bank stabilization. ***Impacts to riparian vegetation are regarded as significant. These***

***impacts to riparian vegetation will be reduced to less than significant with implementation of mitigation.*** See the Impacts and Mitigation Measures for further details.

#### 7.6.3 WATERCOURSE PROTECTION

Any use within the General Industrial (GI) District shall be conducted in compliance with the watercourse protection standards set forth in the Napa County Floodplain Management Ordinance (commencing at Section 16.040.010) or the standards set forth in any specific plan applicable to the lot or lots on which the use is conducted, whichever is more restrictive.

#### 7.6.4 APPLICABILITY TO THE PROJECT

The more restrictive standard for watercourses is outlined in Section V.E.2 of the Napa Valley Business Park Specific Plan and as such, this standard will supersede all other Napa County ordinances. The applicant is requesting a modification to the development standard through Ordinance No. 18.44.210 which allows for variation to the GI development standards as the project site is zoned as GI. As part of this modification request, the proposed project will compensate for impacts to the banks of Fagan Creek by preserving the south side of the property, south of Fagan Creek, in perpetuity via deed restriction as a floodplain preserve as well as implementing a California native riparian planting plan on the north side of Fagan Creek to enhance the riparian corridor. ***Impacts to the riparian corridor are regarded as significant but would be reduced to levels regarded as less than significant with mitigation.*** Please refer to the Impacts and Mitigation Measures below for further details.

#### 7.6.5 SETBACKS AND YARDS

A. Unless a larger setback is required by subsection (B) of this section or by whatever edition of the Uniform Building Code the county has most recently adopted, the minimum yard setbacks are as follows:

    1) Front yard setbacks, which shall apply to any property line which is adjacent to a street, are as follows:
        a) State Route 29: 55-foot on average with a 45-foot minimum. A landscaped setback shall be provided meeting the standards set forth in Section 18.44.110.
        b) All other streets: twenty-foot minimum
    2) Side yard setbacks: none (with the exception of exterior lots where front yard standards shall apply to all street frontages);
    3) Rear yard setbacks: none

#### 7.6.6 VARIATION TO GENERAL INDUSTRIAL (GI) DEVELOPMENT STANDARDS

A. The County planning commission may authorize modifications to standards included within this chapter as part of a use permit, under the conditions provided for in this section (Ordinance No. 18.44.210).

1) The intent of this section is to encourage innovative design and siting of a variety of land uses in an environmentally sensitive manner on a single parcel or parcels involving single or multiple ownership. To encourage such design, it is necessary to be flexible in the

application of certain development standards so long as the intent of the district and any applicable general or specific plan is maintained.

3) Development Standards. The planning commission may allow, as part of approval of a use permit, deviations from the development standards contained in this chapter in the following areas:
   a) Setbacks;
   b) Minimum lot dimensions;
   c) Lot frontage
   d) Landscape requirements;
   e) Coverage and those area requirements on individual parcels within the development, so long as these standards are met in relation to the total acreage of the project submitted under the section;
   f) Parking;
   g) Sign area.

C) Findings Required. In addition to findings required pursuant to Section 18.124.070, the commission shall make the following additional findings:

a) The development plan results in a project that is superior in terms of design and environmental impacts when compared to a project processed under the development standards specified by this chapter.
b) The development plan results in a cohesive design and treatment of the site, including architecture, landscaping, signage and lighting.
c) The orientation and location of buildings structures, open space and other features on the site plan protect and enhance the existing natural resources or site features including significant existing vegetation and maintain and enhance existing views from and through the site.
d) The overall project is consistent with the intent, purpose and applicable standards of the Napa County Airport industrial area specific plan (Napa Valley Business Park Specific Plan).
e) The site plan minimizes the effect of traffic on abutting streets through careful layout of the site with respect to location, dimensions of vehicular and pedestrian entrances, exit drives and walkways; through the adequate provision of off-street parking and loading facilities; through an adequate circulation patter within the boundaries of the development; and through the surfacing and lighting of off-street parking.
f) The site plan shall encourage alternatives to travel by automobile where appropriate, through provision of facilities for pedestrians and bicyclists including covered parking for bicycles and motorcycles where appropriate. Public transit stops and facilities shall be accommodated as appropriate and other incentive provisions considered which encourage automotive travel.
g) The site shall provide open space and landscaping which complement buildings and structures. Said open space shall be provided in a manner so as to be useful to residents employees, or other visitors to the site. Landscaping shall be used to separate and/or screen service and storage areas, separate and/or screen parking areas from other areas, break up expanses of paved area, and define open space for usability and privacy.
h) Signs, lighting fixtures, landscape improvements and similar common area features shall compliment the site plan and avoiding dominating the site and/or existing buildings on

the site or overwhelming the building or structures to which they are attached. Multiple signs on a given site shall be of a consistent design theme.

i) Provisions have been made for permanent use and maintenance of parking areas and other common area fixtures used jointly by owners of the parcels included with the development plan.

#### 7.6.7 APPLICABILITY TO THE PROJECT

There will be minor encroachments into the 75-foot setback from Fagan Creek's top-of-bank (TOB) from the construction of impermeable surface (3,923 square feet, 0.09-acre) consisting of rock-lining of downslope sides of the bioretention features (4,025 square feet, 0.09-acre) and the rock-slope protection (RSP) installed in association with the construction of two 12-inch stormwater outfalls on the banks of Fagan Creek (134 square feet). As such, the applicant is requesting a modification to the development standard through procedures outlined Section V(H) and in the Napa County Code [Ordinance No. 18.44.210(D)] which allows for variation to the GI development standards.

Specifically, the applicant is asking for a modification to the 75-foot stream setback for Fagan Creek per the Napa Valley Basin Specific Plan as provided for in the procedures outlined above. To mitigate for impacts within the stream setback, a portion of the south side of the property, adjacent to Fagan Creek, will be preserved in perpetuity via perpetual conservation deed restriction and will constitute the preservation of an additional 0.42-acre of floodplain/riparian habitat beyond the required 75-foot setback from Fagan Creek. This setback will facilitate the potential expansion of the Fagan Creek riparian corridor by natural recruitment. ***This will provide for a mitigation to impacts ratio of greater than 2:1 (preservation to impacts in the 75-foot setback).*** While there will be approximately 12, 249 square feet (0.28-acre) of impacts from installation of bioretention, these planted areas will retain both the inherent aesthetic and wildlife habitat value/functions of the Fagan Creek corridor. There will be approximately 0.30-acre of temporary disturbance from installation of bioretention, stormdrain pipe ***and*** the two outfalls on the banks of Fagan Creek which will subsequently revert to natural habitat.

The areas of temporary disturbance within the 75-foot setback from the top-of-bank of Fagan Creek required to construct the two stormwater outfalls will be minimized to the extent possible, maintaining a disturbance width no greater on average than 15 feet within the riparian dripline. A California native riparian planting plan would also be implemented to ensure no net loss of riparian habitat or bank stabilization, mitigating for encroachment impacts into the 75-foot buffer and into riparian habitat at a greater than 2:1 mitigation to impacts ratio. In addition, the project includes implementation of a SWPPP that requires that all disturbed soils within the 75-foot setback will be seeded with a California native seed mix. Through preservation of additional floodplain area south of Fagan creek and enhancement of the Fagan Creek riparian corridor, this development plan will result in an aesthetically and environmentally superior development than the minimum development standards required by the Airport Industrial Area Specific Plan (i.e. the Napa Valley Basin Specific Plan). The project otherwise remains consistent with applicable airport safety regulations. ***Impacts within the 75-foot Fagan Creek setback and to minor areas of riparian vegetation are significant impacts that will be reduced to levels regarded as less than significant with implementation of mitigation.*** See the Impacts and Mitigation Measures for further details.

## 7.7 Napa County General Plan

The Napa County General Plan was adopted in 2008. The Conservation Element of this Plan provides goals, policies, and action items related to open space conservation as well as a wide range of other topics that together comprise the natural environment of Napa County, including its natural resources and its water resources. The pertinent goals and policies and their applicability to the project are itemized below.

### 7.7.1 Policy CON-11

The County shall maintain and improve fisheries habitat through a variety of appropriate measures, including the following as well as best management practices developed over time:

e) Manage the removal of invasive vegetation and the retention of other riparian vegetation to reduce the potential for increased water temperatures and siltation and to improve fishery habitat.

### 7.7.2 Applicability to the Project

Removal of minor amounts of riparian vegetation along Fagan Creek is minimized to the extent possible. The proposed project will compensate for impacts to riparian vegetation on the bank of Fagan Creek by preserving the south side of the property, south of Fagan Creek and outside its 75-foot setback, in perpetuity via recordation of a perpetual conservation deed restriction. This will permanently preserve a 0.42-acre of floodplain outside of the 75-foot required stream setbacks. In addition, the project will implement a California native riparian planting plan on the north side of Fagan Creek to enhance the riparian corridor for the benefit biological resources. Impacts to the 75-foot setback and minor impacts to riparian vegetation as necessary to construct two 12-inch stormwater outfalls are significant impacts that are reduced to levels regarded as less than significant with implementation of mitigation measures. Please refer to the Impacts and Mitigation Measures below for further details.

h) Encourage the use of effective vegetated buffers between urban runoff and local storm drains.

### 7.7.3 Applicability to the Project

In accordance with the Regional Water Quality Control Board's National Pollutant Discharge Elimination System (NPDES) Program, a Stormwater Pollution Prevention Plan (SWPPP) will be developed prior to the time that a site is graded (see NPDES section below) to otherwise protect Fagan Creek during construction of the project. In addition, a post construction Stormwater Management Plan (SWMP) will be developed and incorporated into the site development plan that protects downstream receiving waters after the project is constructed.

Finally, the proposed project will compensate for impacts to riparian vegetation at on the bank of Fagan Creek by preserving the south side of the property, south of Fagan Creek and outside its 75-foot setback, in perpetuity via recordation of a perpetual conservation deed restriction. This will permanently preserve a 0.42-acre of floodplain outside of the 75-foot required stream setbacks. In addition, the project will implement a California native riparian planting plan on the north side of Fagan Creek to enhance the riparian corridor for the benefit biological resources.

n) Implement road construction and maintenance practices to minimize bank failure and sediment delivery to streams.

#### 7.7.4 APPLICABILITY TO THE PROJECT

The proposed project will use state of the art engineering to construct the two 12-inch stormwater outfalls above the ordinary high water mark of Fagan Creek that is designed to minimize bank failure and sediment delivery to Fagan Creek.

#### 7.7.5 POLICY CON-13

The County shall require that all discretionary residential, commercial, industrial, recreational, agricultural, and water development projects consider and address impacts to wildlife habitat and avoid impacts to fisheries and habitat supporting special-status species to the extent feasible. Where impacts to wildlife and special-status species cannot be avoided, projects shall include effective mitigation measures and management plans including provisions to:

c) Employ supplemental planting and maintenance of grasses, shrubs and trees of like quality and quantity to provide adequate vegetation cover to enhance water quality, minimize sedimentation and soil transport, and provide adequate shelter and food for wildlife and special-status species and maintain the watersheds, especially stream side areas, in good condition.

#### 7.7.6 APPLICABILITY TO THE PROJECT

The proposed project will compensate for impacts to the banks of Fagan Creek by preserving the south side of the property, south of Fagan Creek in perpetuity via deed restriction as a 0.42-acre floodplain preserve over and above required stream setbacks. In addition, the project will implement a California native riparian planting plan on the north side of Fagan Creek to enhance the riparian corridor and that will benefit biological resources. All temporarily disturbed soils within the stream setback will be seeded with a California native seed mix. ***While impacts within the 75-foot top-of-bank setback and minor impacts to riparian vegetation from the construction of two 12-inch stormwater outfalls are regarded as significant, these effects can be reduced to levels regarded as less than significant pursuant to the CEQA with mitigation.*** Please refer to the Impacts and Mitigation Measures below for further details.

d) Provide protection for habitat supporting special-status species through buffering or other means.

#### 7.7.7 APPLICABILITY TO THE PROJECT

No known special-status species occur on the project site. However, the project site has the potential to provide migratory habitat to the western pond turtle, a state designated species of special concern the, and it provides nesting habitat for birds including raptors. Active nests are protected pursuant to California Fish and Game Codes §§3503 and 3503.5 and the Migratory Bird Treaty Act. Preservation of the south side of the property, adjacent to Fagan Creek, in perpetuity via deed restriction will provide for the preservation of 0.42-acre additional floodplain and facilitate the potential expansion of the Fagan Creek riparian corridor by natural recruitment. Further, a California native riparian planting plan will be implemented on the north side of Fagan Creek to ensure no net loss of riparian habitat, thus providing both enhancement and long-term protection of the riparian habitat along Fagan Creek on the project site. ***While impacts within the 75-foot top-of-bank setback and minor impacts to riparian vegetation from the construction of two 12-inch stormwater outfalls are regarded as significant, these effects can be reduced to levels regarded as less than significant pursuant to the CEQA with mitigation.*** Please refer to the Impacts and Mitigation Measures below for further details.

e) Provide replacement habitat of like quantity and quality on- or off-site for special-status species to mitigate impacts to special-status species.

#### 7.7.8 APPLICABILITY TO THE PROJECT

No known special-status species occur on the project site. Protocol surveys for California red-legged frog surveys were conducted by M&A in 2012 along Fagan Creek with negative results. Fagan Creek is frequented by river otter which are effective predators of all frogs. Further, the project site was found to be unsuitable for this species and other frog species owing to inhospitable site conditions of the creek itself (i.e. 100% shaded) and from adjacent industrial businesses that generate excessive noise and lighting at all hours among other reasons. Additionally, Highway 29 represents a major geographic barrier to overland dispersal between known California red-legged frog records that are more than a mile away and in different watersheds than the project site. Based on this information, it is M&A's conclusion that California red-legged frogs are not present on or adjacent to the project site.

However, the project site has the potential to support migratory habitat of the western pond turtle, a state-designated species of special concern, and nesting Swainson's hawks, a state-listed species, as well as raptors and birds that are protected pursuant to California Fish and Game Codes §§3503 and 3503.5 and the Migratory Bird Treaty Act. The Impacts and Mitigation Measures below fully address impacts to special-status species should they be found to occur on the project site, as well as appropriate mitigation for these impacts. ***Impacts to special-status species and/or to nesting birds would be regarded as significant pursuant to the CEQA but could be reduced to levels regarded as less than significant with implementation of mitigation.***

f) Enhance existing habitat values, particularly for special-status species, through restoration and replanting of native plant species as part of discretionary permit review and approval.

#### 7.7.9 APPLICABILITY TO THE PROJECT

Preservation of the south side of the property, adjacent to Fagan Creek, via a perpetual conservation deed restriction will provide for the preservation of additional floodplain that otherwise will facilitate the potential expansion of the Fagan Creek riparian corridor by natural recruitment. Further, a California native riparian planting plan will be implemented on the north side of Fagan Creek to ensure no net loss of riparian vegetation, thus enhancing the riparian habitat on the project site. Please refer to the Impacts and Mitigation Measures below for further details.

g) Require temporary or permanent buffers of adequate size (based on the requirements of the subject special-status species) to avoid nest abandonment by birds and raptors associated with construction and site development activities.

#### 7.7.10 APPLICABILITY TO THE PROJECT

If nesting birds and raptors are identified during preconstruction surveys for the proposed project, temporary buffers would be imposed to avoid take of eggs or young in the nest. ***Impacts to nesting birds would be regarded as potentially significant. These impacts would be regarded as less than significant with mitigation.*** See the Impacts and Mitigation Measures below for further detail on nesting buffers.

h) Demonstrate compliance with applicable provisions and regulations of recovery plans for federally listed species.

#### 7.7.11 APPLICABILITY TO THE PROJECT

No species that are protected pursuant to the FESA are known or expected to occur on the project site.

#### 7.7.12 POLICY CON-14

To offset possible losses of fishery and riparian habitat due to discretionary development projects, developers shall be responsible for mitigation when avoidance of impacts is determined to be infeasible. Such mitigation measures may include providing and permanently maintaining similar quality and quantity habitat within Napa County, enhancing existing riparian habitat, or

paying in-kind funds to an approved fishery and riparian habitat improvement and acquisition fund. Replacement habitat may occur either on-site or at approved off-site locations, but preference shall be given to on-site replacement.

#### 7.7.13 APPLICABILITY TO THE PROJECT

The proposed project would result in the temporary loss of riparian habitat. No impacts to fishery habitat are anticipated from the construction two outfalls that discharge treated water into Fagan Creek as both outfalls will remain above the ordinary high water mark and thus, out of all aquatic habitat. However, there will be unavoidable impacts to riparian vegetation from the proposed outfalls. These minor impacts include the removal of two arroyo willows and the limbing of the canopy of one black walnut and two red willows as well as the removal of non-native Himalayan blackberry bushes. As such, preservation of the south side of the property, adjacent to Fagan Creek, via deed restriction will provide for the preservation of additional floodplain in perpetuity and facilitate the potential expansion of the Fagan Creek riparian corridor by natural recruitment. Further, a California native riparian planting plan will be implemented on the north side of Fagan Creek to ensure no net loss of riparian vegetation on the project site. ***While impacts within the 75-foot top-of-bank setback and minor impacts to riparian vegetation from the construction of two 12-inch stormwater outfalls are regarded as significant, these effects can be reduced to levels regarded as less than significant pursuant to the CEQA with mitigation.***

#### 7.7.14 POLICY CON-16

The County shall require a biological resources evaluation for discretionary projects in areas identified to contain or potentially contain special-status species based upon data provided in the Baseline Data Report (BDR), California Natural Diversity Database (CNDDB), or other technical materials. This evaluation shall be conducted prior to the approval of any earthmoving activities. The County shall also encourage the development of programs to protect special-status species and disseminate updated information to state and federal resource agencies.

#### 7.7.15 APPLICABILITY TO THE PROJECT

The document addresses the project's effects on special-status species based upon data provided in Napa County's Baseline Data Report (BDR), California Natural Diversity Database (CNDDB), and other technical materials as identified herein. ***No impacts to special-status species are expected to occur from implementation of the proposed project.***

#### 7.7.16 POLICY CON-17

Preserve and protect native grasslands, serpentine grasslands, mixed serpentine chaparral, and other sensitive biotic communities and habitats of limited distribution. The County, in its discretion, shall require mitigation that results in the following standards:

a) Prevent removal or disturbance of sensitive natural plant communities that contain special-status plant species or provide critical habitat to special-status animal species.

