

**BIOLOGICAL RESOURCES CONSTRAINTS ANALYSIS
THE VERANDA AT INDIAN SPRINGS
1522, 1510, 1506, 1502, 1504 LINCOLN AVE
CALISTOGA, CALIFORNIA**

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Prepared for

Metropolitan Planning Group
1303 Jefferson Street, Suite 100-B
Napa, California 94559
Attention: Ms. Olivia Ervin

Prepared by

Monk & Associates, Inc.
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
Contact: Ms. Sarah Lynch

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1. INTRODUCTION

Monk & Associates, Inc. (M&A) has completed a Biological Resources Constraints Analysis of the Veranda at Indian Springs project site and offsite improvement areas which are located in the City of Calistoga, California (Figures 1-3) (herein referred to as the “project site” and “offsite improvement areas”). The purpose of M&A’s constraints analysis is to characterize existing biotic conditions on the project site and in the offsite improvement areas and determine if sensitive biological resources could be present that could be affected by a development proposal. Sensitive biological resources include “waters of the United States” (U.S.) and “State” which includes “wetlands” and “other waters,” as regulated by the U.S. Army Corps of Engineers (Corps) and the California Regional Water Quality Control Board (RWQCB), drainages and wetlands as regulated by the California Department of Fish and Wildlife (CDFW), and special-status plant or animal species (that is, rare, threatened or endangered plants or wildlife) as defined by the U.S. Fish and Wildlife Service (USFWS) and the CDFW. This report presents our survey findings along with mitigation recommendations.

2. PROPOSED PROJECT

The proposed project, the Veranda at Indian Springs, consists of a 96-room hotel expansion to the Resort at Indian Springs, including a restaurant, bars, retail, courtyard, event lawn, two pools with a pool-side snack shack, utility buildings, and parking. The project site is approximately 7.40 acres. The proposed off-site improvements include an Emergency Vehicle Access Road (herein referred to as “EVA road”) connection and pedestrian path for the Calistoga Springs mobile home park, and a Public Plaza behind the Calistoga Train Depot. The offsite improvement areas total approximately 1.04 acres.

3. STUDY METHODS

M&A Senior Associate Biologist, Sarah Lynch, visited the project site and offsite improvement areas on February 18, 2020, and March 12, 2020 (Figure 3). During these surveys, the entire project site was walked and complete lists were made of all plants and animals observed (Tables 1 and 2 attached). Soil samples were taken at several locations on the project site to look for wetland indicators (i.e., redoximorphic conditions), and data on dominant vegetation, hydrology and soils were recorded in those locations. In addition to site survey work, Ms. Lynch also reviewed the proposed development’s engineering plans and biology reports previously prepared by others for this project site. Plans and reports reviewed include, but are not limited to:

1. Existing Conditions and Demolition Plan prepared by BKF Engineers (October 2019)
2. Grading Plans prepared by BKF Engineers in October 2019 and an updated utility plan (Sheet C3.3) received March 2020.
3. Hotel Architecture Plans prepared by Charles Covell (resubmittal date November 22, 2019).
4. Biotic Survey Report prepared for the project site by Mr. Charles A. Patterson (June 16, 2017).
5. Jurisdictional Delineation of Indian Springs, a 47-Acre Property Located in Calistoga, Napa County, California prepared by Glenn Lukos Associates (Revised June 16, 2009).

6. The Influence of Precipitation and Soil Content on the Distribution and Population Status of the Calisoga Popcorn Flower (*Plagiobothrys strictus*)(July 2018) prepared by Aimee Wyrick-Brownworth et al.

Finally, M&A ran a search of the CDFW's Natural Diversity Database (CNDDDB) to determine what special-status species are known to occur within 3 miles of the project site (Figure 4).

4. EXISTING SITE CONDITIONS AND SURROUNDING LAND USES

The project site and its offsite improvement areas are centered on the former Calistoga Gliderport property located between the Calistoga Train depot and Indian Springs Resort. The site has street frontage on the east side of Lincoln Avenue, and the north side of Fair Way Extension. Currently, the project site consists of vacant land, and developed land including an art gallery, laundromat, a small office building, and storage buildings. To the north-northeast of the project site is the Indian Springs Resort, and farther east is a mobile home park. To the north-northwest is commercial development along Lincoln Avenue, to the east-southeast is the former glider port runway and undeveloped land, and to the south is commercial development and the offsite improvement areas (that is, the proposed public plaza and road extension, Fair Way).

The approximately 7.40-acre project site was once part of the larger 40-plus acres of the gliderport which extends to the east-southeast. Gliderport construction and activities over the years altered the native substrate and the seven-acre project site's underlying soils are a mixture of the native soils, gravels, and broken asphalt from the past gliderport days. While a large portion of the project site is paved, hard-packed soils in other locations support a ruderal (weedy) herbaceous community that has been disturbed over the years by deposits of concrete scrap/earthen dirt piles, fill materials and opportunistic or planted landscape vegetation (see Figure 5).

The non-native, ruderal herbaceous vegetation observed onsite during the February and March 2020 site visits included Bermuda grass (*Cynodon dactylon*), filarees (*Erodium botrys*, *E. cicutarium* and *E. moschatum*), canary grass (*Phalaris aquatica*), annual blue grass (*Poa annua*), cat's ear (*Hypochaeris glabra*), cut-leaved geranium (*Geranium dissectum*), and cheeseweed (*Malva parviflora*). Woody vegetation included non-native and invasive bamboo (*Phyllostachys* sp.), non-native Himalayan blackberry (*Rubus armeniacus*), Peruvian pepper tree (*Schinus molle*), native coyote brush (*Baccharis pilularis*), and a few native sapling oak trees (*Quercus agrifolia*, *Q. lobata*). No mature native trees or heritage trees were observed onsite, though a few mature valley oak and coast live oaks were observed just offsite, south of Fair Way Extension, next to the earthen, roadside drainage ditch (colloquially called "Fairway Extension Ditch").

The proposed EVA road and storm water outfall ("offsite improvements") would cut through an area of non-native annual grassland, an upland plant community, located just east of the project site (Figure 5). This non-native grassland community continues past the offsite improvement areas to the east and onto the gliderport property. Non-native grasses and forbs observed in this community in March 2020 included Bermuda grass (last year's flower heads were observed confirming species), soft chess brome (*Bromus hordeaceus*), prickly lettuce (*Lactuca serriola*), dove weed (*Croton setiger*), and vetch (*Vicia* sp.). Large patches of Himalayan blackberry (*Rubus armeniacus*) are also found near and along the proposed EVA road and stormwater outfall location.

4.1 Evaluation for Waters of the U.S. and Waters of the State

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 U.S. Army Corps of Engineers (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. “Waters of the United States” is a broad term that includes “...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).

Under Section 401 of the Clean Water Act, the California Regional Water Quality Control Board (RWQCB) regulates the disposal of dredged or fill materials into “waters of the State” which includes “other waters,” wetlands, and “isolated” wetlands. Isolated wetlands are wetlands that have no hydrologic connection to a navigable waterway. (The Corps does not regulate isolated wetlands, only the RWQCB does). 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 Nationwide Permit that has been certified for use in California by the State Water Resources Control Board, or if the RWQCB has issued a project specific certification of water quality.

4.1.1 APPLICABILITY TO THE PROJECT SITE

On July 1, 2009, the Corps prepared a letter confirming their jurisdiction on the project site. The Corps’ jurisdictional determination letter was based on February 9 and March 6, 2009 site visits conducted by Corps staff. A March 6, 2009 wetland delineation map prepared by WRA Associates is attached to the copy of the Corps’ July 1, 2009 letter that was given to M&A. According to the WRA map that was attached to the Corps’ letter, and according to another wetland delineation map prepared around this same time period by Glenn Lukos Associates that M&A reviewed, the project site did not support any waters of the United States/State, including wetlands, in 2009, the time both maps were prepared and one was verified by the Corps. The Corps’ confirmation expired on July 1, 2014. Exhibit A, attached, shows the wetlands that were mapped on the gliderport property, east of the project site and the offsite improvement areas.

Since the Corps’ confirmed map expired in 2014 and thus, is no longer valid (that is, it cannot be relied on since site conditions could have changed since the time the map was prepared and confirmed by the Corps), M&A examined the project site and offsite improvement locations for potential Corps’ jurisdictional areas (that is, we dug soil pits and examined vegetation as mentioned in the “methods” section above). While the disturbed and graded areas of the site may support puddles during the rainy season, data collected from these areas show that water does not persist for long in these areas. That is, the soils do not show redoximorphic characteristics and/or evidence of hydrology and hydrophytic plants. Under normal conditions, all three indicators (soils, hydrology and hydrophytic vegetation) must be present for an area to be considered a “wetland.” While toad rush (*Juncus bufonius*), a diminutive annual plant with a wetland indicator

status of FACW (facultative wetland)¹ was observed in several hard-packed, gravel areas on the project site, this plant is typically found in non-wetland areas as often as wetland areas since it will readily grow in a puddle on top of concrete as well as in boggy areas. *M&A did not observe any waters of the U.S./State on the project site.* This finding is consistent with past wetland delineation maps prepared for the project site.

Off-site and adjacent to the project site is an earthen drainage ditch which runs approximately northwest to southeast along the southside of the proposed Fairway Extension (Figure 5); this ditch is colloquially called the “Fairway Extension Ditch.” This ditch originates from a street drain inlet and series of culverts, flowing along the project site’s south-southeastern boundary. This ditch may be classified by the Corps as a “water of the United States” and by the RWQCB as a “water of the State.” The October 2019 *Existing Site Conditions and Demolition Plan* and the *Grading Plan* prepared by BKF Engineers, and the architecture plans prepared by Charles Covell (resubmittal date November 22, 2019) show that this roadside drainage ditch would not be affected by the proposed project. However, if project plans change, and it would be necessary to fill or otherwise alter this ditch (for example, install an outfall structure in the ditch), prior authorization from the Corps and the RWQCB would be necessary. Additionally, to avoid indirect impacts to this ditch it may be necessary to install silt fencing, hay wattles and orange construction fencing on the outer limit of this ditch during all project earth-work and construction work. See the Impacts and Mitigations section of this report for details.

