# Huffman-Broadway Group, Inc.

ENVIRONMENTAL REGULATORY CONSULTANTS

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September 18, 2023

Ken Hayes, AIA Hayes Group Architects, Inc. 2657 Spring Street Redwood City, CA 94063

### Subject: Biological Site Assessment for 200 Keith Way, Inverness, Marin County, California

Dear Mr. Hayes:

Huffman-Broadway Group, Inc. (HBG) has completed a Biological Site Assessment report for your proposed additions to your home on an approximately 3.8-acre residential parcel at 200 Keith Way in Inverness, Marin County, California. The evaluation complies with requirements of Item #36, Biological Site Assessment, in Marin County's list of project application materials, County guidelines as spelled out in the document "Preparation of Biological Site Assessments" and clarifications provided in conversations with you regarding biological information that is needed at this time.

As stated in the Marin County guidelines for preparation of Biological Site Assessments, the objective of this study was to (1) determine whether there are any sensitive biological resources such as wetlands, streams, or habitats for special status species in proximity to a proposed project; (2) accurately map any biological constraints on a site plan for the project; and (3) to determine whether the proposed project would result in potentially significant adverse biological impacts pursuant to the California Environmental Quality Act (CEQA). Our analysis included: (1) a review of the habitat characteristics of the site and species of plants and animals present on the site or expected to utilize the site; (2) review of the California Natural Diversity Data Base (CNDDB) to determine if any populations of endangered, threatened, or rare species have occurred historically or are currently known to exist in the project vicinity; (3) a field survey of the site by an HBG biologist, and (4) an evaluation of whether the proposed project has the potential to result in impacts to sensitive habitats or special status species. The study included a general reconnaissance of the site by HBG Senior Environmental Scientist Gary Deghi on October 8, 2019 to determine environmental constraints and a subsequent field review on August 25, 2023 after the applicant/architect had completed a site plan for the proposed work.

### 1.0 PROPOSED PROJECT

The subject property is assessor parcel No. 112-112-10 at 200 Keith Way in Inverness, Marin County, California. The approximately 3.8-acre site is currently developed with a 1,958 square-

foot, single-family residence along with wood decks, concrete patio and garden, carport, septic system, a small shed downhill from the main house, and access from Keith Way. The landowner/applicant and architect (Ken Hayes of Hayes Group Architects) has prepared plans for a project at the site to include an addition to the house that will include improvements to the dining room and kitchen representing a 734-foot expansion and will also include construction of a 1,089 square-foot Accessory Dwelling Unit (ADU). The kitchen expansion will extend into the patio and garden on the south side of the existing house. The dining room addition will extend into a previously-cleared area on the east side of the house, and the detached ADU will be constructed within the previously-cleared area to the west of the main house. The project will also require an expansion of the existing septic leach field which is currently located in a cleared area to the west of the main house. The expanded leach field will be located to the north of the ADU. The site plan is included within an application package submitted to the County of Marin under separate cover.

### 2.0 REGULATORY BACKGROUND

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

### 2.1 Sensitive Habitats

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

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

As recently defined by the United States Supreme Court in *Sackett v. Environmental Protection Agency*, the statutory term, "Waters of the United States," includes relatively permanent, standing, or continuously flowing bodies of water forming geographical features that are described in ordinary parlance as streams, oceans, rivers, and lakes, as well as wetlands that are, as a practical matter, indistinguishable from waters of the United States. Wetlands may come within this definition despite temporary interruptions in surface connection may sometimes occur because of phenomena like low tides or dry spells. "Neighboring" wetlands may not qualify, however, unless they are connected to waters such as streams, oceans, rivers, and lakes.

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

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

Lakes, Streams, Riparian Habitats, Sensitive Plant Communities. CDFW regulates lakes and streams under Section of 1602 of the California Fish and Game Code (FGC). CDFW's regulations implementing the FGC define the relevant rivers, streams, and lakes over which the agency has jurisdiction to constitute "all rivers, streams, lakes, and streambeds in the State of California, including all rivers, streams and streambeds which have intermittent flows of water." (Title 14 *California Code of Regulations* [CCR] § 720). The CDFW takes jurisdiction under its Lake and Streambed Alteration Agreement Program for any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.