#### 7.7.17 APPLICABILITY TO THE PROJECT

No special-status plant species were found on the project site during appropriately-timed surveys conducted by M&A in 2018. *As such, there would be no impacts to special-status plants from the proposed project.* Potential impacts to special-status species are addressed in the Impacts and Mitigation Section of this report. The project site does not fall within critical habitat boundaries for special-status animal species. ***No impacts to special-status species are expected to occur from implementation of the proposed project.***

b) In other areas, avoid disturbances to or removal of sensitive natural plant communities and mitigate potentially significant impacts where avoidance is infeasible.

#### 7.7.18 APPLICABILITY TO THE PROJECT

Removal of riparian habitat for construction of the two outfalls shall be minimized to the extent possible. Nonetheless, the south side of the property, adjacent to Fagan Creek, will be preserved in perpetuity via deed restriction and will constitute the preservation of additional floodplain and facilitate the potential expansion of the Fagan Creek riparian corridor by natural recruitment. Further, a California native riparian planting plan will be prepared to ensure no net loss of riparian habitat.

***While impacts within the 75-foot top-of-bank setback and minor impacts to riparian vegetation from the construction of two 12-inch stormwater outfalls are regarded as significant, these effects can be reduced to levels regarded as less than significant pursuant to the CEQA with mitigation.*** See the Impacts and Mitigation Measures for further detail.

e) Require no net loss of sensitive biotic communities and habitats of limited distribution through avoidance, restoration, or replacement where feasible. Where avoidance, restoration, or replacement is not feasible, preserve like habitat at a 2:1 ratio or greater within Napa County to avoid significant cumulative loss of valuable habitats.

#### 7.7.19 APPLICABILITY TO THE PROJECT

Removal of riparian habitat for construction of the two outfalls shall be minimized to the extent possible. Nonetheless, the south side of the property, adjacent to Fagan Creek, will be preserved in perpetuity via deed restriction and will constitute the preservation of additional floodplain and facilitate the potential expansion of the Fagan Creek riparian corridor by natural recruitment. Further, a California native riparian planting plan will be implemented on the north side of Fagan Creek to ensure no net loss of riparian habitat. ***While impacts within the 75-foot top-of-bank setback and minor impacts to riparian vegetation from the construction of two 12-inch stormwater outfalls are regarded as significant, these effects can be reduced to levels regarded as less than significant pursuant to the CEQA with mitigation.*** See the Impacts and Mitigation Measures for further detail.

#### 7.7.20 POLICY CON-19

The County shall encourage the preservation of critical habitat areas and habitat connectivity through the use of conservation easements or other methods as well as through continued

implementation of the Napa County Conservation Regulations associated with vegetation retention and setbacks from waterways.

#### 7.7.20.1 Applicability to the Project

The Fagan Creek riparian corridor is protected by the Napa County Floodplain and Riparian Zone Management Ordinance No. 16.04.750 and Section V.E.2 of the Napa Valley Business Park Specific Plan for watercourses. The applicant is requesting a modification to the development standard through Ordinance No. 18.44.210 which allows for variation to the General Industrial (GI) development standards but will otherwise comply with all setback requirements for this creek.

### 7.7.21 POLICY CON-26

Consistent with Napa County's Conservation Regulations, natural vegetation retention areas along perennial and intermittent streams shall vary in width with steepness of the terrain, the nature of the undercover, and type of soil. The design and management of natural vegetation areas shall consider habitat and water quality needs, including the needs of native fish and special status species and flood protection where appropriate. Site-specific setbacks shall be established in coordination with Regional Water Quality Control Boards, California Department of Fish and Game, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration National Marine Fisheries Service, and other coordinating resource agencies that identify essential stream and stream reaches necessary for the health of populations of native fisheries and other sensitive aquatic organisms within the County's watersheds. Where avoidance of impacts to riparian habitat is infeasible along stream reaches, appropriate measures will be undertaken to ensure that protection, restoration, and enhancement activities will occur within these identified stream reaches that support or could support native fisheries and other sensitive aquatic organisms to ensure a no net loss of aquatic habitat functions and values within the county's watersheds.

### 7.7.22 APPLICABILITY TO THE PROJECT

The applicant will ensure that the proposed project complies with all setback requirements provided by the above-mentioned regulatory agencies. Removal of riparian habitat will be minimized to the extent possible. Nonetheless, preservation of the south side of the property, adjacent to Fagan Creek, via deed restriction will provide for the preservation of additional floodplain in perpetuity and facilitate the potential expansion of the Fagan Creek riparian corridor by natural recruitment. Further, a California native riparian planting plan will be implemented on the north side of Fagan Creek to ensure no net loss of riparian vegetation on the project site. ***While impacts within the 75-foot top-of-bank setback and minor impacts to riparian vegetation from the construction of two 12-inch stormwater outfalls are regarded as significant, these effects can be reduced to levels regarded as less than significant pursuant to the CEQA with mitigation.*** Please refer to the Impacts and Mitigation Measures below for further details.

### 7.7.23 POLICY CON-27

The County shall enforce compliance and continued implementation of the intermittent and perennial stream setback requirements set forth in existing stream setback regulations, provide

education and information regarding the importance of stream setbacks and the active management and enhancement/restoration of native vegetation within setbacks, and develop incentives to encourage greater stream setbacks where appropriate. Incentives shall include streamlined permitting for certain vineyard proposals on slopes between 5 and 30 percent and flexibility regarding yard and road setbacks for other proposals.

#### 7.7.23.1 Applicability to the Project

The more restrictive standard for watercourses is outlined in Section V.E.2 of the Napa Valley Business Park Specific Plan which requires a 75-foot setback from Fagan Creek and as such, this standard will supersede all other Napa County ordinances. The applicant is requesting a modification to the development standard through Ordinance No. 18.44.210 of Napa County Code and Section V(H) of the Napa Valley Business Park Specific Plan which both allow for variation to the GI development standards as the project site is zoned as GI. Since there will be minor encroachments into the 75-foot setback from Fagan Creek from impermeable, rock-lining/riprap associated with bioretention features and the two outfalls on the banks of Fagan Creek, the applicant is asking for a reduction to the 75-foot stream setback from Fagan Creek in a few targeted locations due to the narrowness of the buildable area parcel which is further compounded by Fagan Creek bisecting said parcel. That said, there will only be 699 square feet of impacts to riparian vegetation as the remainder of the 75-foot buffer is comprised of ruderal vegetation/grassland. The BDR classifies the type of riparian habitat that will be impacted by the proposed project as "mixed willow riparian woodland." More specifically, two proposed 12-inch stormwater outfalls encroach upon a mixed stand of arroyo and red willow and a stand of black walnut (a common associate within the mixed willow riparian woodland). Only a few trees would be impacted by the proposed project. Specifically, two arroyo willows will be removed and the canopies of one black walnut and two red willows will be limbed up as well as removing non-native Himalayan blackberry bushes.

As part of the modification, to mitigate for impacts within the stream setback, a portion of the south side of the property, adjacent to Fagan Creek, will be preserved in perpetuity via deed restriction and will constitute the preservation of an additional 0.42-acre of floodplain beyond the required setbacks and facilitate the potential expansion of the Fagan Creek riparian corridor by natural recruitment. Further, a California native riparian planting plan will be implemented on the north side of Fagan Creek to ensure no net loss of riparian habitat and bank stabilization, mitigating for impacts to riparian habitat at a 2:1 mitigation to impacts ratio. All disturbed soils within the 75-foot setback will be seeded with a California native seed mix. ***While impacts within the 75-foot top-of-bank setback and minor impacts to riparian vegetation from the construction of two 12-inch stormwater outfalls are regarded as significant, these effects can be reduced to levels regarded as less than significant pursuant to the CEQA with mitigation.*** See the Impacts and Mitigation Measures for further detail.

### 7.7.24 POLICY CON-28

To offset possible additional losses of riparian woodland due to discretionary development projects and conversions, developers shall provide and maintain similar quality and quantity of replacement habitat or in-kind funds to an approved riparian woodland habitat improvement and

acquisition fund in Napa County. While on-site replacement is preferred where feasible, replacement habitat may be either on-site or off-site as approved by the County.

#### 7.7.25 APPLICABILITY TO THE PROJECT

On-site preservation and replacement of riparian habitat shall be implemented via a California native riparian planting plan north of Fagan Creek that will mitigate for impacts to riparian vegetation at a 2:1 mitigation to impacts ratio and preservation of the southern portion of the project site adjacent to Fagan Creek as a 0.42-acre floodplain preserve to facilitate riparian corridor expansion. ***While impacts within the 75-foot top-of-bank setback and minor impacts to riparian vegetation from the construction of two 12-inch stormwater outfalls are regarded as significant, these effects can be reduced to levels regarded as less than significant pursuant to the CEQA with mitigation.*** Please refer to the Impacts and Mitigation Measures below for further details.

#### 7.7.26 POLICY CON-30

All public and private projects shall avoid impacts to wetlands to the extent feasible. If avoidance is not feasible, projects shall mitigate impacts to wetlands consistent with state and federal policies providing for no net loss of wetland function.

#### 7.7.27 APPLICABILITY TO THE PROJECT

There will no impacts to Corps or RWQCB Clean Water Act regulated jurisdictional areas from the proposed project. Nonetheless, the south side of the property, adjacent to Fagan Creek, will be preserved in perpetuity via deed restriction and will constitute the preservation of additional floodplain beyond the required 75-foot top-of-bank stream setbacks and will include the preservation of a seasonal wetland (i.e. mapped by M&A but outside the limits of the stamped Corps map).

#### 7.7.28 POLICY CON-48

Proposed developments shall implement project-specific sediment and erosion control measures (e.g., erosion control plans and/or stormwater pollution prevention plans) that maintain pre-development sediment erosion conditions or at minimum comply with state water quality pollution control (i.e., Basin Plan) requirements and are protective of the County's sensitive domestic supply watersheds. Technical reports and/or erosion control plans that recommend site-specific erosion control measures shall meet the requirements of the County Code and provide detailed information regarding site specific geologic, soil, and hydrologic conditions and how the proposed measure will function.

#### 7.7.29 APPLICABILITY TO THE PROJECT

As discussed in sections below, the proposed project will comply with all NPDES requirements, including the preparation of a *Stormwater Pollution Prevention Plan* (SWPPP) and a Stormwater Management Plan (SWMP).

#### 7.7.30 POLICY CON-50

The County will take appropriate steps to protect surface water quality and quantity, including the following:

a) Preserve riparian areas through adequate buffering and pursue retention, maintenance, and enhancement of existing native vegetation along all intermittent and perennial streams through existing stream setbacks in the County's Conservation Regulations (also see Policy CON-27 which retains existing stream setback requirements).

e) In conformance with National Pollution Discharge Elimination System (NPDES) requirements, prohibit grading and excavation unless it can be demonstrated that such activities will not result in significant soil erosion, silting of lower slopes or waterways, slide damage, flooding problems, or damage to wildlife and fishery habitats.

g) Address potential soil erosion by maintaining sections of the County Code that require all construction-related activities to have protective measures in place or installed by the grading deadlines established in the Conservation Regulations. In addition, the County shall ensure enforceable fines are levied upon code violators and shall require violators to perform all necessary remediation activities.

h) Require replanting and/or restoration of riparian vegetation to the extent feasible as part of any discretionary permit or erosion control plan approved by the County, understanding that replanting or restoration that enhances the potential for Pierce's Disease or other vectors is considered infeasible.

#### 7.7.31 APPLICABILITY TO THE PROJECT

a) The south side of the property, adjacent to Fagan Creek, will be preserved in perpetuity via deed restriction and will constitute the preservation of additional floodplain beyond the required 75-foot top-of-bank setbacks that will facilitate the potential expansion of the Fagan Creek riparian corridor by natural recruitment. Further, riparian protection and enhancement mitigation plan will be implemented north of Fagan Creek as compensation for impacts to riparian vegetation and to otherwise enhance the riparian corridor.
e) The proposed project will remain in compliance with the NPDES.
g) The County shall ensure the implementation of a Stormwater Pollution Prevention Plan during construction of the proposed project that will provide water quality protection to downstream receiving waters.
h) A riparian enhancement mitigation plan will be implemented as part of the proposed project to compensate for impacts to riparian vegetation from the bridge construction project.

### 7.8 Napa County Baseline Data Report

The Watershed Information Center and Conservancy (WICC) of Napa County guides and supports the community in its efforts to maintain and improve the health of Napa County's watershed lands. In part, the WICC maintains or makes available the Baseline Data Report (BDR). The BDR serves as a planning document available for use by Napa County and the public. M&A reviewed the Biological Resource Section of the BDR for applicability to the proposed project.

### 7.8.1 APPLICABILITY TO THE PROJECT

The BDR identifies "Critical Biological Areas." The project site is not within any designated Critical Biological Area. In addition, the BDR identifies six communities of limited distribution on a countywide scale: redwood forest, wet meadows, mudflats, Brewer willow scrub, ponderosa pine forest, and tanbark oak forest. Of these six communities, redwood forest is also recognized by CDFW as potentially sensitive. None of these communities will be affected by the proposed project.

The BDR states that there are eighty-one special-status plant species occur or potentially occur in Napa County. Their distributions and habitat associations are summarized in the biological resources chapter of the BDR. Sixty special-status terrestrial wild life species and 9 special-status fish species occur or potentially occur in the County. Associations of these species with particular biotic communities are discussed in the BDR and highlight the importance of a few plant communities that occur in Napa County. A detailed analysis of streams and the riparian corridors is also provided, including a discussion of which stream channels are supportive of sensitive fish species. In this biological report prepared for the proposed Safe Harbor 3.0 project potential impacts to special-status plants and animals are fully discussed. Special-status species listed in the BDR that potentially occur in the greater vicinity of the project site are presented in Tables 3 and 4. These lists were derived from the CDFW's CNDDB and CNPS' lists of sensitive plants in a similar manner to how special-status species are designated in the BDR. While there are potential impacts to special-status plants animals from implementation of the proposed project that are regarded as potentially significant pursuant to the CEQA, such impacts and prescribed mitigations are presented in the Impacts and Mitigations sections of this report. Mitigation measures when implemented will ensure that the project does not impact special-status species.

The proposed project will impact riparian woodland. The BDR classifies the type of riparian habitat that will be impacted by the proposed project as "mixed willow riparian woodland." More particularly, the outfall locations encroach into a stand of arroyo and red willow as well as a small stand of black walnut (a common associate within the mixed willow riparian woodland). Only a few trees would be impacted by the proposed project. Specifically, two arroyo willows will be removed and the canopies of one black walnut and two red willows will be limbed up as well as removing non-native Himalayan blackberry bushes. A full riparian mitigation plan will be implemented to compensate for impacts at 2:1 mitigation to impacts ratio. ***While impacts within the 75-foot top-of-bank setback and minor impacts to riparian vegetation from the construction of two 12-inch stormwater outfalls are regarded as significant, these effects can be reduced to levels regarded as less than significant pursuant to the CEQA with mitigation.***

Four wetland communities are listed as sensitive by the CDFW and are discussed in the BDR. These include Coastal and Valley freshwater marsh, coastal brackish marsh, northern coastal salt marsh, and vernal pool. The proposed project will not impact any wetland area, sensitive or otherwise.

The BDR discusses 23 Sensitive Biotic Communities that are recognized by the CDFW and are included in the CNDDB. Mixed willow riparian forest is one of the 23 communities and would be affected by the proposed project. In this document, impacts to riparian woodland (i.e., mixed

willow riparian forest) are regarded as significant pursuant to the CEQA. ***While impacts within the 75-foot top-of-bank setback and minor impacts to riparian vegetation from the construction of two 12-inch stormwater outfalls are regarded as significant, these effects can be reduced to levels regarded as less than significant pursuant to the CEQA with mitigation.***

Wildlife Movement Areas are discussed in the BDR. Three major, regional north-south wildlife movement routes have been identified in Napa County: the Western Mountains, the Napa River, and the Blue Ridge-Berryessa Natural Area. Constraints to east-west movement and the importance of riparian corridors are discussed in the BDR, as is the potential for zoning buildout to constrain wildlife movement in particular parts of the County. The proposed project will not affect the three major, regional north-south wildlife movement routes identified in Napa County in the BDR. The project site provides no known significant or regional movement corridor for fish species, or other terrestrial wildlife. It is noteworthy that the project site occurs in a highly developed area that is disjointed from any movement corridor of significance in Napa County. While the riparian habitat associated with Fagen creek can act as a movement corridor for migrating birds, the BDR states that "movement of birds and bats is only loosely tied to habitat corridors because of their ability to fly." ***Accordingly, the proposed project is not expected to have significant adverse impacts on any wildlife movement corridor***. See section above on Wildlife Corridors for greater detail).

## 8. REGULATORY REQUIREMENTS PERTAINING TO WATERS OF THE UNITED STATES AND STATE

This section presents an overview of the criteria used by the Corps, the RWQCB, the State Water Resources Control Board, and CDFW to determine those areas within a project area that would be subject to their regulation.

### 8.1 U.S. Army Corps of Engineers Jurisdiction and General Permitting

#### 8.1.1 SECTION 404 OF THE CLEAN WATER ACT

Congress enacted the Clean Water Act "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (33 U.S.C. §1251(a)). Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the Corps regulates the disposal of dredged or fill material into "waters of the United States" (33 CFR Parts 328 through 330). This requires project applicants to obtain authorization from the Corps prior to discharging dredged or fill materials into any water of the United States.

In the Federal Register "waters of the United States" are defined as, "...all interstate waters including interstate wetlands...intrastate lakes, rivers, streams (including intermittent streams), wetlands, [and] natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce..." (33 CFR Section 328.3).

Limits of Corps' jurisdiction:

(a) Territorial Seas. The limit of jurisdiction in the territorial seas is measured from the baseline in a seaward direction a distance of three nautical miles. (See 33 CFR 329.12)

(b) Tidal Waters of the United States. The landward limits of jurisdiction in tidal waters:

(1) Extends to the mean high tide line, or
(2) When adjacent non-tidal waters of the United States are present, the jurisdiction extends to the limits identified in paragraph (c) of this section.