5. SPECIAL-STATUS SPECIES ISSUES

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 California Native Plant Society (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 CEQA (14 CCR §15380) that may include species not found on either CESA or FESA lists;

¹ Facultative wetland plants (FACW) - Plants that occur 67 to 99% of the time in wetlands. The remainder of the time these plants are found in upland habitats (Lichvar et al. 2016).

- plants occurring on Ranks 1A, 1B, 2A, 2B, 3, and 4 of the 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 the 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 the USFWS (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 the CDFW (2020);
- 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."

5.1 Special-Status Plants

Figure 4 provides a graphical illustration of the closest known records for special-status species within three miles of the project site and presents the number of sensitive species that occur within that three-mile radius. No special-status plants have been mapped on the project site or in the offsite improvement areas. However, according to the CDFW's CNDDDB, a total of 16 special-status plant species are known to occur within three miles of the project site (Table 3). There are also two plants not included in the CNDDDB that M&A has included in Table 3 since the CDFW requested their inclusion in the biological analysis: woolly headed lessingia (*Lessingia hololeuca*) (a CNPS Rank 3 plant) and Brewer's milk vetch (*Astragalus breweri*) (CNPS Rank 4) (CDFW 2020).

Most of the special-status plants known to occur within three miles of the project site occur in specialized habitats such as vernal pools, alkaline or volcanic substrates, serpentinite, marshes, conifer forest, and hardwood woodlands, and would not be expected on the disturbed project site or in the developed offsite improvement areas. The project site is partially developed and the undeveloped portions used to be a gliderport with associated facilities. This past use disturbed and removed the native habitats that were once found on this property. The soils onsite are now a combination of gravel, hard-pack, asphalt, and the original soil mixed together with a ruderal

(weedy) herbaceous vegetative cover. Very few of the herbaceous species found onsite are native (Table 1). There is no existing habitat for special-status plants. This has been confirmed by past focused surveys conducted by well-known botanist, Charlie Patterson, who conducted winter, spring, and summer surveys on the property in 2016-2017 (February 26, 2016, April 2, and May 22, 2017). Based on M&A's 2020 surveys which included one full day in February and one full day in March 2020, when locally known special-status plant species were observed blooming (e.g., Calistoga popcorn flower), we conclude that the project site, and proposed offsite improvement areas including the proposed EVA road, stormdrain outfall, new utility line extensions, and Fair Way Extension do not provide habitat for special-status plant species. *No direct impacts to special-status plants are expected from site development.*

While the project site and its offsite improvement areas do not provide habitat for any special-status plant species, it is important to consider the project's potential *indirect effects* on two State and federally listed plants that are known to occur within 1,000 feet of the project site. These two endangered plants are discussed below. All other special-status plants considered for this project site are dismissed from consideration in Table 3, attached.

5.1.1 CALISTOGA POPCORNFLOWER (*PLAGIOBOTHRYIS STRICTUS*)

Calistoga popcornflower is a California listed threatened plant species, which means that killing or possessing this plant is prohibited by the California Endangered Species Act (CESA). This species is also listed as endangered under the federal Endangered Species Act (FESA). FESA protects not only the plant but its habitat. Finally, Calistoga popcornflower is a CNPS Rank of 1B.1 species (defined above). Calistoga popcornflower is an annual herb in the borage family (Boraginaceae), and it grows from 4 to 16 inches tall. It has slender stems with narrow leaves, and small white flowers that typically appear in March and April in a slender, unbranched inflorescence.

Calistoga popcornflower grows in wetland pools and swales adjacent to hot springs and geysers in annual grassland habitats. This species grows on clay soils containing high concentrations of boron, arsenic, and sulfates. Calistoga popcornflower is only known from three locations near the town of Calistoga in Napa County (CNPS 2020). The two populations nearest the project site co-occurs with the California and federally listed endangered Napa bluegrass (*Poa napensis*).

Calistoga popcornflower is highly vulnerable to extinction due to its restricted range and small number of populations. The remaining populations of this species are located on privately-owned land and these sites are not permanently protected. Threats to this species include potential habitat loss due to development or changing land use, potential alteration of geothermal or surface water hydrology, and competition with invasive plant species. Climate change may also threaten the survival of this species.

During M&A's March 12, 2020 site visit, a visit was made to the offsite population of Calistoga popcorn flower that is located between 750 and 1,000 feet southeast of the proposed EVA road and the project site (Exhibit A). This plant was readily visible and in full flower at the time of the March survey. Due to an extremely low rainfall year, there was no longer water sitting in the wetlands where this plant grows and some of the plants' leaves and stems were already yellowing.

The project site and its offsite improvement areas do not support any seasonal wetlands or alkaline habitats suitable for this plant; it is not expected to occur where project site and offsite improvements are proposed. Multiple years of study conducted on the project site by various botanists (e.g., Charlie Patterson, Glenn Lukos Associates, WRA, and now M&A) have failed to identify this plant onsite. Thus, it can be stated with certainty that it does not occur in the project site's degraded, ruderal herbaceous habitats, nor where offsite improvements are proposed.

A stormwater outfall is proposed as part of the proposed development project. This outfall structure would meter treated runoff onto the upland grassland habitat immediately east-southeast of the proposed EVA road. This discharge location would be approximately 750 feet away from the closest Calistoga popcorn flower population (Figure 5). M&A discussed this outfall proposal with Pacific Union College Professor and Biologist Aimee Wyrick-Brownworth who has been studying the Calistoga popcorn flower population at the former gliderport for the past eight years. M&A asked Ms. Wyrick-Brownworth if she had any concerns about the stormwater outfall proposal. Ms. Wyrick-Brownworth stated that as long as the surface runoff that is discharged did not have any pollutants in it that could harm the plants, she thinks the additional water would be beneficial to the popcorn flower since it needs consistent water contributions for flower and seed production, and to help disperse the seeds. Ms. Wyrick-Brownworth stated that the longer the plants have consistent water through the late-winter into spring, the greater the seed production and the larger the next year's crop. Standing water is also beneficial for seed production (S. Lynch, pers. comm. with Ms. Aimee Wyrick-Brownworth, Pacific Union College, March 6, 2020). These statements are consistent with Ms. Wyrick-Brownworth's research as her "*data suggest that surface and groundwater correlate with plant number, size and subsequent reproductive output. In the most basic terms, increased precipitation and groundwater yields greater reproductive output by P. strictus and potentially enhances population viability.*" (Wyrick-Brownworth et al. 2018).

The offsite Calistoga popcorn flower populations would also benefit from geothermal water, which was historically present at the gliderport, as shown in the soils data Ms. Wyrick-Brownworth has collected which shows the soils where the popcorn flower grows are high in minerals such as potassium, boron and manganese, minerals found in geothermal water. However, there have been no recent plans to restore geothermal water to this area.

Regardless, if the project's stormwater discharge is treated, and does not carry any pollutants that could impact the popcorn flower (e.g., petroleum biproducts, herbicides, pesticides, or other contaminants), the proposed project would not have a significant adverse impact on Calistoga popcorn flower. Mitigation Measures are prescribed in the sections below to ensure that the project would not impact this endangered plant species.

5.1.2 NAPA BLUE GRASS (*POA NAPENSIS*)

Napa blue grass is a federal and state-listed endangered plant species. It is also a CNPS Rank 1B.1 species. This perennial grass is found in wet meadows and seeps on alkaline soils near thermal springs. It flowers between May and August. Napa blue grass is known to occur in the alkaline wetland habitats approximately 1,000 feet east-southeast of the project site on the former gliderport property. It grows near the Calistoga popcorn flower populations. The project site and the offsite improvement locations do not provide habitat for Napa blue grass due to the

excessively disturbed conditions and absence of alkaline soils and wetland habitats. The proposed development project includes construction of a stormwater outfall immediately east of the proposed EVA road. Treated stormwater runoff would be metered through this outfall structure offsite into the adjacent upland grasslands. Due to the distance of the Napa blue grass populations from the proposed outfall location, approximately 1,000 feet and greater, it is unlikely that discharged water would reach the Napa blue grass populations. However, if it does, since this grass is known to occur in wetland habitats, it is unlikely that the treated stormwater contributions would have an adverse effect on this grass, similar to the Calistoga popcorn flower populations growing with it.

Thus, if the stormwater being discharged is treated, and does not carry any pollutants (e.g., petroleum biproducts, herbicides, pesticides, or other contaminants) that could impact this species, the proposed project would not have a significant adverse impact on Napa blue grass. Mitigation Measures are prescribed in the sections below to ensure that the project would not impact this endangered plant species.

5.2 Special-Status Animals

Figure 4 provides a graphical illustration of the closest known records for special-status species within three miles of the project site and presents the number of sensitive species that occur in the vicinity of the project site. No special-status animals have been mapped on or adjacent the project site. However, according to the CDFW's CNDDDB, a total of six special-status animal species are known to occur within three miles of the project site (Table 4). Of these six species, the project site only provides habitat for one, the pallid bat (*Antrozous pallidus*). The pallid bat is discussed below. The other five special status animal species were determined not to occur onsite nor in offsite improvement areas due to prior disturbance and lack of suitable habitat.

5.2.1 PALLID BAT (*ANTROZOUS PALLIDUS*)

The pallid bat is a California designated "species of special concern." It has no federal status. The "species of special concern" status designation does not provide any special legally mandated protection for this bat species. However, this status designation likely meets the definition of "rare" pursuant to the CEQA (14 CCR §15380(2)(A)). As such, potential impacts to this bat species should be considered during any CEQA review. Any unmitigated impacts to this species would likely be regarded as a significant adverse impact pursuant to CEQA (§21068).