The CDFW does not have a methodology for the identification and delineation of the jurisdictional limits of streams except for the general guidance provided in *A Field Guide to Lake and Streambed Alteration Agreements, Section 1600-1607 California Fish and Game Code* (CDFG 1994). In making jurisdictional determinations, CDFW staff typically rely on field observation of physical features that provide evidence of water flow through a bed and channel such as observed flowing water, sediment deposits and drift deposits, and that the stream supports fish or other aquatic life. Riparian habitat is not specifically defined by the Fish and Game Code but CDFW takes jurisdiction over areas within the flood plain of a body of water where the

vegetation (grass, sedges, rushes, forbs, shrubs, and trees) is supported by the surface or subsurface flow.

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

**California Coastal Act/Marin County LCP**. The project site is within the Marin County Coastal Zone and also subject to relevant policies of the Marin County Local Coastal Program (LCP). The primary goal of the LCP is to ensure that the local government's land use plans, zoning ordinances, zoning district maps, and implementing actions meet the requirements of, and implement the provisions and policies of, the California Coastal Act (CCA) at the local level.

Policies of the Unit 1 LCP and Unit II LCP (which included the community of Point Reyes Station) (County of Marin 1981) have been superseded by a recently updated LCP. The new components of Marin's LCP include many new and improved policies and code provisions designed to protect natural resources, preserve agricultural uses, and clarify permit processes among other benefits. Wetlands and streams in California's coastal zone are regulated under the CCA which is administered by the California Coastal Commission (CCC). Streams and wetlands are protected as Environmentally Sensitive Habitat Areas (ESHA) as defined by the CCA.

### 2.2 Special Status Species

**Federal Endangered Species Act (FESA).** The FESA is intended to help protect the ecosystems upon which endangered and threatened species depend. The FESA establishes an official listing process for plants and animals considered to be in danger of extinction; requires development of specific plans of action for the recovery of listed species; and restricts activities perceived to harm or kill listed species or affect critical habitat. The FESA prohibits the "take" of endangered or threatened wildlife species. "Take" can be defined as any act that kills or injures a federally listed species, including significant habitat modification or degradation. The FESA also requires federal agencies to ensure that their actions do not jeopardize the continued existence of listed species or adversely modify critical habitat, and to accomplish this in consultation with the U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS) pursuant to Section 7 of the FESA. If formal consultation is required, USFWS or NMFS will issue a biological opinion stating whether the permit action is likely to jeopardize the continued existence of the listed species, recommending reasonable and prudent measures to ensure the continued existence of the species, and authorizing incidental take of the species.

**California Endangered Species Act (CESA).** CDFW administers the California Endangered Species Act (CESA). CESA directs agencies to consult with CDFW on projects or actions that could affect state listed species, directs CDFW to determine whether jeopardy would occur, and allows CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. The CESA prohibits the taking of state-listed endangered or threatened plant and wildlife species. CDFW exercises authority over mitigation projects involving statelisted species, including those resulting from CEQA mitigation requirements. CDFW may authorize taking if an approved habitat management plan or management agreement that avoids or compensates for possible jeopardy is implemented. CDFW requires preparation of mitigation plans in accordance with published guidelines.

California Environmental Quality Act Review. Special status species to be evaluated in reviews pursuant to the California Environmental Quality Act (CEQA) include those species listed by the federal and state governments as endangered, threatened, or rare or candidate species for these lists. Endangered or threatened species are protected by the federal Endangered Species Act of 1973 as amended, the California Native Plant Protection Act of 1977, and the California Endangered Species Act of 1970. The California Environmental Quality Act (CEQA) provides additional protection for unlisted species that meet the "rare" or "endangered" criteria defined in Title 14, California Code of Regulations Section 15380. Special status species also include those species listed by CDFW as Species of Special Concern (species that face extirpation in California if current population and habitat trends continue), those listed as Fully Protected by CDFW (a designation that provides additional protection to those animals that were rare or faced possible extinction), and bird species designated as Bird Species of Conservation Concern by the USFWS. These state and federal Species of Special Concern must be evaluated in the context of evaluation under CEQA. Special status species included in CEQA review also include bat species protected by the California Fish and Game Code and that have been designated with conservation priority by the Western Bat Working Group. CEQA also requires evaluation of impacts to plant species on California Rare Plant Rank (CRPR) Lists 1 and 2.