(c) Non-Tidal Waters of the United States. The limits of jurisdiction in non-tidal waters:

(1) In the absence of adjacent wetlands, the jurisdiction extends to the ordinary high water mark, or
(2) When adjacent wetlands are present, the jurisdiction extends beyond the ordinary high water mark to the limit of the adjacent wetlands.
(3) When the water of the United States consists only of wetlands the jurisdiction extends to the limit of the wetland.

Section 404 jurisdiction in "other waters" such as lakes, ponds, and streams, extends to the upward limit of the ordinary high water mark (OHWM) or the upward extent of any adjacent wetland. The OHWM on a non-tidal water is:

- the "line on shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR Section 328.3[e]).

Wetlands are defined as: "...those areas that are inundated or saturated by surface or ground water at a frequency and duration to support a prevalence of vegetation adapted for life in saturated soil conditions" (33 CFR Section 328.8 [b]). Wetlands usually must possess hydrophytic vegetation (i.e., plants adapted to inundated or saturated conditions), wetland hydrology (e.g., topographic low areas, exposed water tables, stream channels), and hydric soils (i.e., soils that are periodically or permanently saturated, inundated or flooded) to be regulated by the Corps pursuant to Section 404 of the Clean Water Act.

### 8.1.2 Applicability to the Proposed Project

M&A completed an Aquatic Resources Delineation for the project site. On November 1, 2016, the Corps confirmed their jurisdiction over 0.36-acres of waters of the United States limited to Fagan Creek itself adjacent to the proposed development area on the project site.

The proposed development project has been carefully planned to avoid impacts to Corps' jurisdictional areas. Two stormwater outfalls will be constructed outside of the jurisdictional limits in Fagan Creek. Accordingly, there will be no project-related impacts to Clean Water Act regulated waters of the U.S. or State. During project-related activities, sufficient Best Management Practices (BMPs) would be installed to ensure that there would be no impacts to Fagan Creek. ***Thus, as proposed, there will be no impacts to waters of the U.S. and accordingly no Clean Water Act permit for the proposed project is warranted.***

## 8.2 California Regional Water Quality Control Board (RWQCB)

### 8.2.1 Section 401 of the Clean Water Act

The SWRCB and RWQCB regulate activities in "waters of the State" (which includes wetlands) through Section 401 of the Clean Water Act. While the Corps administers a permitting program that authorizes impacts to waters of the United States, including wetlands and other waters, any Corps permit authorized for a proposed project would be inoperative unless it is a NWP that has been certified for use in California by the SWRCB, or if the RWQCB has issued a project specific certification of water quality. Certification of NWPs requires a finding by the SWRCB that the activities permitted by the NWP will not violate water quality standards individually or cumulatively over the term of the permit (the term is typically for five years). Certification must be consistent with the requirements of the federal Clean Water Act, the California Environmental Quality Act, the California Endangered Species Act, and the SWRCB's mandate to protect beneficial uses of waters of the State. Any denied (i.e., not certified) NWPs, and all Individual Corps permits, would require a project specific RWQCB certification of water quality.

### 8.2.2 Applicability to the Proposed Project

The Corps has taken jurisdiction over 0.36-acres of waters of the United States on the project site which solely consists of the stretch of Fagan Creek that bisects the project site. Since the RWQCB does not have a formal method for technically defining what constitutes waters of the State, the RWQCB defers to the Corps' determination that designates aquatic resources including wetlands not subject to the Corps jurisdiction but that would be subject to the RWQCB's Porter-Cologne Water Quality Control Act jurisdiction. Therefore, if the Corps determines there are a specified number of acres of wetland or other waters within the project site boundaries, the RWQCB is expected to concur. Any Section 404 permit authorized by the Corps for the project would be inoperative without also obtaining authorization from the RWQCB pursuant to Section 401 of the Clean Water Act (i.e., without obtaining a certification of water quality). Under the current project design there would be no need to apply to the Corps for a Clean Water Act permit since all work will occur outside of the Corps' and RWQCB's Clean Water Act jurisdictional limits. Thus, there is no requirement to apply to the RWQCB for a Section 401 certification of water quality for the proposed project. ***In summary, there would be no impacts to Clean Water Act defined waters of the U.S. and/or State under the proposed project.***

### 8.2.3 Porter-Cologne Water Quality Control Act

The uncontrolled discharge of pollutants into impaired water bodies is considered particularly detrimental. According to the U.S. Environmental Protection Agency (USEPA), **sediment is one of the most widespread pollutants contaminating U.S. rivers and streams**. Sediment runoff from construction sites is 10 to 20 times greater than from agricultural lands and 1,000 to 2,000 times greater than from forest lands (EPA 2005). Consequently, the discharge of stormwater from large construction sites is regulated by the RWQCB under the federal CWA and California's Porter-Cologne Water Quality Control Act.

The Porter-Cologne Water Quality Control Act, Water Code § 13260, requires that "any person discharging waste, or proposing to discharge waste, that could affect the waters of the State to file a report of discharge" with the RWQCB through an application for waste discharge (Water

Code Section 13260(a)(1). The term "waters of the State" is defined as any surface water or groundwater, including saline waters, within the boundaries of the State (Water Code § 13050(e)). It should be noted that pursuant to the Porter-Cologne Water Quality Control Act, the RWQCB also regulates "isolated wetlands," or those wetlands considered to be outside of the Corps' jurisdiction pursuant to the SWANCC decision (see Corps Section above).

The RWQCB generally considers filling in waters of the State to constitute "pollution." Pollution is defined as an alteration of the quality of the waters of the state by waste that unreasonably affects its beneficial uses (Water Code §13050(1)). The RWQCB litmus test for determining if a project should be regulated pursuant to the Porter-Cologne Water Quality Control Act is if the action could result in any "threat" to water quality.

The RWQCB requires complete pre- and post-development Best Management Practices Plan (BMPs) of any portion of the project site that is developed. This means that a water quality treatment plan for the pre- and post-developed project site must be prepared and implemented. Preconstruction requirements must be consistent with the requirements of the National Pollutant Discharge Elimination System (NPDES). That is, a *Stormwater Pollution Prevention Plan* (SWPPP) must be developed prior to the time that a site is graded (see NPDES section below). In addition, a post construction BMPs plan, or a Stormwater Management Plan (SWMP) must be developed and incorporated into any site development plan.

#### 8.2.4 Applicability to The Proposed Project

Since any "threat" to water quality could conceivably be regulated by the RWQCB or the State Water Resources Control Board pursuant to the Porter-Cologne Water Quality Control Act, care will be required when constructing the proposed project to be sure that adequate pre and post construction Best Management Practices Plan (BMPs) are incorporated into the project implementation plans. Such BMPs, if correctly installed and maintained, are likely to keep the project in compliance with the Porter-Cologne Water Quality Control Act.

While impacts to the top-of-bank of Fagan Creek on the project site are outside of Clean Water Act jurisdiction regulated by the Corps pursuant to Section 404 of the Clean Water Act and by the RWQCB pursuant to Section 401 of the Clean Water Act, impacts associated with the installation of the two 12-inch stormwater outfalls (above the ordinary high water mark) could nonetheless be regulated by the RWQCB pursuant to the Porter-Cologne Water Quality Control Act. To remain in compliance with the Porter-Cologne Clean Water Act, the project cannot impact water quality. Accordingly, it is imperative that a project SWPPP be implemented prior to construction and that a SWMP be implemented such that the post-development project conditions do not result in impacts to downstream receiving waters.

It should be noted that the RWQCB can simply drop by the project site at any time to see that both a SWPPP and a SWMP are being implemented by the project as necessary to comply with the NPDES and Napa County's MS4 Phase II NPDES requirements.

## 8.3 California Department of Fish and Wildlife Protections

### 8.3.1 Section 1602 of California Fish and Game Code

Pursuant to Section 1602 of the California Fish and Game Code: "An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, unless all of the following occur:

(1) CDFW receives written notification regarding the activity in the manner prescribed by CDFW. The notification shall include, but is not limited to, all of the following:
   (A) A detailed description of the project's location and a map.
   (B) The name, if any, of the river, stream, or lake affected.
   (C) A detailed project description, including, but not limited to, construction plans and drawings, if applicable.
   (D) A copy of any document prepared pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code.
   (E) A copy of any other applicable local, state, or federal permit or agreement already issued.
   (F) Any other information required by CDFW" (Fish & Game Code 2014).

Please see Section 1602 of the current California Fish and Game Code for further details.

Please also note that while not stated in the regulations above, CDFW typically considers its jurisdiction to include riparian vegetation (that is, the trees and bushes growing along the stream). Thus, any proposed activity in a natural stream channel that would substantially adversely affect an existing fish and/or wildlife resource, including its riparian vegetation, would require entering into a Streambed Alteration Agreement (SBAA) with CDFW prior to commencing with work in the stream. However, prior to authorizing such permits, CDFW typically reviews an analysis of the expected biological impacts, any proposed mitigation plans that would be implemented to offset biological impacts and engineering and erosion control plans.

### 8.3.2 Applicability to The Proposed Project

Fagan Creek, an intermittent creek on the project site, would be regulated by CDFW pursuant to Section 1602 of the Fish and Game Code. This creek supports riparian vegetation and CDFW can be expected to take jurisdiction over the bed, bank, and channel of this creek and its associated riparian vegetation. Hence, a SBAA with the CDFW will be necessary for the impacts associated with the construction of the two 12-inch stormwater outfalls on the banks of Fagan Creek. The two outfall structures will result in 699 square feet of impact to the banks of Fagan Creek. This information will need to be included in a SBAA application that must be submitted to the CDFW along with current engineering drawings as necessary to obtain a SBAA from the CDFW. Please note that a Notice of Determination from the CEQA Lead Agency for the CEQA review must be submitted to the CDFW with the SBAA application before the CDFW will issue a SBAA. Also, CDFW will require mitigation for impacts to riparian vegetation. ***While construction of the two stormwater outfalls will result in minor impacts to riparian vegetation,***

***these effects would be mitigated.*** As mitigation for impacts to riparian vegetation, a portion of the south side of the property, adjacent to Fagan Creek, will be preserved in perpetuity via a perpetual conservation deed restriction that will preserve an additional 0.42-acre of riparian and floodplain beyond the required Napa County 75-foot stream setbacks. This preserved area will facilitate the potential expansion of the Fagan Creek riparian corridor by natural recruitment. Further, a California native riparian planting plan will be implemented on the north side of Fagan Creek to ensure no net loss of riparian habitat and bank stabilization, mitigating for impacts to riparian habitat at a 2:1 mitigation to impacts ratio. All disturbed soils within the 75-foot setback will be seeded with a California native seed mix.

## 9. STATE WATER RESOURCES CONTROL BOARD (SWRCB)/RWQCB – STORM WATER MANAGEMENT

### 9.1 Construction General Permit

While federal Clean Water Act NPDES regulations allow two permitting options for construction related stormwater discharges (individual permits and General Permits), the State Water Resources Control Board (SWRCB) has elected to adopt only one statewide Construction General Permit at this time that will apply to all stormwater discharges associated with construction activity, except from those on Tribal Lands, in the Lake Tahoe Hydrologic Unit, and those performed by the California Department of Transportation (CalTrans).

The Construction General Permit requires all dischargers where construction activity disturbs greater than one acre of land or those sites less than one acre that are part of a common plan of development or sale that disturbs more than one acre of land surface to:

1. Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving off site into receiving waters.

2. Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation. Achieve quantitatively-defined (i.e., numeric) pollutant-specific discharge standards, and conduct much more rigorous monitoring based on the project's projected risk level.

3. Perform inspections of all BMPs.

This Construction General Permit is implemented and enforced by the nine RWQCBs. It is also enforceable through citizens' suits and represents a dramatic shift in the State Water Board's approach to regulating new and redevelopment sites, imposing new affirmative duties and fixed standards on builders and developers.

<u>Types of Construction Activity Covered by the Construction General Permit</u>

- clearing,
- grading,
- disturbances to the ground such as stockpiling, or excavation that results in soil disturbances of at least one acre or more of total land area.

Construction activity that results in soil disturbances to a smaller area would still be subject to this General Permit if the construction activity is part of a larger common plan of development that encompasses greater than one acre of soil disturbance, or if there is significant water quality impairment resulting from the activity.

Construction activity does not include:

- routine maintenance to maintain original line and grade,
- hydraulic capacity, or original purpose of the facility,
- nor does it include emergency construction activities required to protect public health and safety.

The Construction General Permit includes several "post-construction" requirements. These requirements entail that site designs provide no net increase in overall site runoff and match pre-project hydrology by maintaining runoff volume and drainage concentrations. To achieve the required results where impervious surfaces such as roofs and paved surfaces are being increased, developers must implement non-structural off-setting BMPs, such as landform grading, site design BMPs, and distributed structural BMPs (bioretention cells, rain gardens, and rain cisterns). This "runoff reduction" approach is essentially a State Water Board-imposed regulatory requirement to implement Low Impact Development ("LID") design features. Volume that cannot be addressed using non-structural BMPs must be captured in structural BMPs that are approved by the RWQCB.

Improving the quality of site runoff is necessary to improve water quality in impaired and threatened streams, rivers, and lakes (that is, water bodies on the EPA's 303(d) list). The RWQCB prioritizes the water bodies on the 303(d) list according to potential impacts to beneficial uses. Beneficial uses can include a wide range of uses, such as nautical navigation; wildlife habitat; fish spawning and migration; commercial fishing, including shellfish harvesting; recreation, including swimming, surfing, fishing, boating, beachcombing, and more; water supply for domestic consumption or industrial processes; and groundwater recharge, among other uses. The State is required to develop action plans and establish Total Maximum Daily Loads (TMDLs) to improve water quality within these impaired water bodies. The TMDL is the quantity of a pollutant that can be safely assimilated by a water body without violating the applicable water quality standards.

Pursuant to the CWA, the RWQCB regulates construction discharges under the National Pollutant Discharge Elimination System (NPDES). The project sponsor of construction or other activities that disturb more than 1 acre of land must obtain coverage under NPDES Construction General Permit Order 2009-0009-DWQ, administered by the RWQCB[1].

[1] CGP Order 2009-0009-DWQ remains in effect, but has been amended by CGP Order 2009-0014-DWQ, effective February 14, 2011, and CGP Order 2009-0016-DWQ, effective July 17, 2012. The first amendment merely provided

#### 9.1.1 APPLICABILITY TO THE PROPOSED PROJECT

The proposed project will impact greater than one acre and is required to obtain coverage under the SWRCB administered Construction General Permit. To obtain coverage under this permit, the applicant (typically through its civil engineer) must electronically file a number of permit-related compliance documents (Permit Registration Documents (PRDs), including a Notice of Intent (NOI), a risk assessment, site map, signed certification, Stormwater Pollution Prevention Plan (SWPPP), Notice of Termination (NOT), NAL exceedance reports, and other site-specific PRDs that may be required. The PRDs must be prepared by a Qualified SWPPP Practitioner (QSP) or Qualified SWPPP Developer (QSD) and filed by a Legally Responsible Person (LRP) on the RWQCB's Stormwater Multi-Application Report Tracking System (SMARTS). (QSDs are typically civil engineers, professional hydrologists, engineering geologists, or landscape architects.) Once filed, these documents become immediately available to the public for review and comment. At a minimum, the SWPPP shall identify Best Management Practices (BMPs) for implementation during project construction that are in accordance with the applicable guidance and procedures contained in the California Stormwater Quality Association's *California Stormwater Best Management Practices Handbook* (2015).

### 9.2 RWQCB Municipal Storm Water Permitting Programs

The federal Clean Water Act (CWA) was amended in 1987 to address urban stormwater runoff pollution of the nation's waters. In 1990, the U.S. Environmental Protection Agency (USEPA) promulgated rules establishing Phase 1 of the National Pollutant Discharge Elimination System (NPDES) stormwater program. The Phase 1 program for Municipal Separate Storm Sewer System (MS4s) requires operators that serve populations of 100,000 or greater to implement a stormwater management program to control polluted discharges from these MS4s. While Phase 1 of the municipal stormwater program has focused on large urban areas, Phase 2 of the municipal stormwater program was promulgated by the USEPA for smaller urban areas including non-traditional Small MS4s, which are governmental facilities such as military bases, public campuses, and prison and hospital complexes.

MS4 permits require the discharger (or dischargers that are permitted by the MS4 permittees) to develop and implement a Storm Water Management Plan/Program (SWMP) with the goal of reducing the discharge of pollutants to the maximum extent practicable (MEP). MEP is the performance standard specified in Section 402(p) of the Clean Water Act. The management programs specify what best management practices (BMPs) will be used to address certain program areas. The program areas include public education and outreach; illicit discharge detection and elimination; construction and post-construction; and good housekeeping for municipal operations. In general, medium and large municipalities are required to conduct chemical monitoring, though small municipalities are not.

additional clarification to Order 2009-0009-DWQ, while Order 2009-0016-DWQ eliminated numeric effluent limits on pH and turbidity (except in the case of active treatment systems), in response to a legal challenge to the original order.

### 9.2.1 NPDES C.3 REQUIREMENTS

The NPDES C.3 requirements went into effect for any project (public or private) that is "deemed complete" by the City or County (Lead Agency) on or after February 15, 2005, and which will result in the creation or replacement (other than normal maintenance) of at least 10,000 square feet of impervious surface area (roofs, streets, patios, parking lots, etc. Provision C.3 requires the onsite treatment of stormwater prior to its discharge into downstream receiving waters. Note that these requirements are in addition to the existing NPDES requirements for erosion and sedimentation controls during project construction that are typically addressed through acquisition of coverage under the SWRCB administered Construction General Permit. The C.3 requirements are typically required to be implemented by MS4 permittees (and their constituencies).