This bat is a locally common species of low elevations in California. It occurs throughout California except for the high Sierra Nevada from Shasta to Kern counties, and the northwestern corner of the State from Del Norte and western Siskiyou counties to northern Mendocino County. It occurs in a wide variety of habitats. It is most common in open, dry habitats with rocky areas for roosting. Day roosts are in caves, crevices, mines, and occasionally in hollow trees, bridges, and buildings. Roosts must protect bats from high temperatures. Night roosts may be in more open sites such as porches and open buildings. A social bat; roosts in groups of 20 or more.

The nearest CNDDDB record for this species is located 1.3 miles northwest of the project site (Occurrence No. 436). This 2017 record is from a night roost on a bridge. Less than suitable roosting habitat is present in the abandoned buildings and structures on the project site. However,

in the absence of survey data, there is no reason to say this bat species would not roost in the empty buildings/structures onsite, *accordingly, impacts to pallid bat are regarded as potentially significant pursuant to CEQA*. Mitigation could be implemented to reduce this impact to a level regarded as less than significant pursuant to CEQA. The Impacts and Mitigation Measures that follow in the section below address these impacts.

There are no other special-status species issues related to the proposed project or project site as it does not provide habitat for any other special-status species.

6. 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.).

6.1 Applicability to the Project Site

Song birds (such as jays, mockingbirds, finches, etc.) could nest on the project site. These birds would be 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 such birds were nesting. Upon completion of nesting, the project could commence as otherwise planned. Please review specific requirements for avoidance of nest sites for potentially occurring species in the Impacts and Mitigations section below.

7. 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.”

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 and golden eagle, 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.

7.1 Applicability to the Project Site

Many common passerine birds (that is, song birds) could nest on the project site. Preconstruction nesting surveys would have to be conducted for nesting birds to ensure that there is no direct take of these birds including their eggs, or young, during implementation of the proposed project. Any active nests that are found during preconstruction surveys would have to be avoided by the project. Suitable non-disturbance buffers shall be established around active nests until the nesting cycle is complete and the young birds (fledglings) are no longer dependent on the nest. More specifics on nesting bird surveys and protection buffers are provided below in the Impacts and Mitigations section.

8. CALIFORNIA FISH AND GAME CODE §1602

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 the CDFW (Fish & Game Code 2019).

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.

8.1 Applicability to the Project Site

There are no streams, drainages, or wetlands on the project site or in offsite improvement areas that would be regulated by CDFW pursuant to Section 1602 of California Fish and Game Code. An earthen drainage ditch (“Fairway Extension Ditch”) located offsite, just outside the southern project site boundary (Figure 5), would be regulated pursuant to Section 1602. Thus, if there were any plans to construct anything in this ditch at or below the top-of-bank (for example, an outfall structure) or install a bridge over this ditch with footings at or below the ditch’s top of bank, or if there would be plans to remove any of the trees (riparian canopy) along this ditch, prior authorization from CDFW pursuant to Section 1602 of Fish and Game Code would be necessary. See the Impacts and Mitigations section for details.

9. CITY OF CALISTOGA TREE ORDINANCE

According to the City of Calistoga Tree Ordinance, 19.01.040 Requirements, a “Protected Tree” is:

1. Any tree with a [diameter at breast height] DBH greater than 12 inches.
2. Any native oak with a DBH greater than six inches.
3. Any Valley Oak, seedling, sapling, or older.
4. Any tree bearing an active nest of a fully protected bird (see Fish and Game Code Section 3511).

If a Protected Tree is present on a property, the following must be implemented:

B. Temporary Protective Fencing. Before the start of any on-site work, every protected tree within or immediately adjacent to the area of on-site work shall have installed around it a temporary protective fence at the outer margin of the root protection zone. It shall remain in place and be properly maintained for the duration of all work at the site.

C. Restrictions. Any disturbances including, but not limited to the following, which might cause harm to a protected tree, are strictly prohibited within the root protection zone of that tree, unless otherwise exempted (see below) or unless a tree permit is obtained that specifically grants such an exemption:

1. Removal of a protected tree;
2. Removal of any heritage tree without specific approval of the Council;
3. Removing, moving, or failing to install and maintain proper temporary protective fencing prior to completion of all on-site work;
4. Parking or use of vehicles, equipment, or of other devices which might compact the soil;
5. Storage or use of construction materials;
6. Storage or use of chemicals or of other substances which might be harmful to trees;
7. Pruning shall be performed in accordance with WCISA standards;
8. Trenching, including that required for an irrigation system;
9. Any permanent or temporary structures;
10. Grading, cutting, filling, or changing the natural grade in any way;
11. Installation of irrigation system;
12. Irrigation within 10 feet of a trunk of a tree;
13. Attaching signs, posters, notices, wires, or devices of any sort to the trunk;
14. Covering with any substance impermeable to air and rain water, such as asphalt, concrete, plastic, etc.;
15. Burning, open fires, open flames;
16. Chemical toilets;
17. Compaction of the soil;
18. Cleaning or washing any tools or equipment such as paint brushes, masonry trowels, cement mixtures, etc.;
19. Installation of a septic system and/or leach lines immediately up-grade from a protected tree;
20. Installation of a drainage barrier such as a swimming pool, retaining wall, etc., immediately down-grade from a protected tree.

D. Exemptions. The following trees are exempted from the provisions of this chapter:

1. Trees judged in an emergency to be hazardous to life or property by responsible members of police, fire, or public works departmental representatives;
2. Trees subject to trimming, bracing, and cutting back by any public utility.

E. Tree Protection Plan. In order to protect trees and to increase their chances for natural survival, a tree protection plan shall be required as part of all applications for discretionary projects and/or permits under any other part of this code. A reasonable effort shall be made to design the plan such that negative impacts on protected trees are minimized.

1. The tree protection plan shall be designed or reviewed by and shall have the approval of an arborist who is hired by the City and paid for by the applicant. The City-hired arborist shall certify that the plan complies with this chapter, protecting and preserving protected trees from indiscriminate or unnecessary removal.
2. The tree protection plan shall include:
 - a. A simple plot plan showing the location, estimated drip line, size, species, and condition of each protected tree whose root protection zone falls within 20 feet of all proposed activities, including trenching, grading, landscaping, parking of vehicles, and any similar activity.
 - b. A list of measures that will be taken to ensure the protection and survival of the trees, with special attention given to the restrictions listed in subsection (C) of this section.
 - c. A landscaping plan, if appropriate, that will not adversely affect said trees.
3. In case of disagreement with the certifying arborist, the Director of Public Works may seek a second, qualified arborist's opinion, who may reject or modify the tree protection plan.

F. Tree Removal/Disturbance Permit Required.

1. Tree removal/disturbance permits may be issued for trees meeting the following criteria:
 - a. Any tree authorized for removal by other ordinances or laws of the City, County, State, or United States of America;
 - b. Any tree determined by an arborist to be hazardous, dead, or hopelessly diseased;
 - c. Trees in commercial orchards and tree farms;
 - d. Where the continued existence of the tree will produce economic hardship (such as a tree growing against a foundation).
2. All applications directed to the City, including those relating to construction on a vacant lot, construction of an additional structure, changes in height or footprint of an existing structure, replacement or relocation of any utility or driveway or removal/disturbance permits, shall be referred to the Department of Public Works for determination of whether a tree permit is needed before a building permit is issued.
3. All applications directed to the City for tree permits, including those relating to construction on a vacant lot, construction of an additional structure, changes in height or footprint of an existing structure, replacement or relocation of any utility or driveway or removal/disturbance permits, shall include the following:

- a. A simple plot plan as that required for a tree protection plan, if not already submitted for the project in question, showing all pertinent information such as topography around and near the tree(s) in question, grade changes, etc.;
 - b. Nature of the disturbance or removal applied for;
 - c. A statement of the reason and necessity for disturbing or removing the tree(s) in question;
 - d. Written consent of the owner of the land;
 - e. The diameter, drip line parameters, species, condition and number of trees on parcel. The plot plan shall also include the location, specifies, and size of desired replacement trees;
 - f. Documentation, including the opinion of an arborist may, at the discretion of the Director of Public Works, be an additional requirement of the application.
4. Replacement/restoration shall conform to the guidelines established by the Public Works Department.
5. Granting of a tree permit shall be at the discretion of the Director of Public Works. Applications shall be complete. Disturbance or removal of any protected tree shall be avoided if reasonable redesign of the project site plan affords it. A tree permit shall not be granted prior to the granting of all other permits required for the project in question.
6. A tree permit may include reasonable conditions that are necessary and appropriate to minimize the impact of disturbance on the tree(s) in question. A tree permit may include directions for replacement of protected trees to be removed. In addition, at the discretion of the Director of Public Works, there may be the requirements of a performance bond.
7. Procedures for application and permits:
 - a. After an application for a tree permit has been submitted to the Director of Public Works, the applicant shall identify the trees on site in a manner specified by the Director of Public Works.
 - b. The Director of Public Works shall have an on-site inspection of the site and tree(s) in question executed within 10 days of submission of a completed application.
 - c. The Director of Public Works shall render a written decision within 15 days of submission of the completed application. The decision shall expressly grant, conditionally grant, or deny a tree permit. The decision shall include reasons for any denial and shall be made available to the applicant within 15 days of the submission of a completed application. The decision shall be final unless otherwise appealed.
 - d. Tree permits shall be valid for 30 days. Tree permits shall be null and void after that time unless an extension is expressly granted in writing by the Director of Public Works. The applicant may reapply any time after the time for the permit and all extensions have elapsed.
 - e. After issuance of a tree permit, and prior to taking allowed on-site action, a copy of the permit shall be posted in a conspicuous place nearby.
 - f. The Director of Public Works may require on-site inspections at any time before or after the allowed action is taken in order to verify that all restrictions have been met and that all directions have been followed.

g. The Director of Public Works shall make at least one annual inspection thereafter of all replacement trees until such time as determined that they can continue to grow on their own. (Ord. 465, 1991).