### 2.3 Protections for Migratory Birds

The Migratory Bird Treaty Act (MBTA) implements international treaties devised to protect migratory birds and any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. The regulations governing migratory bird permits are in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California also incorporates the protection of nongame birds and birds of prey, including their nests, in Sections 3800, 3513, 3503, and 3503.5 of the California Fish and Game (CFG) Code. Section 3503 of the Fish and Game Code makes it unlawful to take, possess, or needlessly destroy the nests or eggs of any bird. Section 3503.5 makes it unlawful to take or possess birds of prey (hawks, eagles, vultures, owls) or destroy their nests or eggs.

To ensure compliance with the above regulations, bird nesting surveys are generally required if construction work requires vegetation removal during the bird nesting season. CDFW generally considers the nesting season to be from February 1 to August 31 for most bird species. Required setbacks to protect active nests from construction activity are usually in the order of about 250 feet for passerines (songbirds) and 500 feet or more for raptors (birds of prey).

### 2.4 Protections for Bat Populations

Bats and other non-game mammals are protected in California. Section 4150 of the Fish and Game Code states that all non-game mammals or parts thereof may not be taken or possessed except as otherwise provided in the code or in accordance with regulations adopted by the Fish and Game Commission. Thus, destruction of an occupied, non-breeding, bat roost, resulting in the death of bats, or disturbance that causes the loss of a maternity colony of bats (resulting in the death of young), is prohibited.

Bats in this region use a wide variety of roosts, including man-made roosts such as buildings, bridges, and culverts; they also use trees that contain suitable roost habitat. Bats are nocturnal, and select day roosts for rest, protection, pup-rearing and overwintering, and night roosts during seasonal periods of activity during foraging flights. Often, the same day roost provides night roost habitat. Colonial bats roost in groups ranging from several to thousands of individuals, while solitary bats roost in tree foliage, either alone, or consisting of a female and her pup(s). Bats are particularly vulnerable to loss or disturbance of their day roosts, even more so during pup-rearing when bats are not volant (flying) and during winter months when bats are in torpor or hibernation.

Bats in this region of California are also not active year-round. During the maternity season, non-volant young (those unable to fly) of colonial bats remain in the roost until late summer (end of August), after which they may either disperse from the natal roost, or remain into or throughout the winter. During winter months, bats typically enter torpor, the onset of which is dependent upon environmental conditions, primarily temperature and rainfall. To prevent direct mortality of either non-volant young or torpid bats during winter months, roosts must not be disturbed or destroyed until bats are seasonally active, and only after they have been provided a means of escape from the roost. Therefore, bats may be safely evicted in this region between March 1 (or when evening temperatures are above 45F and rainfall is less than ½" in 24 hours) and April 15 (prior to parturition of pups). The next acceptable period for eviction is September 1 through October 15 (after pups become self-sufficiently volant or prior to evening temperatures dropping below 45F and onset of rainfall greater than ½" in 24 hours).

### 2.5 Marin County Code Section 22.20.040

Marin County Code Sections require procedures to protect roosting bats, nesting birds, and the state and federally listed Northern spotted owl. In areas where a Biological Site Assessment identifies a high probability for the presence roosting bats, Code Section 22.20.040(E) requires a two-step process for removal of trees with potential bat habitat during certain times of the year. If a Biological Site Assessment identifies areas with a high probability of the presence of

nesting birds and the project requires tree removal, grading, or other site disturbances during the nesting season, Code Section 22.20.040(F) requires pre-construction bird nesting surveys and, if nesting birds are found, establishment of appropriate buffer zones and installation of exclusion fencing to ensure no disturbance to active nests until young have fledged. In addition, Marin County Code Section 22.20.040(G) requires special conditions to protect Northern spotted owl be implemented if a Biological Site Assessment identifies a Northern spotted owl nest within 500 feet of proposed outdoor construction activity involving tree removal, grading, or other site disturbances.

### 3.0 EXISTING BIOLOGICAL SETTING

The description of the biological setting for the property is based on an initial field visit to the site by HBG Senior Environmental Scientist Gary Deghi on October 8, 2019 and a subsequent field review on August 25, 2023. These surveys included observations of the composition and distribution of plant species, wildlife observations, identification of sensitive habitats and a comparison of site characteristics for similarity to sites known to support special status species within the area.

Beyond the existing residence, the property slopes downward to the north within a mixed evergreen forest toward Rannoch Way (a paper street). Based on a survey of the property prepared by L.A. Stevens & Associates, Inc. dated August 15, 2023 and the Inverness USGS 7.5-minute quadrangle map, elevations on the property range from about 255 feet msl in the southern portion of the site near the existing home and adjacent to Keith Way to approximately 145 feet msl at the north end of the site. The soil type throughout 95% of the property is Sheridan variant coarse sandy loam, 50 to 75 percent slopes. A small section of the southeast portion of the property east of the existing house (about 5% of the property) is Sheridan variant coarse sandy loam, 9 to 30 percent slopes (USDA 2019).