Projects subject to Provision C3 must include the capture and onsite treatment of all stormwater from the site prior to its discharge, including rainwater falling on building rooftops. Project applicants are required to implement appropriate source control and site design measures and to design and implement stormwater treatment measures in order to reduce the discharge of stormwater pollutants to the *maximum extent practicable.* While the Clean Water Act does not define "maximum extent practicable," the Stormwater Quality Management Plans required as a condition of the municipal NPDES permits identify control measures (known as Best Management Plans, or BMPs) and, where applicable, performance standards, to establish the level of effort required to satisfy the maximum extent practicable criterion. It is ultimately up to the professional judgment of the reviewing municipal staff in the individual jurisdictions to determine whether a project's proposed stormwater controls will satisfy the maximum extent practicable criterion. However, there are numeric criteria used to ensure that treatment BMPs have been adequately sized to accommodate and treat a site's stormwater. The C3 requirements are quite extensive, and their complete explanation is not provided here. However, the following are minimums that should be understood and adhered to:

- The applicant must provide a detailed and realistic site design *and impervious surface area calculations*. This site design *and calculations* will be used by the Lead Agency (County or City) to determine/*verify* the amount of impervious surface area that is being created or replaced. It should include all proposed buildings, roads, walkways, parking lots, landscape areas, etc., that are being created or redeveloped. If large (greater than 10,000 square feet) lots are being created an effort will need to be made to determine the total impervious surface area that could be created on that parcel. For example if only a portion of the lot is shown as a "building envelope" then the lead agency will need to consider that a driveway will have to be constructed to access the envelope and that the envelope will then be developed as shown. If the C.3 thresholds are met (creation/redevelopment of 10,000 square feet of impervious surface area), a Stormwater Control Plan (SWCP) (if required by the Lead Agency, or whatever steps for compliance with Provision C3 are required locally) must accompany the application.

- If a SWCP is required by the Lead Agency for the project it must be stamped by a Licensed Civil Engineer, Architect, or Landscape Architect.

#### 9.2.2 APPLICABILITY TO THE PROPOSED PROJECT

The Water Board issued county-wide municipal stormwater permits in the early 1990s to operators of MS4s. On November 19, 2015, the Water Board re-issued these county-wide municipal stormwater permits as one Municipal Regional Stormwater NPDES Permit to regulate stormwater discharges from municipalities and local agencies. Permittees in the San Francisco Bay area are included in a Municipal Regional Permit (MRP), issued to 76 cities, counties and flood control districts in 2009 and revised in 2015. Each of the Permittee's must file an Annual Report that is comprised of three parts: regional, countywide, and individual. Some requirements of the MRP are being implemented by the Bay Area Stormwater Management Agencies Association (BASMAA) on behalf of all the MRP Permittees. Other elements are being implemented collaboratively by the Permittees through their respective countywide programs. As such, BASMAA and the countywide programs have submitted Annual Report elements on the regional and countywide collaborative tasks, respectively, on behalf of the MRP Permittees and the individual MRP Permittees have also submitted Annual Report elements on the Permit Provisions they have implemented individually. ***It is the applicant's responsibility to ensure that the project civil engineer prepares all required Storm Water Planning documents for submittal to Napa County to comply with its MS4 permit requirements.***

## 10. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REGULATIONS

A CEQA lead agency must determine if a proposed activity constitutes a project requiring further review pursuant to the CEQA. Pursuant to CEQA, a lead agency would have to determine if there could be significant adverse impacts to the environment from a proposed project. Typically, if within the city limits, the city would be the CEQA lead agency. If a discretionary permit (i.e., conditional use permit) would be required for a project (e.g. an occupancy permit must be issued), the lead agency typically must determine if there could be significant environmental impacts. This is usually accomplished by an "Initial Study." If there could be significant environmental impacts, the lead agency must determine an appropriate level of environmental review prior to approving and/or otherwise permitting the impacts. In some cases, there are "Categorical Exemptions" that apply to the proposed activity; thus the activity is exempt from CEQA. The Categorical Exemptions are provided in CEQA. There are also Statutory Exemptions in CEQA that must be investigated for any proposed project. If the project is not exempt from CEQA, the lowest level of review typically reserved for projects with no significant effects on the environment would be for the lead agency to prepare a "Negative Declaration." If a proposed project would have only minimal impacts that can be mitigated to a level of no significance pursuant to the CEQA, then a "Mitigated Negative Declaration" is typically prepared by the lead agency. Finally, those projects that may have significant effects on the environment, or that have impacts that can't be mitigated to a level considered less than significant pursuant to the CEQA, typically must be reviewed via an Environmental Impact Report (EIR). All CEQA review documents are subject to public circulation, and comment periods.

Section 15380 of CEQA defines "endangered" species as those whose survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors. "Rare" species are defined by CEQA as those who are in such low numbers that they could become endangered if

their environment worsens; or the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" as that term is used in FESA. The CEQA Guidelines also state that a project will normally have a significant effect on the environment if it will "substantially affect a rare or endangered species of animal or plant or the habitat of the species." The significance of impacts to a species under CEQA, therefore, must be based on analyzing actual rarity and threat of extinction to that species despite its legal status or lack thereof.

### 10.1 Applicability to the Proposed Project

This report has been prepared as a Biology section that is suitable for incorporation by the CEQA lead agency (in this case Napa County) into a CEQA review document such as a Mitigated Negative Declaration or an Environmental Impact Report. This document addresses potential impacts to species that would be defined as endangered or rare pursuant to Section 15380 of the CEQA.

## 11. IMPACTS ANALYSIS

Below the criteria used in assessing impacts to Biological Resources is presented.

### 11.1 Significance Criteria

A significant impact is determined using CEQA and CEQA Guidelines. Pursuant to CEQA §21068, a significant effect on the environment means a substantial, or potentially substantial, adverse change in the environment. Pursuant to CEQA Guideline §15382, a significant effect on the environment is further defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. Other Federal, State, and local agencies' considerations and regulations are also used in the evaluation of significance of proposed actions.

Direct and indirect adverse impacts to biological resources are classified as "significant," "potentially significant," or "less than significant." Biological resources are broken down into four categories: vegetation, wildlife, threatened and endangered species, and regulated "waters of the United States" and/or stream channels.

#### 11.1.1 THRESHOLDS OF SIGNIFICANCE

##### 11.1.1.1 Plants, Wildlife, Waters

In accordance with Appendix G (Environmental Checklist Form) of the CEQA Guidelines, implementing the project would have a significant biological impact if it would:

- 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 CDFW or USFWS.

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS.

- Have a substantial adverse effect on federally protected "wetlands" as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

- 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 native wildlife nursery sites.

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

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

#### 11.1.1.2 Waters of the United States and State.

Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the Corps regulates the discharge of dredged or fill material into waters of the United States, which includes wetlands, as discussed in the bulleted item above, and also includes "other waters" (stream channels, rivers) (33 CFR Parts 328 through 330). Substantial impacts to Corps regulated areas on a project site would be considered a significant adverse impact. Similarly, pursuant to Section 401 of the Clean Water Act, and to the Porter-Cologne Water Quality Control Act, the RWQCB regulates impacts to waters of the state. Thus, substantial impacts to RWQCB regulated areas on a project site would also be considered a significant adverse impact.

#### 11.1.1.3 Stream Channels

Pursuant to Section 1602 of the California Fish and Game Code, CDFW regulates activities that divert, obstruct, or alter stream flow, or substantially modify the bed, channel, or bank of a stream which CDFW typically considers to include riparian vegetation. Any proposed activity that would result in substantial modifications to a natural stream channel would be considered a significant adverse impact.

## 12. IMPACT ASSESSMENT AND PROPOSED MITIGATION

In this section we discuss potential impacts to sensitive biological resources including special-status animal species, nesting birds and riparian vegetation. We follow each impact with a mitigation prescription that when implemented would reduce impacts to the greatest extent possible. This impact analysis is based on a Site Development Plan, East and West Portions, for a New Winery & Storage Facility for Safe Harbor 3.0 prepared by Greg LeDoux and Associates, dated July 2019 and a Site Development Exhibit for the 75' Riparian Setback Infringement for Safe Harbor 3.0 prepared by Always Engineering on July 2019 (Appendices A and B).

### 12.1 Impact BIO-1. Development of the Project would have a significant adverse impact on the 75-Foot Setback from Fagan Creek

There will be minor encroachments into the 75-foot setback from Fagan Creek from impermeable surface (3,923 square feet, 0.09-acre), rock-lining/riprap associated with bioretention features and the two outfalls on the banks of Fagan Creek (4,160 square feet, 0.10-acre). As such, the applicant is requesting a modification to the development standard through procedures outlined Section V(H) and in the Napa County Code [Ordinance No. 18.44.210(D)] which allows for variation to the GI development standards. Specifically, the applicant is asking for a modification to the 75-foot stream setback for Fagan Creek due to the narrowness of the parcel where developable area is further restricted. ***Impacts to the 75-foot setback from Fagan Creek would be regarded as a significant adverse impact.*** Such impacts would be mitigated to a level considered less than significant.

### 12.2 Mitigation Measure BIO-1 For Impacts to the 75-Foot Setback from Fagan Creek

To mitigate for impacts within the stream setback, a portion of the south side of the property, adjacent to Fagan Creek, will be preserved in perpetuity via deed restriction and will constitute the preservation of an additional 0.42-acre of floodplain beyond the required 75-foot setback. This preservation will facilitate the potential expansion of the Fagan Creek flood plain and riparian corridor by natural recruitment. ***This preservation will provide for a mitigation to impacts ratio of greater than 2:1 (preservation to impacts inside the 75-foot setback).***

The south side of Fagan creek will be entirely preserved via deed restriction between the required stream setbacks and the additional preserved area. The 0.42-acre floodplain preserve area is primarily comprised of ruderal vegetation/grassland dominated non-native grass species including soft chess, rip-gut brome, slender wild oat, and Italian ryegrass as well as non-native forb species including common vetch, poison hemlock, prickly lettuce, bindweed, fennel, bristly ox-tongue and several species of dock. There is one ornamental pear tree (*Pyrus calleryana*) at the southernmost boundary of the 0.42-acre area to be deed restricted. There is also a seasonal wetland that was mapped by M&A in 2016 but never confirmed by the Corps since Fagan Creek was impassable at the time of the verification meeting and thus the limits of the delineation confirmed by the Corps at the time was restricted to the parcel areas north of Fagan Creek. The 0.01-acre seasonal wetland is almost entirely dominated by California aster, a native hydrophytic plant species and exhibits a perched water table due to an occluded layer (i.e. claypan) approximately 6 inches below soil surface. Preservation of the 0.42-acre additional floodplain area will preserve both upland and seasonal wetland habitat adjacent to a primary creek in the area, Fagan Creek thus preserving a portion of its watershed in perpetuity and providing a buffer for the existing riparian corridor which is quite dense on the south side and potential area for future wetland/riparian establishment.

Further, a California native riparian planting plan will also be implemented north of Fagan Creek within the 75-foot setback to ensure no net loss of riparian habitat and to promote bank stabilization, mitigating for impacts to riparian habitat a 2:1 mitigation to impacts ratio. In addition, the project will stabilize all temporarily disturbed soils within the 75-foot setback via seeding with a California native seed mix. Through preservation of additional floodplain area south of Fagan creek and enhancement of the Fagan Creek riparian corridor, this development

plan will serve to enhance the Fagan Creek riparian corridor and preserve a wider setback overall. ***Implementation of these mitigation measures would reduce impacts to the 75-foot stream setback from Fagan Creek to a level regarded as less than significant pursuant to the CEQA.***

### 12.3 Impact BIO-2. Development of the Project would have a significant adverse impact on Riparian Trees (Significant).

The proposed project would result in 699 square feet of impacts to riparian vegetation along Fagan Creek from construction of two proposed outfalls. This will entail the removal of Himalayan blackberry and the removal of 2 arroyo willows as well as dripline impacts (i.e. limbing up) to one black walnut and two red willows. While there is no specific tree protection ordinance for Napa County, there are several County ordinances and General Plan policies that restrict activities within riparian zones and within specific stream setbacks including the following, Napa County's Floodplain and Riparian Zone Management Ordinance (Ordinance No. 16.04.750). In addition, the CDFW has jurisdiction over the bed, bank, and channel of Fagan Creek and its associated riparian vegetation. ***Impacts to riparian trees would be regarded as a significant adverse impact.*** Such impacts would be mitigated to a level considered less than significant.

### 12.4 Mitigation Measure BIO-2 For Impacts to Riparian Trees

Prior to removing any California native tree on the project site, the applicant will need to prepare a Tree Replacement and Riparian Enhancement Plan that will provide mitigation for any California native tree that are impacted on the project site. Any California native tree impacted by the proposed project will need to be replaced at a 2:1 ratio in accordance with Policy Con-17 and 24 of the County General Plan. In addition, prior to impacting riparian trees, the applicant shall be required to acquire a Streambed Alteration Agreement from the CDFW. If a higher tree planting ratio is stipulated by CDFW in any Streambed Alteration Agreement issued for the project, this higher tree planting ratio shall become a condition of the project. A Tree Replacement and Riparian Enhancement Plan for undisturbed areas within the 75-foot setback that are currently not supporting riparian vegetation, shall be submitted to the County and CDFW for approval prior to implementation of the proposed project. The Tree Replacement and Riparian Enhancement Plan shall present detailed specifications regarding the proposed plant palette, irrigation and maintenance of the plantings, success criteria, and will provide a maintenance and monitoring prescription consistent with CDFW requirements for impacts to riparian vegetation.

To mitigate for minor encroachments into the 75-foot setback from Fagan Creek as outlined in the Napa Valley Business Park Specific Plan, a portion of the south side of the property, adjacent to Fagan Creek, will be preserved in perpetuity via perpetual conservation deed restriction that will result in the permanent preservation of an additional 0.42-acre of floodplain beyond the required 75-foot setback from Fagan Creek. This preserved area will facilitate the potential expansion of the Fagan Creek riparian corridor by natural recruitment. The required creek protection corridor shall, at a minimum, include the bed, bank, and channel and outside edge of existing riparian canopy, plus a modified buffer from top-of-bank to the north as allowed by a modification to the development standard from the County and the standard 75-foot buffer to the

south in accordance with the Napa Valley Basin Specific Plan, Napa County Code and the County General Plan. All replacement/enhancement planting of native trees shall occur within the 75-foot setback area on the north side of Fagan Creek. ***Implementation of these mitigation measures would reduce impacts to riparian trees to a level regarded as less than significant pursuant to the CEQA.***

### 12.5 Impact BIO-3. Development of The Project May Have A Significant Adverse Effect on Nesting Swainson's Hawk (Potentially Significant).

The Swainson's hawk is a state-listed threatened species. While the Swainson's hawk has no special federal status it is protected from direct take under the Federal Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-711). Swainson's hawks, their nests, eggs, and young are also protected under California Fish and Game Code (§3503, §3503.5, §3513, and §3800). The closest known Swainson's hawk record is approximately 0.5 miles north of the project site (CNDDB Occurrence No. 2744). There is suitable nesting habitat along Fagan Creek which bisects the project site and Swainson's hawks have been observed flying over the area. As such, if Swainson's hawks were nesting on or near the project site, implementation of the proposed project could be viewed by the CDFW as a project that could impact nesting Swainson's hawks. Nest site disturbance which results in: (1) nest abandonment; (2) loss of young; (3) reduced health and vigor of eggs and/or nestlings (resulting in reduced survival rates); and (4) may ultimately result in the take (killing) of nestling or fledgling Swainson's hawks incidental to otherwise lawful activities, would be considered a "take" by the CDFW. The taking of Swainson's hawks in this manner can be viewed by the CDFW as a violation of the Section 2080 of the Fish and Game Code. This interpretation of take has been judicially affirmed by the landmark appellate court decision pertaining to CESA (Department v. ACID, 8 CA App. 4, 41554) (CDFW 1994).

Typically, the CDFW requires that any impact to a Swainson's hawk nest be permitted through a Fish and Game Section 2081 management authorization. If an active nest is found on or adjacent to the project site within the area of influence of the project site (which is generally considered to be within 1,000 feet of the project site) "to avoid potential violation of Fish and Game Code 2080 (i.e., killing of listed species), project-related disturbance at active Swainson's hawk nesting sites should be reduced or eliminated during critical phases of the nesting cycle (March 1- September 15 annually)" (CDFW 2000). If disturbance would occur, a Fish and Game Section 2081 management authorization may be required if the project could result in take of Swainson's hawks, including their eggs or young. ***Impacts to Swainson's hawk would be regarded as a potentially significant adverse impact. Such impacts ccould be mitigated to a level considered less than significant pursuant to the CEQA.***

### 12.6 Mitigation Measure BIO-3 For Impacts to Nesting Swainson's Hawk

The CDFW has prepared guidelines for conducting surveys for Swainson's hawk entitled: Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (CDFW 2000). These survey recommendations were developed by the Swainson's Hawk Technical Advisory Committee (TAC) to maximize the potential for locating nesting Swainson's hawks in the Central Valley of California, and thus reduce the potential for nest failures as a result of project activities and/or disturbances. To meet the CDFW's intent for

protection of active Swainson's hawk nests, nesting surveys shall be conducted for a half-mile radius around all project activities and shall be completed for at least two survey periods immediately prior to a project's initiation. The guidelines provide specific recommendations regarding the number of surveys based on when the project is scheduled to begin and the time of year the surveys are conducted.

If Swainson's hawks are found to be nesting within 1,000 feet of the project site, the necessity of acquiring a Fish and Game Section 2081 management authorization shall be determined via consultation with the CDFW. Impacts to the nesting Swainson's hawks, their eggs and/or young shall not be allowed. Accordingly, nest protection buffers shall be established by a qualified raptor biologist that will ensure that there is no take of Swainson's hawks, their eggs or young. The nest site buffer shall be established in consultation with the CDFW or as required in any Fish and Game Section 2081 management authorization issued to the project by the CDFW. The nest protection buffer shall be maintained until the Swainson's hawk nesting attempt is completed as determined by a qualified raptor biologist. Once the nesting cycle is complete no further action is warranted for this raptor species unless CDFW issues a Fish and Game Section 2081 management authorization that requires additional mitigation. ***Implementation of the above mitigation measures would reduce impacts to nesting Swainson's hawks to a level regarded as less than significant pursuant to the CEQA.***

### 12.7 Impact BIO-4. Development of The Project May Have A Significant Adverse Effect on Western Pond Turtle (Potentially Significant).