C. Mitigation.

Any unauthorized disturbance, damage or destruction, or removal of protected trees shall be mitigated. Satisfactory mitigation shall consist of, but not be limited to, any or all of the following: replacement/restoration, monetary reimbursement equal to the cost of repair or replacement, suspension or revocation of permits, and/or criminal penalties. Said mitigation may include the requirements of security or performance bond.

1. Replacement/restoration shall confirm to the same guidelines as those for exemptions granted by tree permits.
2. Cost of replacement shall include labor and materials required for removing damaged or destroyed trees as well as cost of labor and materials required for equivalent replacement. The value of removed or damaged trees shall be as determined by use of the methods described within the manual entitled "Guide for Establishing Values of Trees and Other Plants" published by the International Society of Arboriculture, and using the basic value of \$22.00 per square inch of trunk.
3. Suspension or revocation of permits shall remain in force until proper mitigation has been performed. (Ord. 465, 1991).

9.1 Applicability to the Project Site

There are a few sapling valley oak trees on the project site; these trees meet the City's definition of a "protected" tree. There also a few sapling coast live oak trees on the project site; these trees may meet the City's DBH requirement to be considered protected trees (that is, if they are 6 inches or greater DBH). There are a few non-native trees on the project site that may meet the criteria as protected trees under the City's ordinance (that is, if they are greater than 12 inches DBH). There are also mature valley oak and coast live oak trees just outside the project site boundaries adjacent to the Fairway Extension Ditch; these mature oak trees meet the definition of protected trees.

A tree survey has been completed by Bill Pramuk, updated January 31, 2020, to determine if there will be project impacts to protected trees. A total of eight trees including two London planetree, two fruitless mulberry, one red horse chestnut, one California peppertree, one valley oak, and one Coast live oak would be removed by the proposed project. As such, a tree removal permit must be obtained from the City prior to the tree removal and mitigation would be necessary as prescribed by the City in this ordinance. See the Impacts and Mitigations section for details.

10. CITY OF CALISTOGA GENERAL PLAN OPEN SPACE AND CONSERVATION ELEMENT

C. Goals, Objectives, Policies And Actions

10.1 Goal OSC-1. Conserve The Value And Function Of Calistoga's Open Space As A Biological Resource

10.1.1 OBJECTIVE OSC-1.1 MAINTAIN BIODIVERSITY WITHIN THE PLANNING AREA WITH SPECIAL EMPHASIS ON SPECIES THAT ARE SENSITIVE, RARE, DECLINING, UNIQUE OR REPRESENT VALUABLE BIOLOGICAL RESOURCES.

Policies

P1.1-1 When reviewing development proposals the City should include assessment of impacts on both individual species and overall biodiversity within the Planning Area.

P1.1-2 Impacts to movement corridors that link wildlife habitat areas should be considered when reviewing development proposals. These corridors should be protected.

P1.1-3 The City should encourage efforts to identify and map biological resources on the gliderport property, which provides an important and unique habitat area within the city limits.

P1.1-4 The City shall explore the possibility of designating parcels as Natural Resource Preservation Areas in areas of the City known to contain sensitive and unique species, in order to protect these resources. Examples of such sensitive natural resource areas include the gliderport, Mount Washington, geothermal marshland areas and the Napa River corridor. Any such designation would respect property rights.

10.1.2 APPLICABILITY TO THE PROPOSED PROJECT

This Biological Resources Constraints Analysis identifies biological resources on the project site and where offsite improvements are proposed, and analyzes the potential effects of the proposed project on these resources. Vegetation communities on the project site have been mapped and are shown on Figure 5 of this report. There are no sensitive or significant biological resources on the project site. The project site is within a developed area (that is, it is an “infill” project); commercial development surrounds the project site on three sides. Hence, the project site does not serve as a movement corridor for wildlife that requires protection. See the Impacts and Mitigations section of this report for a discussion on the project’s impact on significant and sensitive biological resources.

Actions

A1.1-1 Prepare and maintain an updated list of State and federal rare, threatened and endangered species known or suspected to occur in the Planning Area, as well as special status or rare and endangered species identified by the California Department of Fish and Game and the California Native Plant Society. This list should be monitored and updated at least every two years.

A1.1-2 Develop and adopt guidelines establishing wildlife corridors, biological habitat preservation techniques, and wetlands restoration methods.

A1.1-3 Work with applicable agencies to ensure that biological resources are analyzed in local review of development proposals.

A1.1-4 Develop and adopt guidelines to enforce regulations concerning the protection of special status species known or suspected to occur in the Planning Area.

10.1.3 OBJECTIVE OSC-1.2 MINIMIZE IMPACTS TO SENSITIVE NATURAL HABITATS INCLUDING RIPARIAN FOREST AND SCRUB, FRESHWATER MARSH ASSOCIATED WITH DRAINAGES AND GEOTHERMAL AREAS, OAK WOODLAND AND SAVANNAH, AND NATIVE GRASSLANDS.

Policies

P1.2-1 Policies of the Land Use Element concerning design and development considerations to protect natural resources in areas of ecological sensitivity such as Mount Washington and the gliderport shall be supported.

P1.2-2 Review new development and geothermal resource exploitation in order to ensure the maximum protection of native tree species, riparian vegetation, important concentrations of natural plants and important wildlife habitat.

P1.2-3 Prior to approving specific development plans on undeveloped parcels, biological and wetland assessments to determine the presence or absence of populations of special-status species, sensitive natural communities, and wetland resources shall be conducted. Assessments shall:

- Be conducted by qualified specialists in botany, wildlife biology and wetland ecology.
- Include, as necessary, detailed field surveys conducted during the appropriate time of the year to permit detection of sensitive resources.
- Produce mitigation plans for impacts to biological resources, as necessary. These mitigation plans should include wildlife preservation management plans, where necessary, including adequate mitigation for loss of wildlife habitat components that are critical to maintenance of special-status and other important species.

10.1.4 APPLICABILITY TO THE PROPOSED PROJECT

The project site and offsite improvement areas do not support any riparian forest, marshland, or sensitive natural communities. A drainage ditch that would be characterized as an “other water” of the U.S./State exists next to project site; this ditch does not support wetlands or special-status species habitat. This ditch supports a few valley and coast live oak trees and they are shown on Figure 5. This Biological Resources Constraints Analysis has considered the proposed project’s effects on sensitive natural resources and where necessary, prescribes mitigation measures to offset any potential impacts.

Actions

A1.2-1 Amend the requirements of the Hillside Development Ordinance to specifically include preservation of forest lands.

A1.2-2 Develop and adopt guidelines to enforce regulations concerning assessment and mitigation of impacts to sensitive biological resources caused by new development.

10.1.5 OBJECTIVE OSC-1.3 CONSERVE CALISTOGA'S NATIVE TREES AND VEGETATION, WHICH ARE IMPORTANT BIOLOGICAL AND AESTHETIC RESOURCES WITHIN THE PLANNING AREA.

Policy

P1.3-1 Continue to implement and enforce the provision of the Tree Preservation Ordinance, particularly with regard to preservation of native trees of significant size.

10.1.6 APPLICABILITY TO THE PROPOSED PROJECT

There are a few sapling valley oak trees on the project site; these trees meet the City's definition of a "protected" tree. There are also a few sapling coast live oak trees on the project site; these trees may meet the City's DBH requirement to be considered protected trees (that is, 6 inches or greater DBH). There are a few non-native trees on the project site that may meet the criteria as protected trees under the City's ordinance (that is, greater than 12 inches DBH). There are also mature valley oak and coast live oak trees just outside the project site boundaries adjacent to the roadside ditch that meet the definition of protected tree. A tree survey completed by Bill Pramuk Updated January 31, 2020 determined that the project would result in the removal of eight trees. As such, a tree removal permit must be obtained from the City prior to the tree removal and mitigation would be necessary as prescribed by the City in this ordinance.

Actions

A1.3-1 Develop or adopt design guidelines that incorporate the specific requirements of the Tree Preservation Ordinance.

A1.3-2 Develop and adopt design guidelines for landscaping in new development that emphasize the use of native and drought-tolerant plant species to the extent possible.

A1.3-3 Continue to disseminate information to the public on the benefits of using native and drought tolerant plant species for both water conservation and native species preservation purposes.

A1.3-4 Consider implementation of a tree planting program to ensure the development and maintenance of an expanding "urban forest" in Calistoga.

10.1.7 OBJECTIVE OSC-1.4 COORDINATE WITH OTHER LEVELS OF GOVERNMENT AND INTERESTED AGENCIES TO PRESERVE NATURAL RESOURCES.

Policies

P1.4-1 The City shall support Napa County efforts to minimize the conversion of chaparral and forest to vineyards within the Planning Area. These include policies of the Napa County General Plan, such as enforcement of hardwood cutting criteria and preservation of Valley and Live Oak groves.

P1.4-2 The City shall encourage and support groups like the Land Trust of Napa County in their efforts to acquire and preserve natural resource open space.

10.1.8 APPLICABILITY TO THE PROPOSED PROJECT

Since the project site does not support any native plant or wildlife habitats, including chaparral and forest as mentioned above; nor does it support any significant biological resources (for example, wetlands, streams, or special-status species), these policies do not apply to the project. However, since there are significant biological resources adjacent to the project site (for example, listed plant species and a drainage ditch), mitigation measures are prescribed in this report that include protections of these resources and, if necessary, coordination with other government agencies.

Action

A1.4-1 Seek funding for open space acquisition from federal, State and regional agencies.

10.1.9 OBJECTIVE OSC-1.5 PREVENT THE DEGRADATION AND LOSS OF CALISTOGA'S WETLAND AREAS.

Policies

P1.5-1 The City shall protect and enhance the freshwater marsh areas associated with Calistoga's geothermal resources that provide habitat for endemic and unique species.

P1.5-2 The City shall recognize Calistoga's network of drainage ditches as important wetland resource in the Planning Area. Drainage ways shall be considered when evaluating impacts of proposed development on wetland resources.

P1.5-3 Wetlands shall be protected and enhanced. Adequate mitigation shall be provided where complete avoidance is not feasible.

P1.5-4 Any proposed modifications to wetlands shall require appropriate coordination with representatives of the California Department of Fish and Game (CDFG), and US Army Corps of Engineers (Corps) to ensure that the concerns and possible requirements of both agencies can be easily incorporated into the proposed plans.

10.1.10 APPLICABILITY TO THE PROPOSED PROJECT

There are no wetlands or marsh areas on the project site. From M&A's review of the site development plans and BKF's engineering plans, it appears that the Fairway Extension Ditch adjacent to the project site will not be adversely affected by the project. If, however, that is not the case and there are plans to impact or alter this drainage ditch, the appropriate permits from the Corps, the RWQCB, and the CDFW are required to be obtained prior to impacting these areas. Any mitigation measures required by these agencies would become conditions of project approval. See the Impacts and Mitigation Measures section of this report for details.

11. IMPACT ASSESSMENT AND PROPOSED MITIGATION

In this section potential impacts to sensitive biological resources are discussed, including special-status plants and animals, in accordance with Appendix G of the CEQA Guidelines. 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 October 2019 *Existing Site Conditions and Demolition Plan* and *Grading Plan* prepared by BKF Engineers, with an updated utility plan (Sheet C3.3) (received March 3, 2020), as well as Architecture Plans prepared by Charles Covell.

Appendix G, CEQA Checklist Items, are listed below. Where there would be significant impacts to checklist categories, these impacts and required mitigation measures are fully discussed below.

11.1 CEQA Checklist Items

Would the Proposed Project 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?

Yes, the site may provide habitat for special-status bats and/or nesting birds; impacts and mitigation measures are detailed below.

Would the Proposed Project 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?

No. There is no riparian habitat or sensitive natural community on the project site that has been identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.

Therefore, the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community.

Would the Proposed Project have a substantial adverse effect on state or federally protected "wetlands" (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No. There are no wetlands on the project site. There are state and federally protected waters/wetlands adjacent to the project site: a roadside drainage ditch (Fairway Extension Ditch) to the south and seasonal wetlands to the east-southeast. According to project civil drawings, it appears all offsite waters/wetlands will be avoided by the project. Regardless, in an abundance of caution, a mitigation measure is prescribed to avoid potential impacts to these features.

Would the Proposed Project 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?

No. The proposed project would not adversely impact or interfere with wildlife movement corridors and the project site does not provide a native wildlife nursery site. The project site is

located in downtown Calistoga, abuts development on three sides, to the north, west, and south, and does not serve as a wildlife corridor. The project site is part of a former gliderport and has existing businesses on the property (an art gallery, laundromat, small office building). The vacant, open areas of the project site are in near constant use by vehicle traffic: electric carts, traveling to and from the adjacent resort, criss cross the project site throughout the day, as do workers in cars and trucks entering the property to access nearby businesses. This site is not a local or regional wildlife corridor and its development would not impact that use.

Would the Proposed Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Yes. The project as proposed will require the removal of at least one protected tree. See the Impacts and Mitigation Measures for details. The project would not result in any other conflicts with local policies or ordinances protecting biological resources.

Would the Proposed Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No. There are no Habitat Conservation Plans or Natural Community Conservation Plans in force in the City of Calistoga.

11.2 Impacts and Mitigation Measures

11.2.1 IMPACT BIO-1. IMPLEMENTATION OF THE PROJECT MAY HAVE A POTENTIALLY SIGNIFICANT ADVERSE IMPACT ON PROTECTED TREES (POTENTIALLY SIGNIFICANT)

There are a few sapling valley oak trees on the project site; these trees meet the City's definition of a "protected" tree. There are also a few sapling coast live oak trees on the project site; these trees may meet the City's DBH requirement to be considered protected trees (that is, 6 inches or greater DBH). There are a few non-native trees on the project site that may meet the criteria as protected trees under the City's ordinance (that is, greater than 12 inches DBH). There are also mature valley oak and coast live oak trees just outside the project site boundaries adjacent to the Fairway Extension Ditch that meet the definition of a protected tree. Impacts to protected trees from the proposed project is a potentially significant adverse impact. This impact could be mitigated to a less than significant level pursuant to CEQA.

11.2.2 MITIGATION MEASURE BIO-1. MITIGATION FOR POTENTIAL IMPACTS TO PROTECTED TREES

A tree removal permit shall be obtained from the City prior to tree removal and mitigation would be necessary as prescribed by the City's Tree Ordinance.

In order to mitigate the removal of protected trees, the applicant shall include the planting of appropriately sized native trees as part of the project's proposed landscaping, in conformance with the City of Calistoga's Tree Ordinance. If onsite planting is not feasible, the applicant may be allowed to pay an in-lieu fee, at the sole discretion of the City. All requirements and restrictions contained in Chapter 19.01 of the City's Municipal Code shall be complied with, including the incorporation of replacement trees for those trees slated for removal, protection of

trees to remain around the project boundary, as well as any recommendations of the project arborist including those set forth in the Tree Protection Plan.

This mitigation measure would reduce the project's impact on protected trees to a level considered less than significant pursuant to CEQA.

11.2.3 IMPACT BIO-2. IMPLEMENTATION OF THE PROJECT MAY HAVE A POTENTIALLY SIGNIFICANT ADVERSE IMPACT ON THE ENDANGERED CALISTOGA POPCORN FLOWER (*PLAGIOBOTHRYIS STRICTUS*) AND NAPA BLUE GRASS (*POA NAPENSIS*) (POTENTIALLY SIGNIFICANT)

Calistoga popcorn flower (*Plagiobothrys strictus*) is a State-listed threatened and federally listed endangered plant species that is limited in distribution to three known extant occurrences (CNPS 2020). This plant does not occur on the project site nor in areas where offsite improvements are proposed, and the project site and offsite improvements areas do not provide habitat suitable for its existence; however, a large population of this listed plant is known to occur between 750-1,000 feet east-southeast of the project site (Figure 5). Napa blue grass (*Poa napensis*) is a State-listed and federally listed endangered plant species that is also known to occur between 750-1,000 feet east-southeast of the project site. This grass does not occur on the project site or in the offsite improvement areas.

Pacific Union College Professor and Biologist, Aimee Wyrick-Brownworth has been studying the Calistoga popcorn flower at the gliderport property for the past eight years. Ms. Wyrick-Brownworth believes the project's proposal for an outfall structure which will discharge *treated* surface runoff onto the gliderport grasslands will be beneficial to the popcorn flower. According to Ms. Wyrick-Brownworth, the popcorn flower produces more seed under wet conditions and water also helps to disperse the seeds. Thus, the additional water proposed via the outfall, as long as it is treated and free of pollutants, will be beneficial to the popcorn flower, especially in drought years, since it will ensure the populations thrive. Since Napa blue grass is also a wetland plant, with an obligate (OBL) wetland status, contributions of treated runoff would likely benefit this grass as well.

The project engineers, BKF, have prepared a Stormwater Control Plan (SWCP) consistent with the Bay Area Storm Water Management Agencies Association (BASMAA) *Post Construction Manual: Design Guidance for Storm Water Treatment and Control for Projects in Marin, Sonoma, Napa, and Solano Counties* (January 2019). This project proposes to integrate storm water treatment facilities which capture site runoff during light precipitation events in accordance with the objectives of the BASMAA guidance. The SWCP proposes stormwater treatment facilities that will double as stormwater detention facilities to attenuate runoff. Thus, runoff will be filtered through bioretention areas and landscaped planters prior to being metered through the outfall and discharged offsite.

If the storm water that is discharged from the proposed outfall structure is not properly treated to remove contaminant and pollutants, discharge from this storm water outfall may have a *potentially significant impact* on the offsite populations of these threatened and endangered plant species. Implementation of mitigation would reduce this impact to a less than significant level.

11.2.4 MITIGATION MEASURE BIO-2. MITIGATION FOR POTENTIAL IMPACTS TO CALISTOGA POPCORN FLOWER AND NAPA BLUE GRASS

In order to ensure proper treatment of the runoff to protect the two listed plant species offsite, *enhanced* treatment of the runoff discharged via the new stormdrain outfall shall also be incorporated into the SWCP. This enhanced treatment shall include, but is not necessarily limited to the following to ensure the health of the popcorn flower and Napa blue grass:

- Pollutants and contaminants shall be monitored with a “real-time water quality monitoring system”² and shall fall below detectable levels.
- Filtration shall be incorporated into all drains within the parking area to remove any oils, lubricant, and other fuels and liquids.
- Landscaping maintenance shall utilize only natural fertilizers and shall preclude the application of pesticides and herbicides.

Additionally, prior to installing the outfall structure and initiating work on the EVA road, orange construction fencing and signage shall be installed along the eastern perimeter of the EVA road delineating the area immediately offsite to the east-southeast as environmentally sensitive and precluding access by construction workers. Exhibit A shows the recommended location for placement of orange construction fencing. Placement of orange fencing shall be verified by a qualified biologist to ensure that all sensitive habitats are adequately protected during construction. Upon completion of construction work all orange fencing shall be removed. Permanent signage shall be installed east of the EVA road directing users to stay on the road due to environmentally sensitive areas offsite.