The western pond turtle is a California "species of special concern." The USFWS is also in preparation of a "12-month finding" to determine whether or not there is enough information to warrant listing of this turtle species. The 12-month finding is expected in 2021. Suitable habitat for western pond turtle is present in Fagan Creek. Although no western pond turtles have been observed on the project site during multiple surveys, this turtle could migrate onto the project site through the Fagan Creek corridor. As the proposed project involves the construction of two 12-inch stormwater outfalls below top of bank of Fagan Creek and includes other development within 75-feet of the top-of-bank of Fagan Creek, ***impacts to western pond turtle, while unlikely, are regarded as potentially significant.*** These impacts could be reduced to a level considered less than significant pursuant to CEQA.

### 12.8 Mitigation Measure BIO-4. For Impacts to Western Pond Turtle

Preconstruction transect and aquatic surveys for turtles and their nests shall be conducted by a qualified biologist 30 days prior to implementation of construction regardless of the time of year because young turtles (hatchlings) over-winter in the nest. If nests are located during surveys, moth balls (naphthalene) should be sprinkled around the vicinity of the nest (no closer than 10 feet) to mask human scent and discourage predators. The nest site plus a 50-foot buffer around the nest site shall be fenced with orange construction fencing to avoid impacts to the eggs or hatchlings which over-winter at the nest site. Construction at the nest site and within the 50-foot buffer area shall be delayed until the young leave the nest (this could be a period of many months) or as otherwise advised and directed by CDFW, the agency responsible for overseeing the protection of the pond turtle. If no turtles or nests are found, no further consideration for western pond turtle or their nests

is warranted. ***Implementation of the above mitigation measures would reduce impacts to Western pond turtle to a level regarded as less than significant pursuant to the CEQA.***

### 12.9 Impact BIO-5. Development of The Project Would Have a Potentially Significant Adverse Impact on Nesting Birds (Potentially Significant)

White-tailed kite, northern harrier, Cooper's hawk, sharp-shinned hawk, and American kestrel are all known from the area and while unlikely, potentially could nest on the project site. Common song birds (passerine birds) could also nest on the project site as well as special-status passerines such as tricolored blackbird and saltmarsh common yellow throat. All of these birds are protected under the Migratory Bird Treaty Act (50 CFR 10.13) and their eggs and young are protected under California Fish and Game Code Sections 3503, 3503.5. Any project-related impacts to these species would be considered a significant adverse impact. Potential impacts to these species from the proposed project include disturbance to nesting birds and possibly death of adults, eggs, and/or young. ***In the absence of survey results, it must be concluded that impacts to nesting raptors and song birds from the proposed project would be potentially significant pursuant to CEQA.*** This impact could be mitigated to a level considered less than significant.

### 12.10 Mitigation Measure BIO-5. Nesting Birds

To avoid impacts to nesting birds, a nesting survey shall be conducted 15 days prior to commencing with construction work or tree removal if this work would commence between February 1st and August 31st. The nesting survey should include an examination of all buildings onsite and all trees onsite and within 200 feet of the entire project site (i.e., within a zone of influence of nesting birds), not just trees slated for removal. The zone of influence includes those areas outside the project site where birds could be disturbed by earth- moving vibrations and/or other construction-related noise.

If birds are identified nesting on or within the zone of influence of the construction project, a qualified biologist shall establish a temporary protective nest buffer around the nest(s). The nest buffer should be staked with orange construction fencing. The buffer must be of sufficient size to protect the nesting site from construction-related disturbance and shall be established by a qualified ornithologist or biologist with extensive experience working with nesting birds near and on construction sites. Typically, adequate nesting buffers are 50 feet from the nest site or nest tree dripline for small birds and up to 300 feet for sensitive nesting birds that include several raptor species known the region of the project site but that are not expected to occur on the project site. Upon completion of nesting surveys, if nesting birds are identified on or within a zone of influence of the project site, a qualified ornithologist/biologist that frequently works with nesting birds shall prescribe adequate nesting buffers that when established would protect the nesting birds from harm while the project is constructed.

No construction or earth-moving activity shall occur within any established nest protection buffer prior to September 1 unless it is determined by a qualified ornithologist/biologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones, or that the nesting cycle is otherwise completed. In the region of the project site, most species complete nesting by mid-July. This date can be significantly earlier or later and would have to be determined by the qualified biologist. At the end of the nesting cycle, and

fledging from the nest by its occupants, as determined by a qualified biologist, temporary nesting buffers may be removed and construction may commence in established nesting buffers without further regard for the nest site. ***Implementation of the above mitigation measures would reduce impacts to nesting birds to a level regarded as less than significant pursuant to CEQA***.

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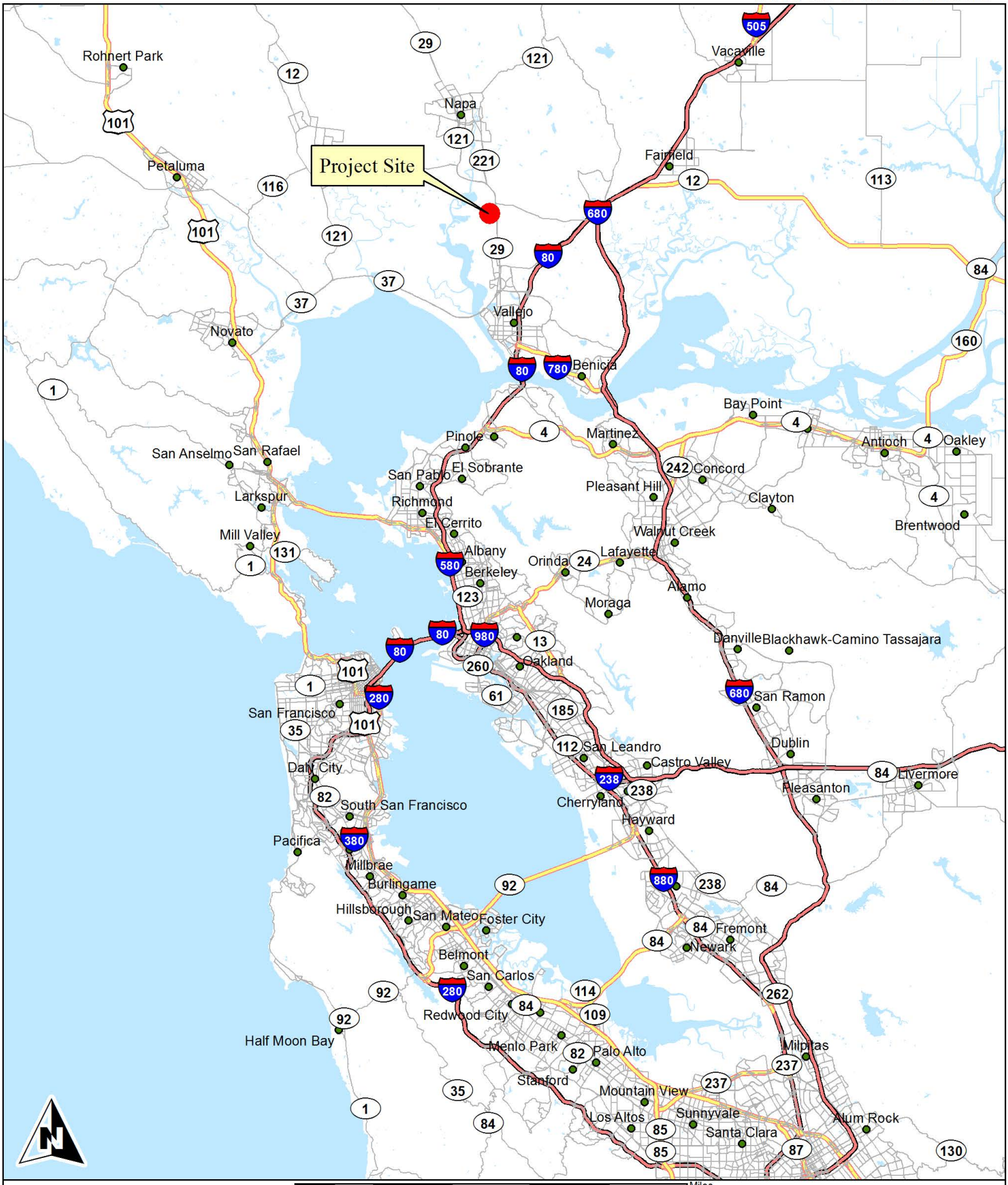


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Figure 1. 665 Napa Vallejo Hwy Project Site
Regional Map
Napa, California

County: Napa
Map Preparation Date: July 29, 2019


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Figure 2. 665 Napa Vallejo Hwy Project Site
Location Map
Napa, California

38.213986 -122.264845
Section: 11, 12; T4N R4W
7.5-Minute Cuttings Wharf quadrangle
Aerial Photograph Source: ESRI
Map Preparation Date: July 29, 2019


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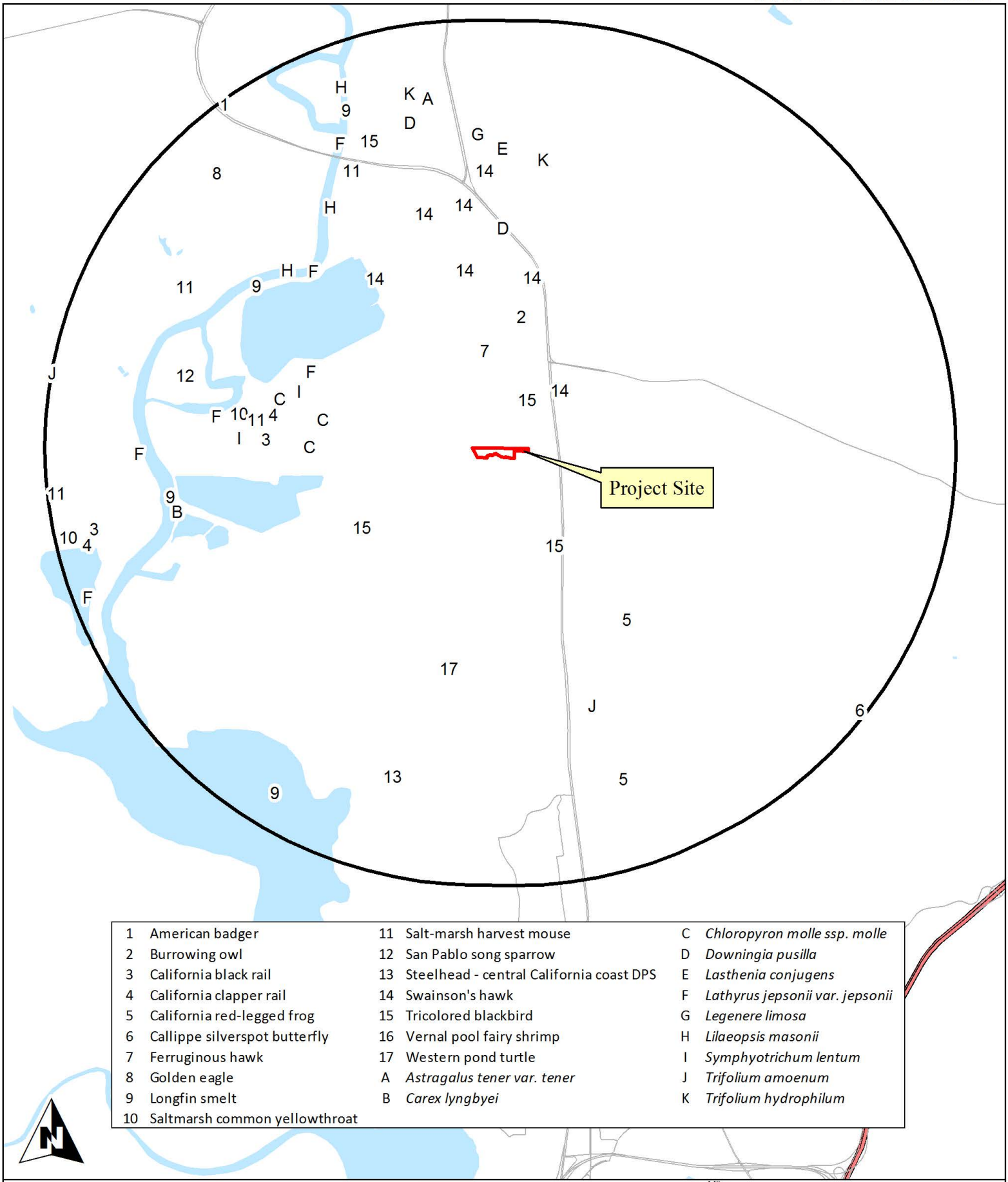
Figure 3. Aerial Photograph of the
665 Napa Vallejo Hwy Project Site
Napa, California

Aerial Photograph Source: ESRI
Map Preparation Date: July 29, 2019




| | | | | | |
|---|---|---|---|---|---|
| 1 | American badger | 11 | Salt-marsh harvest mouse | C | *Chloropyron molle ssp. molle* |
| 2 | Burrowing owl | 12 | San Pablo song sparrow | D | *Downingia pusilla* |
| 3 | California black rail | 13 | Steelhead - central California coast DPS | E | *Lasthenia conjugens* |
| 4 | California clapper rail | 14 | Swainson's hawk | F | *Lathyrus jepsonii var. jepsonii* |
| 5 | California red-legged frog | 15 | Tricolored blackbird | G | *Legenere limosa* |
| 6 | Callippe silverspot butterfly | 16 | Vernal pool fairy shrimp | H | *Lilaeopsis masonii* |
| 7 | Ferruginous hawk | 17 | Western pond turtle | I | *Symphyotrichum lentum* |
| 8 | Golden eagle | A | *Astragalus tener var. tener* | J | *Trifolium amoenum* |
| 9 | Longfin smelt | B | *Carex lyngbyei* | K | *Trifolium hydrophilum* |
| 10 | Saltmarsh common yellowthroat | | | | |

0 0.5 1 2 3 Miles

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Figure 4. Closest Known Special-Status CNDDB Species within 3 Miles of the 665 Napa Vallejo Hwy Project Site

Map Preparation Date: July 29, 2019
3-Mile Radius
Source: CDFW, California Natural Diversity Data Base, 2019

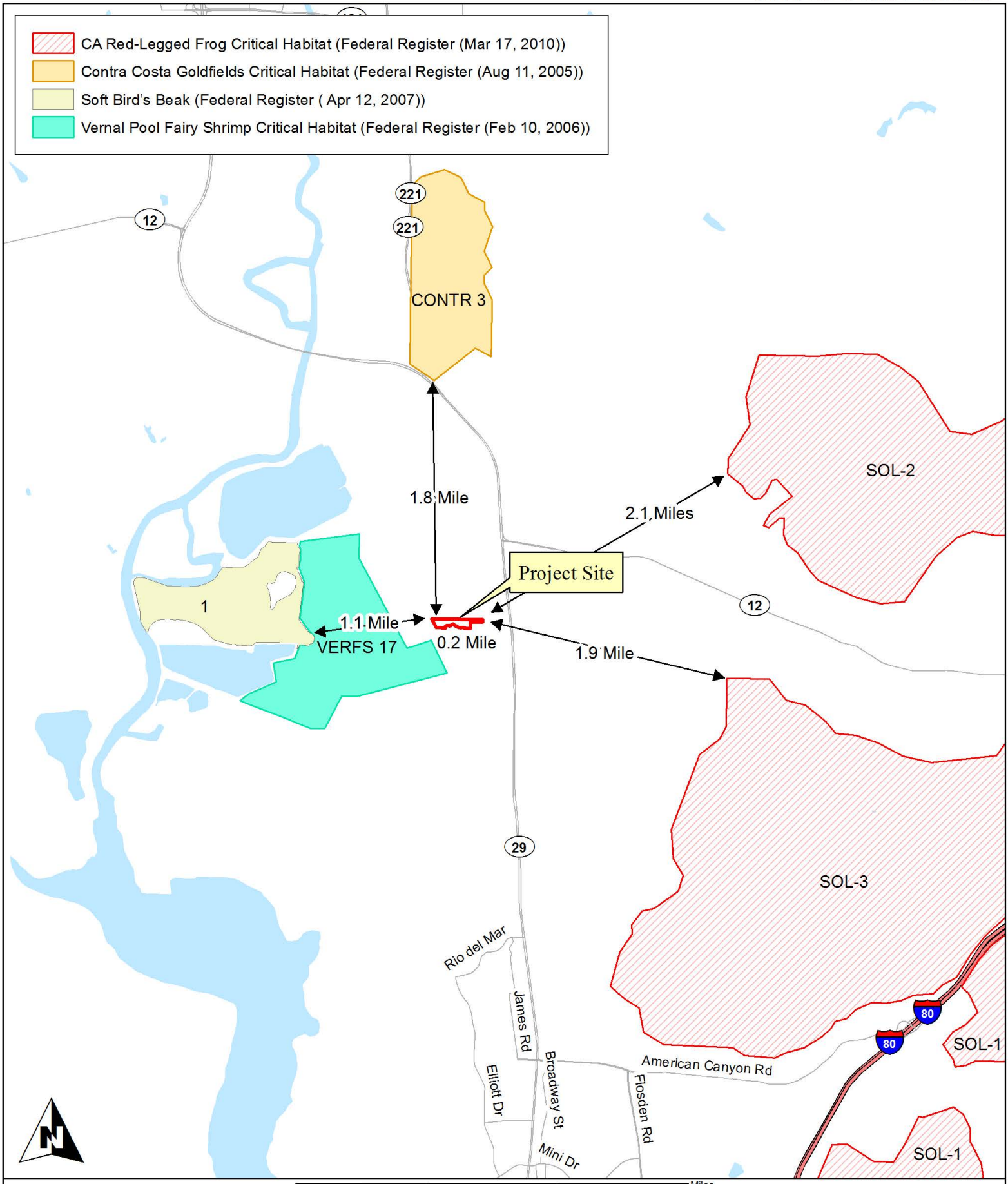


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Figure 5. USFWS Critical Habitat
in the Vicinity of the
665 Napa Vallejo Hwy Project Site

Source: USFWS
Map Preparation Date: July 29, 2019

# Table 1

## Plant Species Observed on the 665 Napa Highway Project Site

### Ferns and Allies

#### Equisetaceae

| | |
|---|---|
| *Equisetum arvense* | Common horsetail |

### Gymnosperms

#### Cupressaceae

| | |
|---|---|
| **Cupressus sempervirens* | Italian cypress |

#### Pinaceae

| | |
|---|---|
| *Pinus radiata* | Monterey pine |

### Angiosperms - Dicots

#### Apiaceae

| | |
|---|---|
| **Conium maculatum* | Poison hemlock |
| **Foeniculum vulgare* | Sweet fennel |
| **Torilis arvensis* | Tall sock destroyer |