This mitigation measure would reduce the project’s impact on the offsite populations of Calistoga popcorn flower and Napa blue grass to a level considered less than significant pursuant to CEQA.

11.2.5 IMPACT BIO-3. IMPLEMENTATION OF THE PROJECT MAY HAVE A POTENTIALLY SIGNIFICANT ADVERSE IMPACT ON SPECIAL-STATUS BATS (POTENTIALLY SIGNIFICANT)

The pallid bat is a California “species of special concern.” Species of special concern are considered “rare” and protected pursuant to CEQA. While this bat is not known to occur on the project site, no formal bat surveys have been conducted and the buildings on the project site may provide potential maternity and roosting habitat for this species. Noise and grading disturbance adjacent to maternity and roosting habitat could impact bats. Impacts to pallid bat are regarded as potentially significant pursuant to CEQA. Implementation of mitigation would reduce this impact to a less than significant level.

11.2.6 MITIGATION MEASURE BIO-3. MITIGATION FOR POTENTIAL IMPACTS TO SPECIAL-STATUS BATS

In order to avoid impacts to roosting pallid bat or other special-status bats, building removal shall only be conducted during seasonal periods of bat activity: between August 31 and October 15, when bats would be able to fly and feed independently, and between March 1 and April 1st to

² <https://ieeaccess.ieee.org/featured-articles/design-smart-sensors-real-time-water-quality-monitoring/>

avoid hibernating bats, and prior to the formation of maternity colonies. A qualified biologist, one with at least two years of experience surveying for bats, shall do preconstruction surveys within 14 days of building demolition. If bat roosts are found, then a plan shall be developed for removal and exclusion, in conjunction with the CDFW.

If building removal must occur outside of the seasonal activity periods mentioned above (i.e., between October 16 and February 28/29, or between April 2 and August 30), then a qualified biologist, one with at least two years of experience surveying for bats, shall do preconstruction surveys within 14 days of building demolition. If roosts are found, a determination shall be made whether there are young (i.e., a maternity site). If a maternity site is found, impacts to the maternity site will be avoided by establishment of a fenced, non-disturbance buffer until the young have reached independence, as determined by the qualified biologist. The size of the buffer zone shall be determined by the qualified bat biologist at the time of the surveys. If the qualified biologist finds evidence of roosting bats but not a maternity site with young during the surveys, then a plan shall be developed for removal and exclusion, in conjunction with the CDFW.

This mitigation measure would reduce the project's impact to special-status bats to a level considered less than significant.

11.2.7 IMPACT BIO-4. IMPLEMENTATION OF THE PROJECT MAY RESULT IN ADVERSE IMPACTS TO NESTING BIRDS (POTENTIALLY SIGNIFICANT)

Passerine birds (song birds) could nest in the trees, shrubs, grass, and landscape vegetation onsite. Song birds including their eggs and young are protected pursuant to California Fish and Game Code Section 3503, as well as the Migratory Bird Treaty Act. Any project-related impacts to these species, their eggs or young would be considered a significant adverse impact. Potential impacts to these species from the project include "take" (to kill) or disturbance to nesting birds that results in inattentiveness or abandonment of nests, either that can cause egg failure or the death of nestlings. In the absence of surveys conducted the year that the project would commence, impacts to nesting song birds from the project are regarded as potentially significant pursuant to CEQA. Implementation of mitigation would reduce this impact to a less than significant level.

11.2.8 MITIGATION MEASURE BIO-4. MITIGATION FOR POTENTIAL IMPACTS TO NESTING BIRDS

To avoid impacts to most nesting birds known from the region, nesting surveys shall be conducted no more than 15 days prior to commencing with work if this work would commence between February 1 and August 31. The nesting survey shall include an examination of all trees, shrubs, and grassland within the project site and within 300 feet of the project site (i.e., within a zone of influence of nesting birds). 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 to 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 this mitigation measure would reduce impacts to nesting birds to a level regarded as less than significant pursuant to CEQA.

11.2.9 IMPACT BIO-5. IMPLEMENTATION OF THE PROJECT MAY HAVE A POTENTIALLY SIGNIFICANT INDIRECT IMPACT ON OFFSITE WATERS OF THE UNITED STATES AND/OR STATE AND/OR CDFW JURISDICTIONAL AREAS (POTENTIALLY SIGNIFICANT)

The project is not anticipated to impact “waters” of the U.S. or State (which include wetlands and other waters) as regulated by the Corps pursuant to Section 404 Clean Water Act and by the RWQCB pursuant to Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. Waters of the State are also subject to the regulatory authority of the CDFW within defined tributaries exhibiting a bed, bank, and channel, and including associated riparian vegetation. The project will not impact CDFW-regulated stream channels/drainages. Therefore, no Clean Water Act authorizations are warranted from the Corps or RWQCB pursuant to Sections 404 and 401 of the Clean Water Act, respectively, or from CDFW pursuant to Section 1602 of Fish and Game Code. However, if there are unexpected modifications to the project, and impacts to waters of the United States/State are unavoidable, these unexpected impacts can be reduced to less-than-significant levels through various means, including avoidance or minimization of impacts to the extent practicable, and mitigation compensation.

While impacts to offsite “waters of the United States/State” and CDFW-regulated drainages are unlikely, indirect impacts to offsite waters are nonetheless regarded as potentially significant. Indirect impacts to waters of the U.S./State and CDFW-regulated stream channels could be mitigated to a level considered less than significant pursuant to CEQA.

11.2.10 MITIGATION MEASURE BIO-5. AVOIDANCE MEASURES FOR POTENTIAL INDIRECT IMPACTS TO OFFSITE WATERS OF THE UNITED STATES AND/OR STATE AND/OR CDFW JURISDICTIONAL AREAS

Indirect impacts to adjacent, offsite waters of the U.S./State shall be minimized to the maximum extent practicable by the use of best management practices (BMPs) that are installed prior to

earth-work to protect waters of the U.S./State outside of the designated work areas to ensure that there are no inadvertent impacts to waters of the U.S./State, and to downstream receiving waters within the watershed. These practices can include installing orange construction fencing, silt fencing, wildlife friendly hay wattles (that is, no monofilament netting), gravel wattles, and other protective measures between project activities and preserved offsite waters of the U.S./State. Exhibit A shows where orange construction fencing and other appropriate BMPs shall be installed along the southern edge of the offsite improvement area and the project site to protect Fairway Extension Ditch offsite, as well this ditch's tree canopy. This exhibit also shows where orange construction fencing shall be installed along the eastern edge of the proposed EVA road to avoid impacting offsite wetlands during construction of the EVA road or other aspects of the project. Prior to the implementation of the construction project, a biological monitor shall inspect installation of BMPs to ensure that offsite waters are protected. BMPs shall thereafter be routinely inspected by the construction manager to ensure they remain in place for the duration of the construction project. Upon completion of project construction all orange fencing shall be removed along with any temporary BMPs.

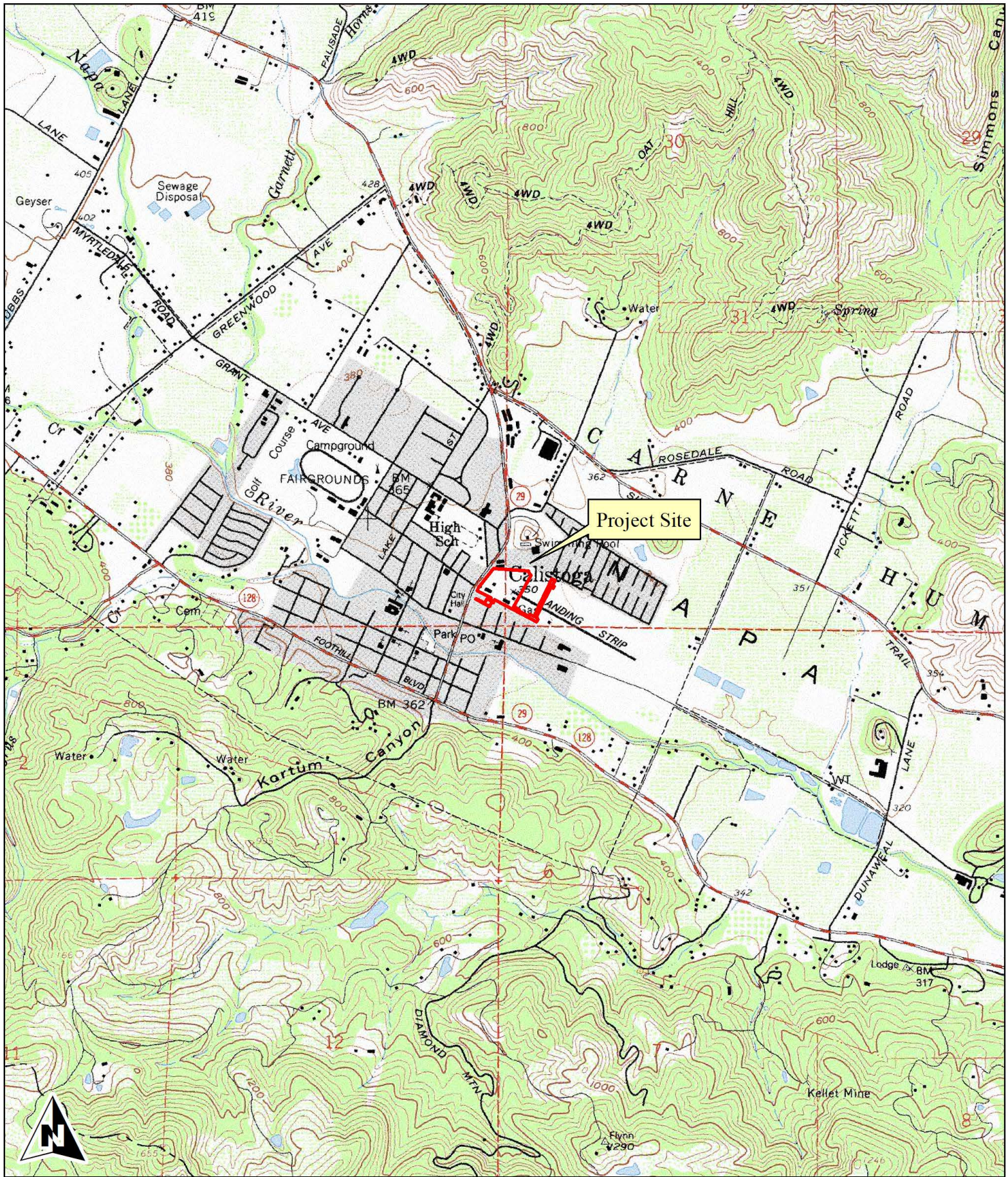
If it is determined that it will be necessary to impact waters or CDFW regulated drainages, for example, if it will be necessary to install an outfall structure in the offsite drainage ditch, permit applications to the Corps and the RWQCB, and possibly the CDFW, depending on the impact and feature to be impacted, would be necessary prior to initiating the impact, and all requirements stipulated in permits/ authorizations issued by these agencies shall be followed by the project applicant.

In the unlikely event that impacts to offsite waters of United States/State and/or CDFW-regulated stream channels are unavoidable, implementation of the measures described above would reduce potentially significant impacts to a level considered less-than-significant pursuant to the CEQA.

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

Figure 2. Veranda at Indian Springs Project Site
Location Map
Calistoga, California

38.580337 -122.576655
Land Grant
7.5-Minute Calistoga quadrangle
HUC08 Watershed CA: San Pablo Bay
Topography Source: USGS
Map Preparation Date: March 12, 2020



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

Figure 3. Aerial Photograph of the
Veranda at Indian Springs Project Site
Calistoga, California

Aerial Photograph Source: ESRI
Map Preparation Date: May 5, 2020

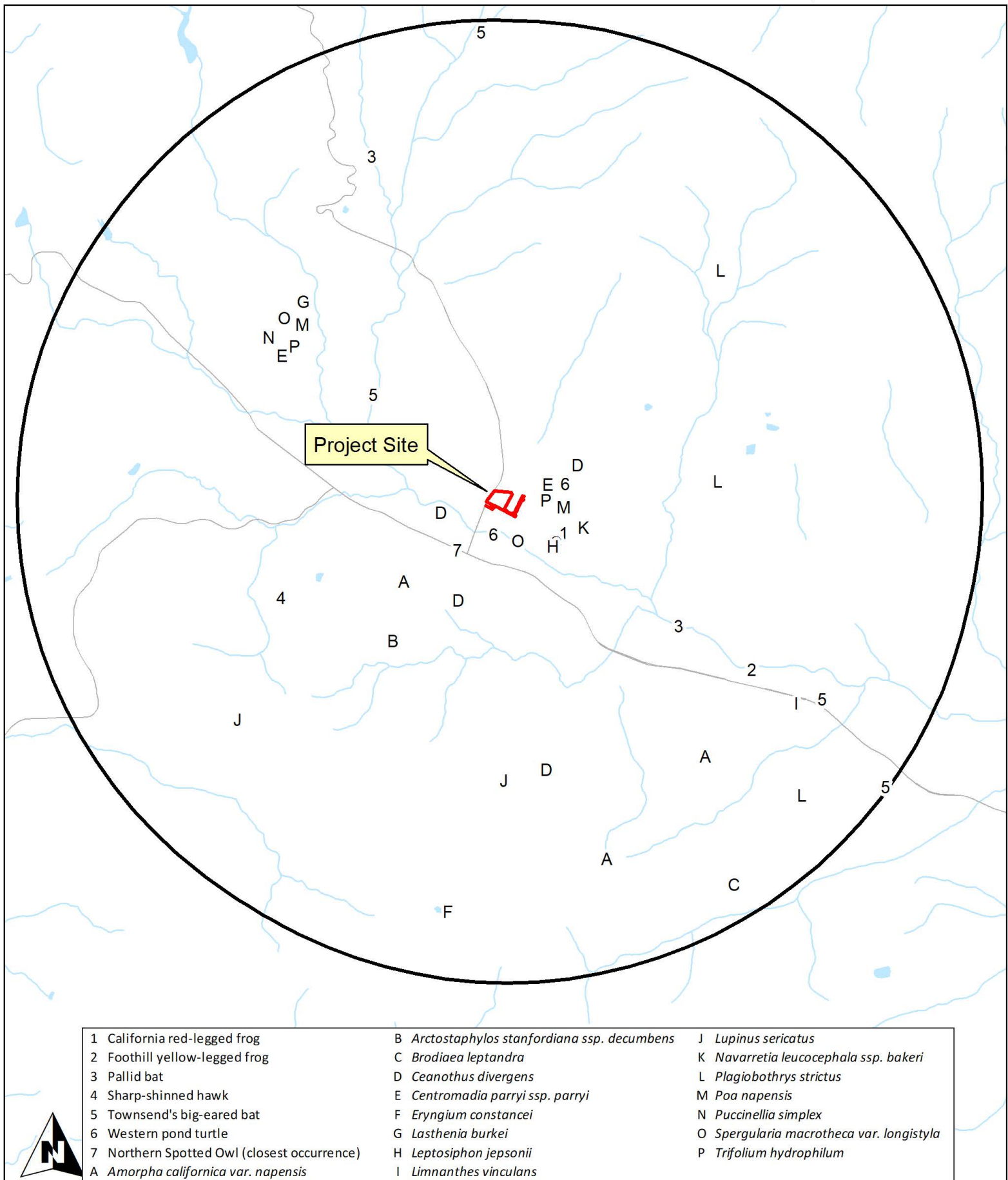




Figure 5. Plant Communities/Vegetation Types of the
Veranda at Indian Springs Project Site
Calistoga, California

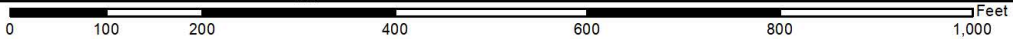


Table 1

Plants Observed in February and March 2020 at the Veranda Project Site

Angiosperms - Dicots

Anacardiaceae

* <i>Schinus molle</i>	Peruvian pepper tree
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Apiaceae

* <i>Daucus carota</i>	Queen Anne's lace
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* <i>Foeniculum vulgare</i>	Sweet fennel
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Asteraceae

* <i>Calendula arvensis</i>	Field-marigold
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* <i>Carduus pycnocephalus subsp. pycnocephalus</i>	Italian thistle
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* <i>Cichorium intybus</i>	Chicory
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* <i>Dittrichia graveolens</i>	Stinkwort
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* <i>Hypochaeris glabra</i>	Smooth cat's-ear
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* <i>Hypochaeris radicata</i>	Rough cat's-ear
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* <i>Lactuca serriola</i>	Prickly lettuce
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* <i>Sonchus oleraceus</i>	Common sow-thistle
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Brassicaceae

* <i>Hirschfeldia incana</i>	Short-podded mustard
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* <i>Raphanus sativus</i>	Wild radish
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Euphorbiaceae

<i>Croton setiger</i>	Turkey mullein
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Fabaceae

* <i>Medicago polymorpha</i>	California burclover
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* <i>Vicia sativa</i>	Common vetch
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* <i>Vicia sp.</i>	Vetch
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Fagaceae

<i>Quercus agrifolia</i> var. <i>agrifolia</i>	Coast live oak
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<i>Quercus lobata</i>	Valley oak
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Geraniaceae

* <i>Erodium botrys</i>	Broad-leaf filaree
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* <i>Erodium cicutarium</i>	Red-stem filaree
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* <i>Erodium moschatum</i>	White-stem filaree
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* <i>Geranium dissectum</i>	Cut-leaf geranium
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Lythraceae

* <i>Lythrum hyssopifolia</i>	Hyssop loosestrife
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Malvaceae

* <i>Malva parviflora</i>	Cheeseweed
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Onagraceae

<i>Epilobium brachycarpum</i>	Summer cottonweed
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Plantaginaceae

* <i>Plantago lanceolata</i>	English plantain
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Table 1**Plants Observed in February and March 2020 at the Veranda Project Site**

Polygonaceae	
* <i>Polygonum aviculare</i>	Common knotweed
* <i>Rumex crispus</i>	Curly dock
Rosaceae	
* <i>Prunus cerasifera</i>	Cherry plum
<i>Prunus sp.</i>	Prunus
* <i>Rubus armeniacus</i>	Himalayan blackberry
Scrophulariaceae	
<i>Scrophularia californica</i>	California figwort
Angiosperms -Monocots	
Juncaceae	
<i>Juncus balticus subsp. ater</i>	Baltic rush
<i>Juncus bufonius</i>	Toad rush
Poaceae	
* <i>Avena barbata</i>	Slender wild oat
* <i>Bromus hordeaceus</i>	Soft chess
* <i>Cortaderia jubata</i>	Pampas grass
* <i>Cynodon dactylon</i>	Bermudagrass
<i>Elymus triticoides</i>	Creeping wildrye
* <i>Phalaris aquatica</i>	Harding grass
* <i>Poa annua</i>	Annual bluegrass
* <i>Stipa miliacea var. miliacea</i>	Smilo grass

Table 2
Wildlife Observed in February and March 2020 at the Veranda Project Site

Reptiles	
Western fence lizard	<i>Sceloporus occidentalis</i>
Birds	
Great blue heron	<i>Ardea herodias</i>
Mourning dove	<i>Zenaida macroura</i>
Common raven	<i>Corvus corax</i>
Yellow-rumped warbler	<i>Setophaga coronata</i>
White-crowned sparrow	<i>Zonotrichia leucophrys</i>
House finch	<i>Haemorhous mexicanus</i>
House sparrow	<i>Passer domesticus</i>
Mammals	
Black-tailed jackrabbit	<i>Lepus californicus</i>
Botta's pocket gopher	<i>Thomomys bottae</i>