#### Araliaceae

| | |
|---|---|
| **Hedera helix* | English ivy |

#### Asteraceae

| | |
|---|---|
| **Anthemis cotula* | Mayweed |
| *Artemisia douglasiana* | California mugwort |
| *Baccharis pilularis subsp. consanguinea* | Coyote brush |
| *Baccharis pilularis subsp. pilularis* | Baccharis |
| **Calendula arvensis* | Field-marigold |
| **Carduus pycnocephalus subsp. pycnocephalus* | Italian thistle |
| **Centaurea calcitrapa* | Purple starthistle |
| **Cichorium intybus* | Chicory |
| **Cirsium vulgare* | Bull thistle |
| **Erigeron bonariensis* | Hairy fleabane |
| *Helenium puberulum* | Sneezeweed |
| **Helminthotheca echioides* | Bristly ox-tongue |
| **Lactuca saligna* | Willow lettuce |
| **Lactuca serriola* | Prickly lettuce |
| **Lactuca virosa* | Bitter lettuce |
| **Leontodon saxatilis* | Long-beaked hawkbit |
| **Silybum marianum* | Milk thistle |
| **Sonchus asper subsp. asper* | Prickly sow-thistle |
| **Sonchus oleraceus* | Common sow-thistle |
| *Symphyotrichum chilense* | Common California aster |
| **Tragopogon porrifolius* | Common salsify |
| *Xanthium spinosum* | Spiny cocklebur |

#### Brassicaceae

| | |
|---|---|
| **Brassica nigra* | Black mustard |
| *Cardamine oligosperma* | Few-seed bittercress |

## Table 1

## Plant Species Observed on the 665 Napa Highway Project Site

| | |
|---|---|
| **Hirschfeldia incana* | Short-podded mustard |
| **Lepidium latifolium* | Broadleaf pepperweed |
| **Nasturtium officinale* | Water cress |
| **Raphanus sativus* | Wild radish |
| **Sinapis arvensis* | Wild mustard |
| **Cactaceae** | |
| **Opuntia sp.* | Prickly pear |
| **Convolvulaceae** | |
| **Convolvulus arvensis* | Bindweed |
| **Dipsacaceae** | |
| **Dipsacus fullonum* | Wild teasel |
| **Euphorbiaceae** | |
| **Triadica sebifera* | Chinese tallowtree |
| **Fabaceae** | |
| **Lotus corniculatus* | Birdfoot trefoil |
| **Medicago polymorpha* | California burclover |
| **Melilotus albus* | White sweetcover |
| **Trifolium hirtum* | Rose clover |
| **Vicia sativa* | Common vetch |
| **Fagaceae** | |
| *Quercus agrifolia var. agrifolia* | Coast live oak |
| *Quercus lobata* | Valley oak |
| **Geraniaceae** | |
| **Erodium botrys* | Broad-leaf filaree |
| **Erodium cicutarium* | Red-stem filaree |
| **Erodium moschatum* | White-stem filaree |
| **Geranium dissectum* | Cut-leaf geranium |
| **Geranium robertianum* | Geranium |
| **Juglandaceae** | |
| *Juglans hindsii* | Northern California black walnut |
| **Lamiaceae** | |
| **Melissa officinalis* | Lemon balm |
| **Mentha pulegium* | Pennyroyal |
| **Mentha spicata* | Spearmint |
| **Lauraceae** | |
| *Umbellularia californica* | California bay |
| **Malvaceae** | |
| **Malva nicaeensis* | Bull mallow |
| **Malva parviflora* | Cheeseweed |
| **Myrsinaceae** | |
| **Lysimachia arvensis* | Scarlet pimpernel |

* Indicates a non-native species

## Table 1

## Plant Species Observed on the 665 Napa Highway Project Site

| | |
|---|---|
| **Oleaceae** | |
| **Fraxinus oxycarpa* | Raywood ash |
| **Onagraceae** | |
| *Epilobium ciliatum* | Hairy willow-herb |
| **Papaveraceae** | |
| *Eschscholzia californica* | California poppy |
| **Plantaginaceae** | |
| **Plantago lanceolata* | English plantain |
| **Plantago major* | Common plantain |
| **Veronica arvensis* | Corn speedwell |
| **Platanaceae** | |
| *Platanus racemosa* | Western sycamore |
| **Polygonaceae** | |
| *Persicaria hydropiperoides* | False waterpepper |
| **Rumex crispus* | Curly dock |
| **Rumex pulcher* | Fiddle dock |
| **Rosaceae** | |
| **Prunus cerasifera* | Cherry plum |
| **Prunus dulcis* | Almond tree |
| **Pyrus calleryana* | Callery pear |
| **Rubus armeniacus* | Himalayan blackberry |
| *Rubus ursinus* | California blackberry |
| **Rubiaceae** | |
| *Galium aparine* | Goose grass |
| **Salicaceae** | |
| *Populus fremontii subsp. fremontii* | Fremont cottonwood |
| **Salix babylonica* | Weeping willow |
| *Salix exigua* | Narrow-leaved willow |
| *Salix gooddingii* | Goodding's black willow |
| *Salix laevigata* | Red willow |
| *Salix lasiolepis* | Arroyo willow |
| **Solanaceae** | |
| *Solanum americanum* | Black nightshade |
| **Ulmaceae** | |
| **Ulmus parvifolia* | Chinese elm |
| **Ulmus sp.* | Elm |
| **Angiosperms -Monocots** | |
| **Alliaceae** | |
| **Allium triquetrum* | Onion |
| **Amaryllidaceae** | |
| **Amaryllis belladonna* | Naked ladies |

* Indicates a non-native species

## Table 1

## Plant Species Observed on the 665 Napa Highway Project Site

| | |
|---|---|
| **Araceae** | |
| *Lemna sp.* | Duckweed |
| **Cyperaceae** | |
| *Carex barbarae* | Whiteroot sedge |
| *Cyperus eragrostis* | Tall flatsedge |
| **Juncaceae** | |
| *Juncus balticus subsp. ater* | Baltic rush |
| *Juncus patens* | Spreading rush |
| *Juncus phaeocephalus* | Brown-headed rush |
| **Poaceae** | |
| **Arundo donax* | Giant reed |
| **Avena barbata* | Slender wild oat |
| *Bromus carinatus var. carinatus* | California brome |
| **Bromus diandrus* | Ripgut grass |
| **Bromus hordeaceus* | Soft chess |
| **Bromus madritensis subsp. madritensis* | Foxtail chess |
| **Cynodon dactylon* | Bermudagrass |
| **Elymus ponticus* | Tall wheat grass |
| *Elymus triticoides* | Creeping wildrye |
| **Festuca myuros* | Rattail sixweeks grass |
| **Festuca perennis* | perennial ryegrass |
| **Hordeum marinum subsp. gussoneanum* | Mediterranean barley |
| **Hordeum murinum subsp. leporinum* | Hare barley |
| *Leersia oryzoides* | Rice cutgrass |
| **Paspalum dilatatum* | Dallis grass |
| **Phalaris aquatica* | Harding grass |
| **Phalaris minor* | Littleseed canary grass |
| **Polypogon interruptus* | Ditch beard grass |
| **Polypogon monspeliensis* | Annual beard grass |
| **Stipa miliacea var. miliacea* | Smilo grass |
| **Typhaceae** | |
| *Typha angustifolia* | Narrow-leaved cattail |

* Indicates a non-native species

# Table 2
## Wildlife Species Observed on the 665 Napa Highway Project Site

| | |
|---|---|
| **Fish** | |
| Mosquito fish | *Gambusia affinis* |
| **Reptiles** | |
| Western fence lizard | *Sceloporus occidentalis* |
| **Birds** | |
| Turkey vulture | *Cathartes aura* |
| Swainson's hawk | *Buteo swainsoni* |
| Ring-necked pheasant | *Phasianus colchicus* |
| Mourning dove | *Zenaida macroura* |
| Anna's hummingbird | *Calypte anna* |
| Nuttall's woodpecker | *Picoides nuttallii* |
| Black phoebe | *Sayornis nigricans* |
| California scrub jay | *Aphelocoma californica* |
| American crow | *Corvus brachyrhynchos* |
| Tree swallow | *Tachycineta bicolor* |
| Northern rough-winged swallow | *Stelgidopteryx serripennis* |
| Bushtit | *Psaltriparus minimus* |
| Northern mockingbird | *Mimus polyglottos* |
| European starling | *Sturnus vulgaris* |
| California towhee | *Pipilo crissalis* |
| Song sparrow | *Melospiza melodia* |
| Red-winged blackbird | *Agelaius phoeniceus* |
| House finch | *Haemorhous mexicanus* |
| House sparrow | *Passer domesticus* |
| **Mammals** | |
| Broad-footed mole | *Scapanus latimanus* |
| Black-tailed jackrabbit | *Lepus californicus* |
| Botta's pocket gopher | *Thomomys bottae* |
| American beaver (scat/tracks) | *Castor canadensis* |
| Raccoon | *Procyon lotor* |

# Table 3

## Special-Status Plant Species Known within the Region of the 665 Napa Vallejo Highway Project Site

| Family<br>Taxon<br>Common Name | Status* | Flowering Period | Habitat | Area Locations | Probability on Project Site |
|---|---|---|---|---|---|
| **Adoxaceae** | | | | | |
| *Viburnum ellipticum*<br>Western viburnum | Fed: -<br>State: -<br>CNPS: Rank 2B.3 | May-July | Chaparral; cismontane woodland; lower montane coniferous forest. | Closest record for this species located approximately 3.8 miles northeast of the project site (Occurrence No. 7) | None. No woodland, chaparral or coniferous forest on the project site. Not observed during appropriately timed surveys. |
| **Apiaceae** | | | | | |
| *Lilaeopsis masonii*<br>Mason's lilaeopsis | Fed: -<br>State: CR<br>CNPS: Rank 1B.1 | April-October | Marshes and swamps (brackish or freshwater); riparian scrub. | Closest record for this species located approximately 1.9 miles northwest of the project site (Occurrence No. 10) | None. No marshes or swamps within the development area. Suitable habitat present within Fagan Creek but not observed during appropriately timed surveys. |
| **Asteraceae** | | | | | |
| *Balsamorhiza macrolepis*<br>Big-scale balsam-root | Fed: -<br>State: -<br>CNPS: Rank 1B.2 | March-June | Cismontane woodland; chaparral; valley and foothill grassland; [sometimes serpentinite]. 90 - 1555 meters | Closest record for this species located approximately 3.6 miles southeast of the project site (Occurrence No. 7) | None. No woodland or chaparral on the project site. Ruderal vegetation provides marginal habitat. Not observed during appropriately timed surveys. |
| *Erigeron greenei*<br>Narrow-leaved daisy | Fed: -<br>State: -<br>CNPS: Rank 1B.2 | May-September | Chaparral (serpentinite). | Closest record for this species located approximately 2.1 miles north of the project site (Occurrence No. 16) | None. No chaparral or serpentine soils on the project site. Not observed during appropriately timed surveys. |
| *Lasthenia conjugens*<br>Contra Costa goldfields | Fed: FE<br>State: -<br>CNPS: Rank 1B.1 | March-June | Valley and foothill grassland (mesic); vernal pools. | Closest record for this species located approximately 2.1 miles north of the project site (Occurrence No. 1) | None. No vernal pools or seasonal wetlands that hold water within the development area. Not observed during appropriately timed surveys. |
| *Symphyotrichum lentum*<br>Suisun Marsh aster | Fed: -<br>State: -<br>CNPS: Rank 1B.2 | August-November | Marshes and swamps (brackish and fresh water) | Closest record for this species located approximately 1.4 miles west of the project site (Occurrence No. 18) | None. No marshes or swamps within the development area. Suitable habitat present within Fagan Creek but not observed during appropriately timed surveys. |

# Table 3

## Special-Status Plant Species Known within the Region of the 665 Napa Vallejo Highway Project Site

| Family<br>Taxon<br>Common Name | Status* | Flowering Period | Habitat | Area Locations | Probability on Project Site |
|---|---|---|---|---|---|
| **Campanulaceae** | | | | | |
| *Downingia pusilla*<br>Dwarf downingia | Fed: -<br>State: -<br>CNPS: Rank 2.2 | March-May | Valley and foothill grassland (mesic); vernal pools. | Closest record for this species located approximately 1.6 miles north of the project site (Occurrence No. 108) | None. No vernal pools or seasonal wetlands that hold water within the development area. Not observed during appropriately timed surveys. |
| *Legenere limosa*<br>Legenere | Fed: -<br>State: -<br>CNPS: Rank 1B.1 | April-June | Vernal pools. | Closest record for this species located approximately 2.2 miles north of the project site (Occurrence No. 7) | None. No vernal pools on the project site. Not observed during appropriately timed surveys. |
| **Chenopodiaceae** | | | | | |
| *Extriplex joaquinana*<br>San Joaquin spearscale | Fed: -<br>State: -<br>CNPS: Rank 1B.2 | April-October | Chenopod scrub; meadows; valley and foothill grassland; [alkaline]. | Closest record for this species located approximately 3.8 miles south of the project site (Occurrence No. 58) | None. No alkaline soils on the project site. Not observed during appropriately timed surveys. |
| **Cyperaceae** | | | | | |
| *Carex lyngbyei*<br>Lyngbye's sedge | Fed: -<br>State: -<br>CNPS: Rank 2 | May-August | Marshes or swamps (brackish or freshwater) | Closest record for this species located approximately 2.2 miles west of the project site (Occurrence No. 28) | None. No marshes or swamps in the development area. Suitable habitat present within Fagan Creek but not observed during appropriately timed surveys. |
| **Fabaceae** | | | | | |
| *Astragalus tener tener*<br>Alkali milkvetch | Fed: -<br>State: -<br>CNPS: Rank 1B.2 | March-June | Playas; mesic grasslands (adobe clay), vernal pools (alkaline). | Closest record for this species located approximately 4.0 miles west of the project site (Occurrence No. 41) | None. No alkaline wetlands or playas on the project site. Not observed during appropriately timed surveys. |

# Table 3

## Special-Status Plant Species Known within the Region of the 665 Napa Vallejo Highway Project Site

| Family<br>Taxon<br>Common Name | Status* | Flowering Period | Habitat | Area Locations | Probability on Project Site |
|---|---|---|---|---|---|
| *Lathyrus jepsonii jepsonii*<br>Delta tule pea | Fed: -<br>State: -<br>CNPS: Rank 1B.2 | May-September | Marshes and swamps (freshwater and brackish). | Closest record for this species located approximately 1.3 miles northwest of the project site (Occurrence No. 23) | None. No marshes or swamps within the development area. Suitable habitat present within Fagan Creek but not observed during appropriately timed surveys. |
| *Trifolium amoenum*<br>Showy Indian clover | Fed: FE<br>State: -<br>CNPS: Rank 1B.1 | April-June | Valley and foothill grassland (sometimes serpentinite) | Closest record for this species located approximately 2.0 miles south of the project site (Occurrence No. 23) | None. Ruderal vegetation provides marginal habitat. Not observed during appropriately timed surveys. No impacts to this species anticipated. |
| *Trifolium hydrophilum*<br>Saline clover | Fed: -<br>State: -<br>CNPS: Rank 1B.2 | April-June | Marshes and swamps; valley and foothill grassland (mesic, alkaline); vernal pools. 0-300 m. | Closest record for this species located approximately 2.1 miles north of the project site (Occurrence No. 35) | None. No marshes, swamps or wetlands within the development area. Ruderal vegetation provides marginal habitat but none observed during appropriately timed surveys. |
| **Orobanchaceae** | | | | | |
| *Castilleja affinis neglecta*<br>Tiburon paintbrush | Fed: FE<br>State: CT<br>CNPS: Rank 1B.2 | April-June | Valley and foothill grassland [serpentinite] | Closest record for this species located approximately 3.5 miles southeast of the project site (Occurrence No. 3) | None. No serpentine grassland on the project site. Not observed during appropriately timed surveys. |
| *Chloropyron molle molle*<br>Soft bird's-beak | Fed: FE<br>State: CR<br>CNPS: Rank 1B.2 | July-September | Marshes and swamps (coastal salt). | Closest record for this species located approximately 1.3 miles west of the project site (Occurrence No. 3) | None. No salt marsh on the project site. Not observed during appropriately timed surveys. |
| **Rhamnaceae** | | | | | |
| *Ceanothus purpureus*<br>Holly-leaf ceanothus | Fed: -<br>State: -<br>CNPS: Rank 1B.2 | February-April | Chaparral (volcanic). | Closest record for this species located approximately 4.0 miles northeast of the project site (Occurrence No. 47) | None. No chaparral or volcanic soils on the project site. No species of Ceanothus observed on the project site during any surveys conducted. |

# Table 3

## Special-Status Plant Species Known within the Region of the 665 Napa Vallejo Highway Project Site

| Family<br>Taxon<br>Common Name | Status* | Flowering Period | Habitat | Area Locations | Probability on Project Site |
|---|---|---|---|---|---|
| **Themidaceae** | | | | | |
| *Brodiaea leptandra*<br>Narrow-anthered California brodiaea | Fed: -<br>State: -<br>CNPS: Rank 1B.2 | May-July | Broadleafed upland forest; chaparral; cismontane woodland; lower montane coniferous forest; valley and foothill grassland. Elevation 110 - 915 meters. | Closest record for this species located approximately 3.6 miles northeast of the project site (Occurrence No. 30) | None. No woodland, chaparral or forest onsite. Ruderal vegetation provides marginal habitat but not observed during appropriately timed surveys. |

***Status**

Federal:
FE - Federal Endangered
FT - Federal Threatened
FPE - Federal Proposed Endangered
FPT - Federal Proposed Threatened
FC - Federal Candidate

State:
CE - California Endangered
CT - California Threatened
CR - California Rare
CC - California Candidate
CSC - California Species of Special Concern

CNPS:
Rank 1A - Presumed extinct in California
Rank 1B - Plants rare, threatened, or endangered in California and elsewhere
Rank 1B.1 - Seriously endangered in California (over 80% occurrences threatened/ high degree and immediacy of threat)
Rank 1B.2 - Fairly endangered in California (20-80% occurrences threatened)
Rank 1B.3 - Not very endangered in California (<20% of occurrences threatened or no current threats known)