Table 3

Special-Status Plant Species Known to Occur Within Three Miles of the Veranda at Indian Springs Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Apiaceae					
<i>Eryngium constancei</i> Loch Lomand button-celery	Fed: FE State: CE CNPS: Rank 1B	April-June	Vernal pools.	Closest record is 2.5 miles south from the project site from 1996 (Occurrence No. 2).	None. No Suitable habitat onsite. No impact expected.
Asteraceae					
<i>Centromadia parryi parryi</i> Pappose tarplant	Fed: - State: - CNPS: Rank 1B.2	May-November	Coastal prairie; meadows and seeps; marshes and swamps; vernal wet grassland (sometimes alkaline).	Closest record is a 1994 sighting approximately 0.5-mile northeast of the project site (Occurrence No. 15).	None. No Suitable habitat onsite. No impact expected.
<i>Lasthenia burkei</i> Burke's goldfields	Fed: FE State: CE CNPS: Rank 1B.1	April-June	Meadows and seeps (mesic); vernal pools.	Closest record is 1.6 miles northwest from the project site from 1929 (Occurrence No. 14).	None. No Suitable habitat onsite. No impact expected.
<i>Lessingia hololeuca</i> Woolly-headed lessingia	Fed: - State: - CNPS: Rank 3	June-October	Coastal scrub; lower montane coniferous forest; valley and foothill grassland; [clay, serpentinite].	Closest record is approximately 1.7 miles north of the project site at Myrtdale and Tubbs Road.	None. No suitable habitat on the project site. No impact expected.
Boraginaceae					
<i>Plagiobothrys strictus</i> Calistoga popcornflower	Fed: FE State: CT CNPS: Rank 1B.1	March-June	Broad-leaved upland forest; meadows; valley and foothill grassland; [alkaline areas near thermal springs]. Known from three extant populations (CNPS 2020).	Known to occur just east of the project site, ~800 feet east.	None. Project site does not provide suitable habitat. See text. No impact expected.

Table 3

Special-Status Plant Species Known to Occur Within Three Miles of the Veranda at Indian Springs Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Caryophyllaceae					
<i>Spergularia macrotheca longistyla</i> Long-styled sand-spurrey	Fed: - State: - CNPS: Rank 1B.2	February-May	Alkaline marshes, mud flats, meadows, hot springs. Occurs at elevations less than 200 M.	Closest record is on the project site from 1975 (Occurrence No. 19).	None. No Suitable habitat onsite. No impact expected.
Ericaceae					
<i>Arctostaphylos stanfordiana decumbens</i> Rincon manzanita	Fed: - State: - CNPS: Rank 1B.1	February-April	Chaparral (rhyolitic).	Closest record is 1.1 miles southwest from the project site from 2008 (Occurrence No. 14).	None. No manzanita onsite. No impact expected.
Fabaceae					
<i>Amorpha californica napensis</i> Napa false indigo	Fed: - State: - CNPS: Rank 1B.2	April-July	Broadleaved upland forest (openings); chaparral, cismontane woodland. 150-2000 m.	Closest record is 0.7 mile southwest from the project site from 1980 (Occurrence No. 61).	None. No Suitable habitat onsite. No impact expected.
<i>Astragalus breweri</i> Brewer's milkvetch	Fed: - State: - CNPS: Rank 4	April-June	Chaparral; cismontane woodland; meadows; valley and foothill grassland; [often serpentinite].	Closest record is approximately 1.7 miles north of the project site at Myrtdale and Tubbs Road.	None. No suitable habitat on the project site. No impact expected.
<i>Lupinus sericatus</i> Cobb Mountain lupine	Fed: - State: - CNPS: Rank 1B	March-June	Chaparral; cismontane woodland; lower coniferous forest.	Closest record is 1.6 miles south from the project site from 1982 (Occurrence No. 4).	None. No Suitable habitat onsite. No impact expected.
<i>Trifolium hydrophilum</i> Saline clover	Fed: - State: - CNPS: Rank 1B.2	April-June	Marshes and swamps; valley and foothill grassland (mesic, alkaline); vernal pools. 0-300 m.	Closest record is 0.1 miles east from the project site from 2000 (Occurrence No. 18).	None. No Suitable habitat onsite. No impact expected.

Table 3

Special-Status Plant Species Known to Occur Within Three Miles of the Veranda at Indian Springs Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Limnanthaceae					
<i>Limnanthes vinculans</i> Sebastopol meadowfoam	Fed: FE State: CE CNPS: Rank 1B.1	April-May	Meadows (mesic); vernal pools.	Closest record is 2.2 miles southeast from the project site from 2010 (Occurrence No. 53).	None. No Suitable habitat onsite. No impact expected.
Poaceae					
<i>Poa napensis</i> Napa bluegrass	Fed: FE State: CE CNPS: Rank 1B	May-August	Meadows (alkaline, near hot springs).	Closest record is 0.3 mile east from the project site from 2018 (Occurrence No. 3).	None. No Suitable habitat onsite. See text. No impact expected.
<i>Puccinellia simplex</i> California alkali grass	Fed: State: CNPS: Rank 1B.2	March-June	Meadows and seeps, chenopod scrub, valley and foothill grasslands, vernal pools. Alkaline, vernal mesic. Sinks, flats, and lake margins. 1-915 m.	Closest record is 1.7 miles northwest from the project site from 1955 (Occurrence No. 62).	None. No Suitable habitat onsite. No impact expected.
Polemoniaceae					
<i>Leptosiphon jepsonii</i> Jepson's leptosiphon	Fed: - State: - CNPS: Rank 1B.2	March-May	Chaparral; cismontane woodland (usually volcanic).	Closest record is on the project site from 1893 (Occurrence No. 6).	None. No Suitable habitat onsite. No impact expected.
<i>Navarretia leucocephala bakeri</i> Baker's navarretia	Fed: - State: - CNPS: Rank 1B.1	May-July	Cismontane woodland; lower montane coniferous forest; meadows (mesic); valley and foothill grassland; vernal pools.	Closest record is on the project site from 1903 (Occurrence No. 14).	None. No Suitable habitat onsite. No impact expected.

Table 3

Special-Status Plant Species Known to Occur Within Three Miles of the Veranda at Indian Springs Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Rhamnaceae					
<i>Ceanothus divergens</i>	Fed: -	March-April	Chaparral (serpentine or volcanic).	Closest record is 0.2 mile west from the project site (Occurrence No. 26).	None. No Suitable habitat onsite. No impact expected.
<i>Calistoga ceanothus</i>	State: - CNPS: Rank 1B.2				
Themidaceae					
<i>Brodiaea leptandra</i>	Fed: -	May-July	Broadleafed upland forest; chaparral; cismontane woodland; lower montane coniferous forest; valley and foothill grassland. Elevation 110 - 915 meters.	Closest record is from 1887 (Occurrence No. 14) in the general vicinity of Calistoga. Exact location unknown.	None. No Suitable habitat onsite. No impact expected.
Narrow-anthered California brodiaea	State: - CNPS: Rank 1B.2				

***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)
 Rank 3.2 - Plants about which we need more information (Review List)
 Rank 4 - Plants of limited distribution - a watch list

Table 4
Special-Status Wildlife Known to Occur Within 3 Miles of the Veranda at Indian Springs Project Site

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Insects				
Western bumble bee <i>Bombus occidentalis</i>	Fed: State: CC Other:	Inhabits grassland with select food plants: Melilotus, Cirsium, Trifolium, Centaurea, Chrysothamnus, and Eriogonum. Typically nests underground in abandoned rodent burrows or other cavities.	Closest known record is on the project site from 1953 (Occurrence No. 172).	None. Site is greatly disturbed. Few flowering forbs onsite. No ground squirrel burrows. No impact expected.
Amphibians				
California red-legged frog <i>Rana draytonii</i>	Fed: FT State: CSC 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 known record is on the project site from 1915 (Occurrence No. 1601).	None. No creeks or drainages onsite. No impact expected.
Foothill yellow-legged frog <i>Rana boylei</i>	Fed: -- State: CC Other:	Found in partially shaded, shallow streams with rocky substrates. Requires perennial pools or flowing water. Needs some cobble-sized rocks as a substrate for egg laying. Requires water for 15 weeks for larval transformation.	Closest known record is 1.9 miles southeast of the project site from 1943 (Occurrence No. 1848).	None. No creeks or drainages onsite. No impact expected.
Reptiles				
Western pond turtle <i>Emys marmorata</i>	Fed: - State: CSC 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 known record is 0.1 mile south of the project site from 2017 (Occurrence No. 455).	None. No creeks or rivers onsite. Uplands greatly disturbed and do not provide nesting habitat. No impact expected.

Table 4
Special-Status Wildlife Known to Occur Within 3 Miles of the Veranda at Indian Springs Project Site

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Mammals				
Townsend's big-eared bat <i>Corynorhinus townsendii townsendii</i>	Fed: -- State: CSC Other: -	Occurs in humid coastal regions of northern and central California. Roosts in limestone caves, lava tubes, mines, and buildings. Extremely sensitive to disturbance.	Closest known record is 1.0 mile northwest of the project site from 1955 (Occurrence No. 622).	Low-None. Extremely susceptible to disturbance. Unlikely to occur. Surveys necessary prior to building demolition to rule out.
Pallid bat <i>Antrozous pallidus</i>	Fed: - State: CSC 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 known record is a 2017 observation 1.3 miles northwest of the project site where it was observed roosting with other bat species (Occurrence No. 436).	Low. However, buildings should be surveyed prior to demolition. See text.

***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