CNPS Continued:
Rank 2 - Plants rare, threatened, or endangered in California, but more common elsewhere
Rank 2A - Extirpated in California, common elsewhere
Rank 2B.1 - Seriously endangered in California, but more common elsewhere
Rank 2B.2 - Fairly endangered in California, but more common elsewhere
Rank 2B.3 - Not very endangered in California, but more common elsewhere
Rank 3 - Plants about which we need more information (Review List)
Rank 3.1 - Plants about which we need more information (Review List) Seriously endangered in California
Rank 3.2 - Plants about which we need more information (Review List) Fairly endangered in California
Rank 4 - Plants of limited distribution - a watch list

# Table 4

## Special-Status Wildlife Species Known within the Region of the 665 Napa Vallejo Highway Project Site

| Species | *Status | Habitat | Closest Locations | Probability on Project Site |
|---|---|---|---|---|
| **Invertebrates** | | | | |
| Vernal pool fairy shrimp<br>*Branchinecta lynchi* | Fed: FT<br>State: -<br>Other: | Endemic to the grasslands of the Central Valley, central coast mountains, and south coast mountains. Inhabit static rain-filled/vernal pools, small, clear water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression | Closest record for this species located approximately 1.0 miles west of the project site (Occurrence No. 232) | None. No suitable seasonal wetland habitat on the project site. No impacts to this species anticipated. |
| **Insects** | | | | |
| Callippe silverspot butterfly<br>*Speyeria callippe callippe* | Fed: FE<br>State: -<br>Other: | Occurs in grassland habitats and shrubby woodlands around San Francisco Bay. Viola pedunculata is the host plant. Males congregate on hilltops. | Closest record for this species located approximately 5.0 miles southwest of the project site (Occurrence No. 14). | None. No suitable grassland habitat or host plant present on the project site. No impacts to this species anticipated. |
| **Fish** | | | | |
| Steelhead - Central California Coast DPS<br>*Oncorhynchus mykiss irideus* | Fed: FT<br>State: -<br>Other: | From Russian River south to Soquel Creek, and to Pajaro River. Also found in San Francisco & San Pablo Bay Basins. Spawn in clear, cool, well oxygenated streams greater than 18 cm deep. | Closest record for this species located approximately 2.4 miles south of the project site (Occurrence No. 4). | None. No records in Fagan Creek. No construction proposed within Fagan Creek. No impacts to this species anticipated. |
| Longfin smelt<br>*Spirinichus thaleichthys* | Fed: --<br>State: CT<br>Other: | Endemic to the Sacramento-San Joaquin River system. Inhabits open waters in the Delta and Suisun Bay. After spawning, larvae are carried downstream to brackish nursery areas. | Closest record for this species located approximately 2.0 miles west of the project site (Occurrence No. 26). | None. No suitable habitat provided by Fagan Creek. No impacts to this species anticipated. |
| Sacramento splittail<br>*Pogonichthys macrolepidotus* | Fed:<br>State: CSC<br>Other: | Endemic to the lakes and rivers of the Central Valley; now confined to the delta, Suisun Bay, and associated marshes. Inhabits slow moving river sections and dead-end sloughs. Needs flooded vegetation for spawning. | Closest record for this species located approximately 4.9 miles south of the project site (Occurrence No. 12). | None. No suitable habitat provided by Fagan Creek. No impacts to this species anticipated. |

## Table 4

## Special-Status Wildlife Species Known within the Region of the 665 Napa Vallejo Highway Project Site

| Species | *Status | Habitat | Closest Locations | Probability on Project Site |
|---|---|---|---|---|
| **Amphibians** | | | | |
| California red-legged frog<br>*Rana draytonii* | Fed: FT<br>State: CSC<br>Other: | Occurs in lowlands and foothills in deeper pools and streams, usually with emergent wetland vegetation. Requires 11-20 weeks of permanent water for larval development. | Closest record for this species located approximately 1.3 miles southwest of the project site (Occurrence No. 1062). | None. Presence/absence surveys conducted within Fagan Creek. See text. No impacts to this species anticipated. |
| **Reptiles** | | | | |
| Western pond turtle **<br>*Emys marmorata* | Fed: -<br>State: CSC<br>Other: | Inhabits ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Needs suitable basking sites and upland habitat for egg laying. Occurs in the Central Valley and Contra Costa County. | Closest record for this species located approximately 1.5 miles south of the project site (Occurrence No. 552). | Low. Not observed in Fagan Creek during multiple years of surveys. No sunny basking sites within this section of Fagan Creek. Preconstruction surveys recommended. See text. |
| **Birds** | | | | |
| Northern harrier<br>*Circus cyaneus* | Fed: -<br>State: CSC<br>Other: | Nests on the ground or in shrubby vegetation typically in grasslands, fallow farm lands, near freshwater and salt water marshes. | Closest record for this species located approximately 3.4 miles west of the project site (Occurrence No. 29). | Low. Habitat limited and between developments. Preconstruction surveys recommended. See text. |
| Swainson's hawk<br>*Buteo swainsoni* | Fed: -<br>State: CT<br>Other: | Migratory and resident raptor that breeds in open areas with scattered trees. Prefers riparian and sparse oak woodland habitats for nesting. Requires nearby grasslands, grain fields, or alfalfa for foraging. | Closest record for this species located approximately 0.5 miles north of the project site (Occurrence No. 2744). | Low to moderate. Mature trees along Fagan Creek may provide suitable nesting habitat. Preconstruction surveys recommended. See text. |
| Ferruginous hawk<br>*Buteo regalis* | Fed: --<br>State: WL<br>Other: | Winter migrant to California where they prefer grasslands, cultivated fields and arid areas with an abundance of prey species, such as pocket gophers, black-tailed hares, and cottontails. | Closest record for this species located approximately 0.8 miles north of the project site (Occurrence No. 28). | None. Does not nest in California. No impacts to this species anticipated. |

## Table 4

## Special-Status Wildlife Species Known within the Region of the 665 Napa Vallejo Highway Project Site

| Species | *Status | Habitat | Closest Locations | Probability on Project Site |
|---|---|---|---|---|
| Golden eagle<br>*Aquila chrysaetos* | Fed: -<br>State: FP<br>Other: | Found in rolling foothill grassland with scattered trees. Nests on cliffs and in large trees in open areas. | Closest record for this species located approximately 2.7 miles northwest of the project site (Occurrence No. 82). | None. No suitable nesting habitat. Site surrounded by development. No impacts to this species anticipated. |
| California black rail<br>*Laterallus jamaicensis coturniculus* | Fed: --<br>State: CT<br>Other: | Inhabits salt marshes bordering larger bays. Prefers tidal salt marshes of pickleweed. | Closest record for this species located approximately 1.7 miles west of the project site (Occurrence No. 31). | None. No suitable habitat. No impacts to this species anticipated. |
| California Ridgway's rail<br>*Rallus obsoletus obsoletus* | Fed: FE<br>State: CE<br>Other: | Inhabits salt water and brackish marshes with tidal sloughs in San Francisco Bay. Prefers dense pickleweed for cover, but forages for invertebrates along mud-bottomed sloughs. | Closest record for this species located approximately 1.7 miles west of the project site (Occurrence No. 16). | None. No suitable habitat. No impacts to this species anticipated. |
| Western snowy plover<br>*Charadrius alexandrinus nivosus* | Fed: FT<br>State: CSC<br>Other: | Prefers sandy beaches, salt pond levees, and shores of large alkali lakes. Requires sandy, gravelly, or friable soil for nesting. | Closest record for this species located approximately 4.0 miles west of the project site (Occurrence No. 121). | None. No suitable habitat. No impacts to this species anticipated. |
| Western burrowing owl<br>*Athene cunicularia hypugaea* | Fed: --<br>State: CSC<br>Other: | Found in open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel. | Closest record for this species located approximately 1.0 miles north of the project site (Occurrence No. 935). | None. No burrows present and tall vegetation would discourage use of project site. Not observed during multiple years of surveys. No impacts to this species anticipated. |
| Salt marsh common yellowthroat<br>*Geothlypis trichas sinuosa* | Fed: -<br>State: CSC<br>Other: | Resident of freshwater and salt water marshes in the San Francisco Bay region. Requires thick, continuous cover for foraging and tall grasses, tules, or willows for nesting. | Closest record for this species located approximately 1.7 miles west of the project site (Occurrence No. 37). | Low. Fagan Creek is 100% shaded and has mature riparian habitat. Preconstruction surveys recommended. See text. |

## Table 4

## Special-Status Wildlife Species Known within the Region of the 665 Napa Vallejo Highway Project Site

| Species | *Status | Habitat | Closest Locations | Probability on Project Site |
|---|---|---|---|---|
| San Pablo song sparrow<br>*Melospiza melodia samuelis* | Fed: --<br>State: CSC<br>Other: | More properly known as Samuels Song Sparrow. Resident of salt marshes along the north side of San Francisco and San Pablo Bays. Inhabits tidal sloughs in the California marshes; nests in grindelia bordering slough channels. | Closest record for this species located approximately 2.1 miles west of the project site (Occurrence No. 16). | None. Not within the geographic range of this sparrow. No impacts to this species anticipated. |
| Tricolored blackbird<br>*Agelaius tricolor* | Fed: -<br>State: CC<br>Other: CSC | Colonial nester in dense cattails, tules, brambles or other dense vegetation. Requires open water, dense vegetation, and open grassy areas for foraging. | Closest record for this species located approximately 0.2 miles north of the project site (Occurrence No. 194). | Low. Little open space for foraging present. Site is surrounded by industrial development. Preconstruction surveys recommended. See text. |
| **Mammals** | | | | |
| Suisun shrew<br>*Sorex ornatus sinuosus* | Fed: --<br>State: CSC<br>Other: | Inhabits tidal marshes in the northern end of San Pablo and Suisun Bays. Requires dense, low cover of plants, driftwood, and other litter above the mean high tide line. | Closest record for this species located approximately 5.0 miles south of the project site (Occurrence No. 2). | None. No suitable habitat on the project site. No impacts to this species anticipated. |
| Western red bat<br>*Lasiurus blossevillii* | Fed:<br>State: CSC<br>Other: | Prefers riparian areas where they roost in tree foliage. This bat is occasionally captured in riparian habitats dominated by cottonwoods, oaks, sycamores, and walnuts and is rarely found in desert habitats. | Known from Central and Coastal California through Southern California and closely associated with mature riparian habitat. | None. Fagan Creek characterized by small diameter trees without exfoliated bark. Most activity will remain over 50 feet from the riparian corridor. No trees with cavities or exfoliated bark will be impacted. |
| Pallid bat<br>*Antrozous pallidus* | Fed: -<br>State: CSC<br>Other: | Occurs in deserts, grasslands, shrublands, woodlands, and forests. Most common in dry habitats with rocky areas for roosting. Roosts in caves, crevices, mines, and occasionally hollow trees. Night roosts in open areas such as porches and open buildings. | Closest record for this species located approximately 3.6 miles northwest of the project site (Occurrence No. 57). | None. No suitable habitat within development envelope. No impacts to this species anticipated. |
| Salt marsh harvest mouse<br>*Reithrodontomys raviventris* | Fed: FE<br>State: CE<br>Other: | Inhabits saline marshes in the San Francisco Estuary. Prefers pickleweed marshes. Requires higher areas for escaping high water. | Closest record for this species located approximately 1.7 miles northwest of the project site (Occurrence No. 48). | None. No suitable habitat on the project site. No impacts to this species anticipated. |

## Table 4

## Special-Status Wildlife Species Known within the Region of the 665 Napa Vallejo Highway Project Site

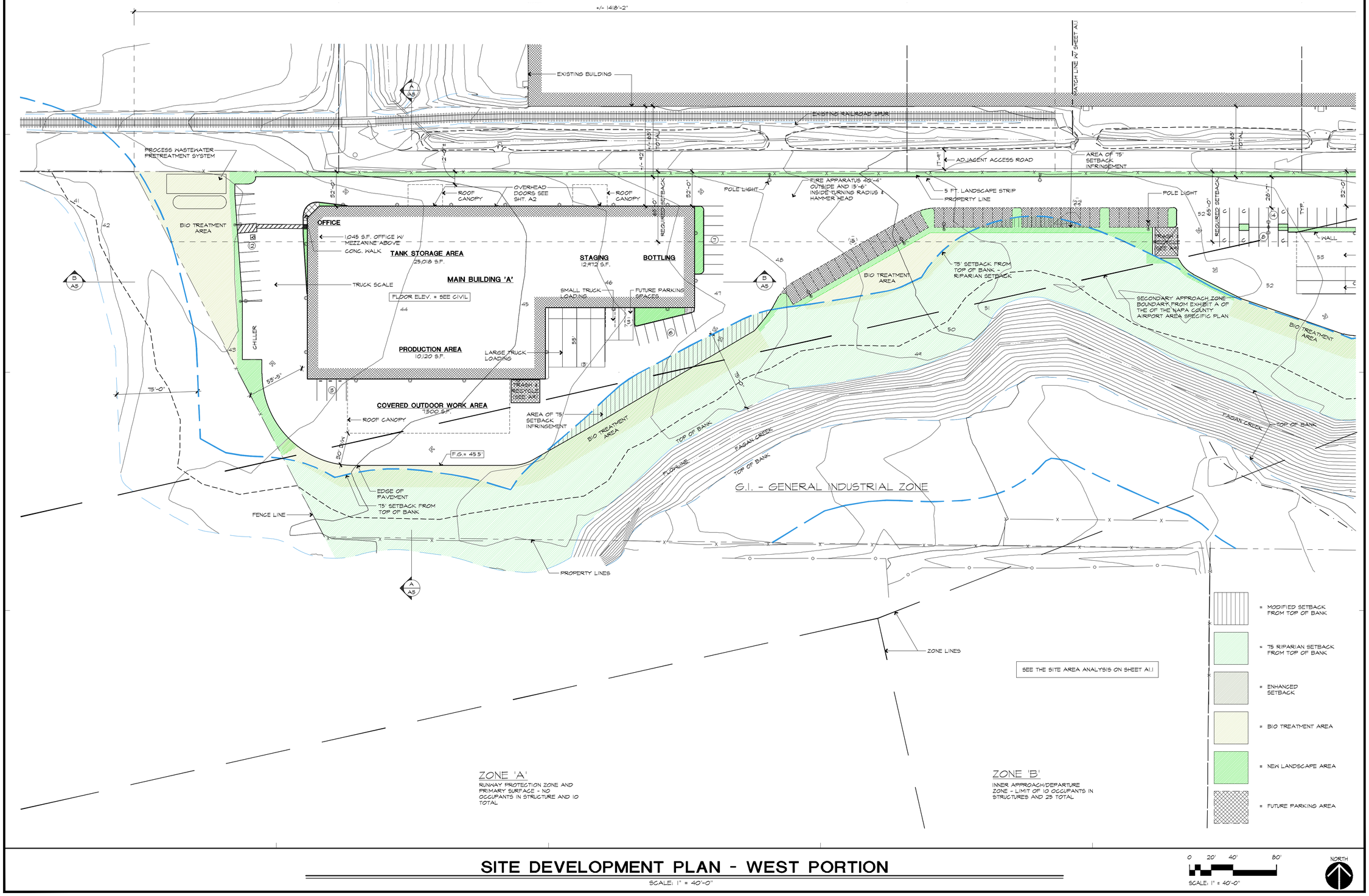
| Species | *Status | Habitat | Closest Locations | Probability on Project Site |
|---|---|---|---|---|
| American badger<br>*Taxidea taxus* | Fed: -<br>State: CSC<br>Other: | Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Need sufficient food, friable soils & open, uncultivated ground. Prey on burrowing rodents. Dig burrows. | Closest record for this species located approximately 3.8 miles northwest of the project site (Occurrence No. 203). | None. No burrows present onsite. Completely surrounded by industrial development. No impacts to this species anticipated. |

***Status**

| Federal: | State: |
|---|---|
| FE - Federal Endangered | CE - California Endangered |
| FT - Federal Threatened | CT - California Threatened |
| FPE - Federal Proposed Endangered | CR - California Rare |
| FPT - Federal Proposed Threatened | CC - California Candidate |
| FC - Federal Candidate | CSC - California Species of Special Concern |
| FPD - Federally Proposed for delisting | FP - Fully Protected |
| | WL - Watch List. Not protected pursuant to CEQA |

**The USFWS hopes to finish a 12-month finding for western pond turtle in 2021 but until formally listed, it is not afforded the protections of FESA.

Appendix A.




## SITE DEVELOPMENT PLAN - WEST PORTION

SCALE: 1" = 40'-0"

0 20' 40' 80'

SCALE: 1" = 40'-0"

NORTH

| REVISIONS: | BY: |
|---|---|
| | |
| | |
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| | |



A NEW WINERY & STORAGE FACILITY FOR:

**SAFE HARBOR 3.0**

655 NAPA VALLEJO HWY.
NAPA COUNTY, CA

APN: 057-110-012

LICENSED ARCHITECT
GREG LeDOUX
NO. C11,434
STATE OF CALIFORNIA

EXPIRES 12-31-19

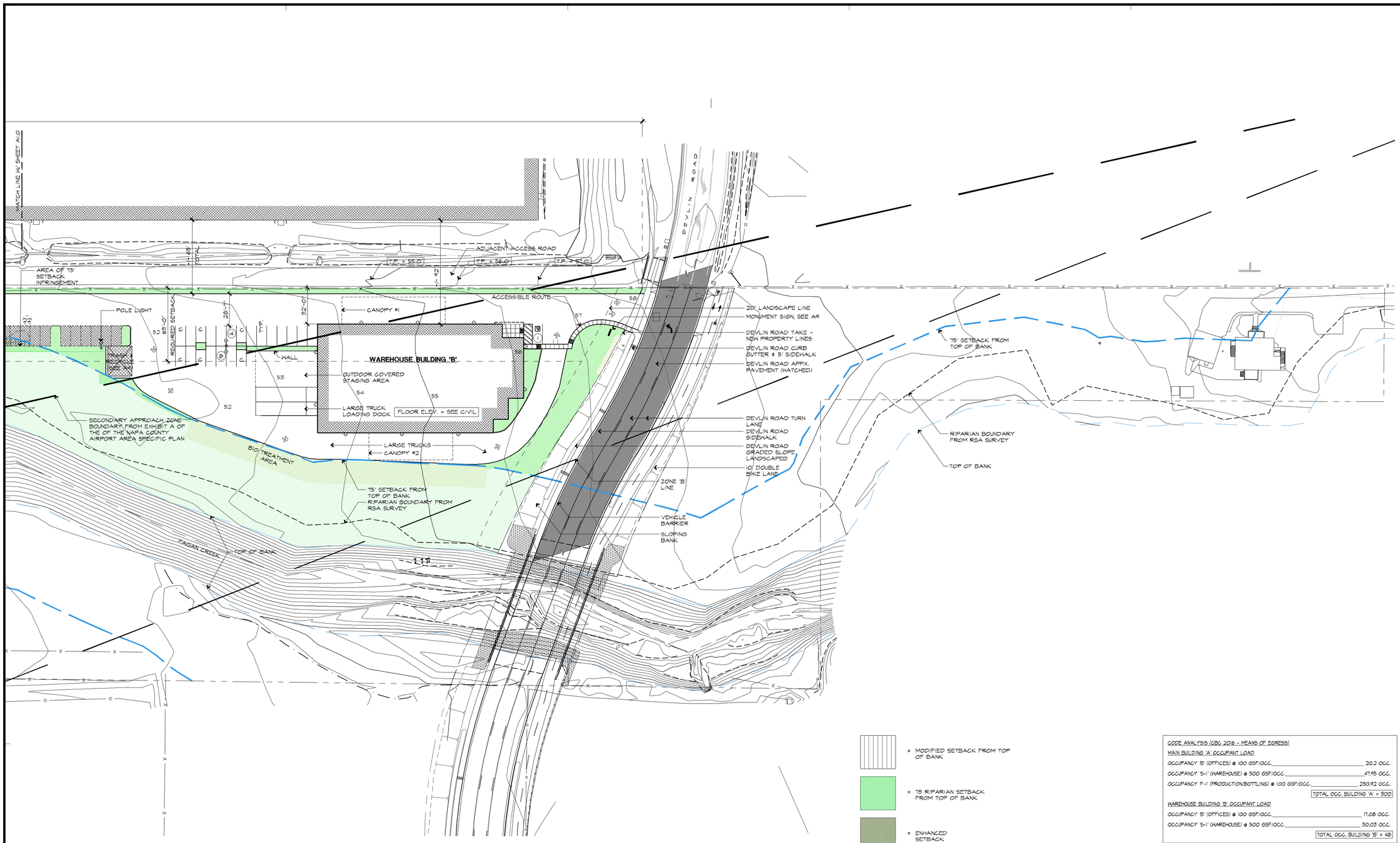
GREG LeDOUX and ASSOCIATES, INC.

48 W. SIERRA AVE.
COTATI, CA
(707) 795-8855

| | |
|---|---|
| DRAWN BY: | NDK, NM |
| DATE: | JULY 2019 |
| JOB NO. | 17.0408 |
| SCALE: | 1" = 40'-0" |

**A1.0**

OF 16 ARCH SHTS.




= MODIFIED SETBACK FROM TOP OF BANK

= 75 RIPARIAN SETBACK FROM TOP OF BANK

= ENHANCED SETBACK

= BIO TREATMENT AREA

= NEW LANDSCAPE AREA

= FUTURE PARKING AREA

CODE ANALYSIS (CBC 2016 - MEANS OF EGRESS)

MAIN BUILDING 'A' OCCUPANT LOAD

OCCUPANCY 'B' (OFFICES) @ 100 GSF/OCC. _____ 20.2 OCC.

OCCUPANCY 'S-1' (WAREHOUSE) @ 500 GSF/OCC. _____ 47.45 OCC.

OCCUPANCY 'F-1' (PRODUCTION/BOTTLING) @ 100 GSF/OCC. _____ 230.92 OCC.

TOTAL OCC. BUILDING 'A' = 300

WAREHOUSE BUILDING 'B' OCCUPANT LOAD

OCCUPANCY 'B' (OFFICES) @ 100 GSF/OCC. _____ 17.08 OCC.

OCCUPANCY 'S-1' (WAREHOUSE) @ 500 GSF/OCC. _____ 30.03 OCC.

TOTAL OCC. BUILDING 'B' = 48

| MAIN BUILDING 'A' | | | | | | |
|---|---|---|---|---|---|---|
| | OFFICE | STORAGE/WAREHOUSE | PRODUCTION | BOTTLING | EXTERNAL COVERED SPACE | TOTAL |
| LOWER FLOOR | 1,045 | 23,975 | 10,120 | 12,972 | 8,796 | 56,908 |
| UPPER FLOOR | 975 | | | | | 975 |
| TOTAL | 2,020 | 23,975 | 10,120 | 12,972 | --- | 49,087 |

| WAREHOUSE BUILDING 'B' | | | | | | |
|---|---|---|---|---|---|---|
| | OFFICE | STORAGE/WAREHOUSE | PRODUCTION | BOTTLING | EXTERNAL COVERED SPACE | TOTAL |
| LOWER FLOOR | 1,708 | 15,150 | | | 5,975 | 22,833 |
| TOTAL | 1,708 | 15,150 | | | --- | 16,858 |

# SITE DEVELOPMENT PLAN - EAST PORTION

SCALE: 1" = 40'-0"

0 20' 40' 80'

SCALE: 1" = 40'-0"

| REVISIONS: | BY: |
|---|---|
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A NEW WINERY & STORAGE FACILITY FOR:

**SAFE HARBOR 3.0**

655 NAPA VALLEJO HWY.
NAPA COUNTY, CA

APN: 057-110-012

SITE DEVELOPMENT PLAN - EAST PORTION

LICENSED ARCHITECT
GREG LeDOUX
NO. C11,434
STATE OF CALIFORNIA

EXPIRES 12-31-19

GREG LeDOUX and ASSOCIATES, INC.

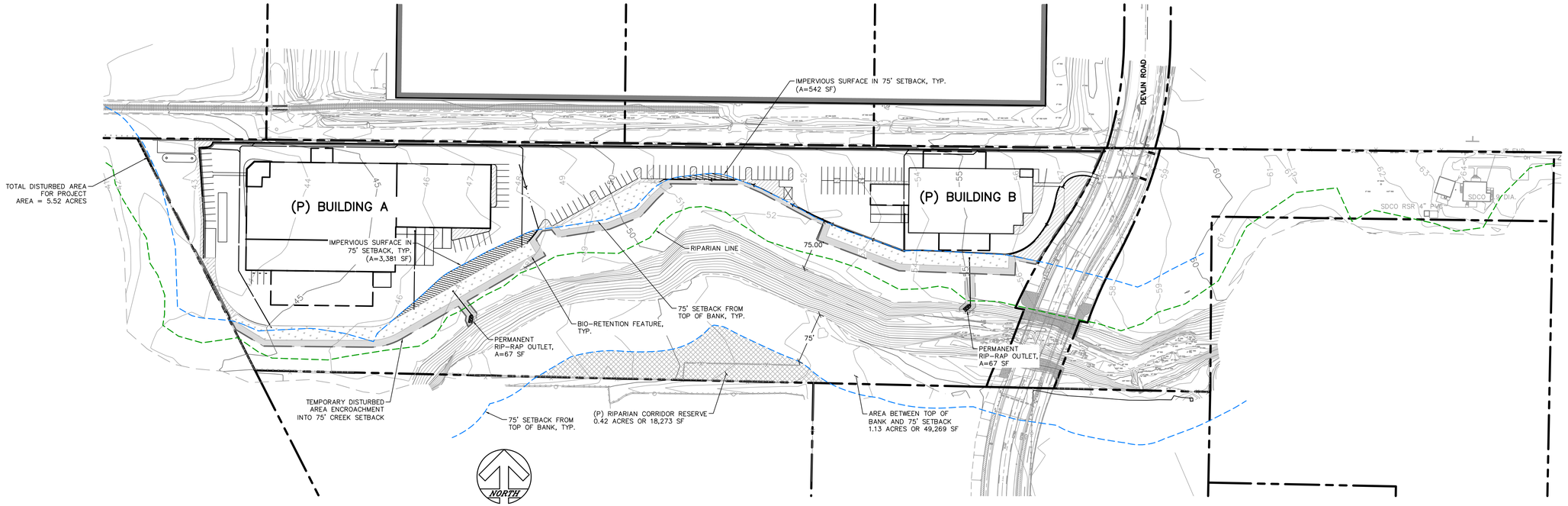
48 W. SIERRA AVE.
COTATI, CA
(707) 795-8855

| | |
|---|---|
| DRAWN BY: | NDK, NA |
| DATE: | JULY 2019 |
| JOB NO. | 17.0408 |
| SCALE: | 1" = 40'-0" |

A1.1

OF 16 ARCH SHTS.

Appendix B.




SITE PLAN

SCALE: 1" = 80'

## LEGEND

- IMPERVIOUS SURFACE IN 75' SETBACK = 3,923 SF
- TEMPORARY DISTURBED AREA ENCROACHING INTO 75' CREEK SETBACK = 0.30 ACRES
- 75' SETBACK FROM TOP OF BANK
- RIPARIAN LINE
- BIO-RETENTION FEATURE, 19,889 SF (12,249 SF INSIDE 75' SETBACK)
- (P) LANDSCAPE AREAS

REGISTERED PROFESSIONAL ENGINEER JASON FRANK HOERNER No. C66429 CIVIL STATE OF CALIFORNIA

| REVISION | DESCRIPTION | BY | DATE |
|---|---|---|---|
| | | | |


Always Engineering, Inc.
Civil Engineering & Topographic Surveying
131 Stony Circle, Suite 1000 (707) 542-8795
Santa Rosa, CA 95401 Fax (707) 542-8798
www.alwayseng.com JasonH@alwayseng.com


Prepared for: SAFE HARBOR 3.0
655 NAPA VALLEJO HWY., NAPA COUNTY, CA

Prepared on: May 13, 2019

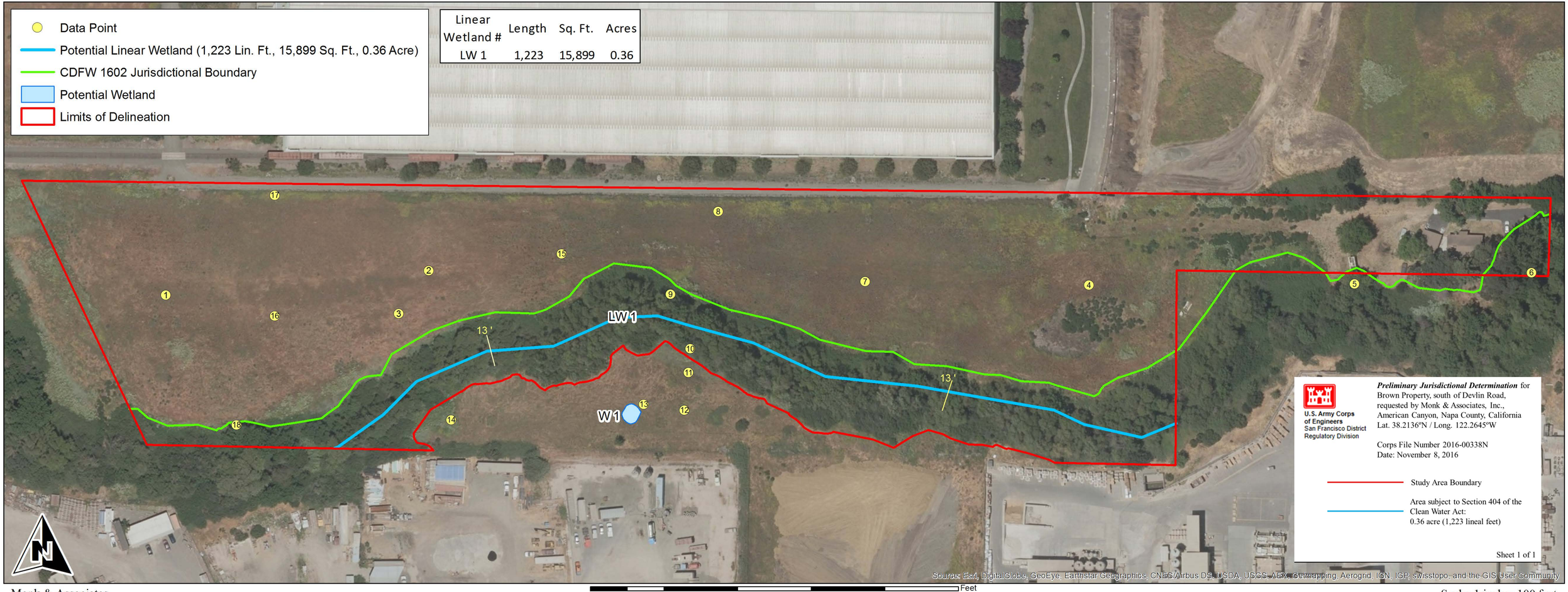
SITE DEVELOPMENT EXHIBIT
75' RIPARIAN SETBACK INFRINGEMENT
655 NAPA VALLEJO HWY., NAPA COUNTY, CA
APN: 057-110-012

JOB#19002.0

SHEET P1 OF P1



When printed=Jul 15, 2019 - 11:54:43AM File=UP-19002.0_LEDOUX_190624.dwg




Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Sheet 1. Confirmed Aquatic Resources Map
Brown Property Project Site
Napa, California

Scale: 1 inch = 100 feet
Delineation Conducted by Geoff Monk & Christy Owens
Aerial Photograph Source: ESRI
Corps Confirmation Date: November 1, 2016;
Confirmed By: Dan Breen, Corps
Map Preparation Date: November 3, 2016

**DEPARTMENT OF THE ARMY**
**SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS**
**1455 MARKET STREET, 16TH FLOOR**
**SAN FRANCISCO, CALIFORNIA 94103-1398**

Appendix D.

**DECEMBER 16, 2016**

Regulatory Division

Subject: File No. 2016-00338N

Ms. Christy Owens
Monk & Associates, Inc.
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595

Dear Ms. Owens:

This correspondence is in reference to your submittal of October 13, 2016, on behalf of Richard L. Brown and Daniel E. Brown, requesting a preliminary jurisdictional determination of the extent of navigable waters of the United States (U.S.) and waters of the U.S. occurring on a 13.5-acre site east of Napa County Airport and west of Highway 29, adjacent to Fagan Creek, in the City of American Canyon, Napa County, California (38.2136ºN and 122.2645ºW; APN: 057-110-012).

All proposed discharges of dredged or fill material occurring below the plane of ordinary high water in non-tidal waters of the U.S.; or below the high tide line in tidal waters of the U.S.; and within the lateral extent of wetlands adjacent to these waters, typically require Department of the Army authorization and the issuance of a permit under Section 404 of the Clean Water Act of 1972, as amended (33 U.S.C. § 1344 *et seq*.). Waters of the U.S. generally include the territorial seas; all traditional navigable waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters subject to the ebb and flow of the tide; wetlands adjacent to traditional navigable waters; non-navigable tributaries of traditional navigable waters that are relatively permanent, where the tributaries typically flow year-round or have continuous flow at least seasonally; and wetlands directly abutting such tributaries. Where a case-specific analysis determines the existence of a "significant nexus" effect with a traditional navigable water, waters of the U.S. may also include non-navigable tributaries that are not relatively permanent; wetlands adjacent to non-navigable tributaries that are not relatively permanent; wetlands adjacent to but not directly abutting a relatively permanent non-navigable tributary; and certain ephemeral streams in the arid West.

The enclosed delineation map entitled, "Preliminary Jurisdictional Determination for Brown Property, south of Devlin Road, requested by Monk & Associates, Inc., American Canyon, Napa County, California," in one sheet date certified November 8, 2016, depicts the extent and location of wetlands within the boundary area of the site that **may be** subject to U.S. Army Corps of Engineers' regulatory authority under Section 404 of the Clean Water Act. This preliminary jurisdictional determination is based on the current conditions of the site, as verified during a field investigation of November 1, 2016, a review of available digital photographic imagery, and a review of other data included in your submittal. While this preliminary jurisdictional

determination was conducted pursuant to Regulatory Guidance Letter No. 08-02, *Jurisdictional Determinations*, it may be subject to future revision if new information or a change in field conditions becomes subsequently apparent. The basis for this preliminary jurisdictional determination is fully explained in the enclosed *Preliminary Jurisdictional Determination Form*. You are requested to sign and date this form and return it to this office within two weeks of receipt.

You are advised that the preliminary jurisdictional determination may **not** be appealed through the U.S. Army Corps of Engineers' *Administrative Appeal Process*, as described in 33 C.F.R. Part 331 (65 Fed. Reg. 16,486; Mar. 28, 2000). Under the provisions of 33 C.F.R § 331.5(b)(9), non-appealable actions include preliminary jurisdictional determinations since they are considered to be only advisory in nature and make no definitive conclusions on the jurisdictional status of the water bodies in question. However, you may request this office to provide an approved jurisdictional determination that precisely identifies the scope of jurisdictional waters on the site; an approved jurisdictional determination may be appealed through the *Administrative Appeal Process*. If you anticipate requesting an approved jurisdictional determination at some future date, you are advised not to engage in any on-site grading or other construction activity in the interim to avoid potential violations and penalties under Section 404 of the Clean Water Act. Finally, you may provide this office new information for further consideration and request a reevaluation of this preliminary jurisdictional determination.

You may refer any questions on this matter to Holly Costa by telephone at (415) 503-6780 or by e-mail at holly.n.costa@usace.army.mil. All correspondence should be addressed to the Regulatory Division, North Branch, referencing the file number at the head of this letter.

The San Francisco District is committed to improving service to our customers. The Regulatory staff seeks to achieve the goals of the Regulatory Program in an efficient and cooperative manner, while preserving and protecting our nation's aquatic resources. If you would like to provide comments on our Regulatory Program, please complete the Customer Service Survey Form available on our website: http://www.spn.usace.army.mil/Missions/Regulatory.aspx.

Sincerely,

William Connor
Project Manager

Enclosures

Copy Furnished (w/ encls):

Messrs. Richard and Daniel Brown
2291 Monticello Road
Napa, California 94558