Like other portions of northern California, Inverness experiences a Mediterranean climate characterized by warm, dry summers and cool, wet winters. Coastal low clouds and fog are common, especially during the late night and early morning hours. Average annual precipitation in the Inverness area is slightly less than 40 inches, with most rain in the Bay Area's winter "rainy season" (November through March).

The project site is within the Marin County Coastal Zone and also subject to relevant policies of the Marin County LCP Land Use Plan (Marin County 2019).

### 3.1 Plant Communities

Vegetation communities and habitats at the project site were identified based on the currently accepted List of Vegetation Alliances and Associations (or Natural Communities List) (CDFW 2010). The list is based on A Manual of California Vegetation, Second Edition (Sawyer and Keeler-Wolf 2009), which is the National Vegetation Classification applied to California. The project site contains one habitat type according to this classification: Mixed Evergreen Forest.

Vegetation throughout most of the lot (much of the area downslope and north of the existing house) consists of the Mixed Evergreen Forest with a tree canopy consisting mainly of Coast live oak (Quercus agrifolia) and California bay (Umbellularia californica), with lesser amounts of Bishop pine (Pinus muricata), Coast redwood (Sequoia sempervirens), tanbark oak (Notholithocarpus densiflorus), Pacific wax-myrtle (Myrica californica), and Pacific madrone (Arbutus menziesii). The plant association of the understory within the forested area is similar to vegetation in many portions of Inverness Ridge and consists of shrubs such as hazelnut (Corylus cornuta), toyon (Heteromeles arbutifolia), California huckleberry (Vaccinium ovate), coffeeberry (Frangula californica), and coyote brush (Baccharis pillars). Herbaceous plants such as cow parsnip (Heracleum lanatum), poison hemlock (Conium maculatum), poison oak (Toxicodendron diversional), thistles (Cirsium sp.), gorse (Ulex europaeus) and cape ivy (DeLaria odorata) are also present. Groundcover vegetation throughout includes ferns such as narrowleaf sword fern (Polytech imbricans) and bracken fern (Pteridium aquilinum), herbaceous plants including native species such as California blackberry (Rubus ursinus) and hedge-nettle (Stachys rigida), and a variety of non-native grasses including dog tail (Cynosurus cristatus), velvet grass (Holcus lanatus), rip-gut brome (Bromus diandrus), reed canary grass (Phalaris sp.), and veldt grass (Ehrharta erecta), among others.

The area in the immediate vicinity of the main house has been cleared for fire protection, though several trees are present. Some shrubs, herbs, and other ornamental plants have been planted within a garden area near the patio located on the south side of the house. Representative plants present in the garden area include rose campion (*Silene coronaria*), Chinese rhubarb (*Gunnera tinctoria*), ocean spray (*Holodiscus discolor*), max chrysanthemum (*Leucanthemum maximum*), pink honeysuckle (*Lonicera hispidula*), spearmint (*Mentha spicata*), oregano (*Origanum vulgare*), and others. Most trees close to the house are mature Coast live oaks, though other trees include a couple of Coast redwood, a mature, large Bishop pine, and a small madrone within the garden area. Vegetation on the west and east sides of the house also consist of small coffeeberry, toyon, huckleberry shrubs, along with ground cover and other vegetation including ferns and many of the grasses mentioned above as occurring with the understory of the forest.

### 3.2 Animal Populations

The habitats on site and in the immediately surrounding area support a number of wildlife species, mostly those typically found in forested habitats in West Marin and those adapted for life in disturbed forested environments. Trees and other vegetation on the property provide nesting and roosting sites for birds, and cover and foraging habitat for species of birds, mammals, reptiles and amphibians. Many mature Coast live oaks and other trees are old enough to have developed cavities in trunks and branches that may harbor cavity nesting birds or serve as roost sites for any of a number of species of bats, and several trees within the proposed construction area contain such features.

A number of wildlife species were documented at the site during field reviews conducted by Gary Deghi of HBG on October 8, 2019 and August 25, 2023. Nearly all species documented are

common to abundant in the region and would be expected in the habitats present at the site. Bird species documented in the area around the main house during field surveys included bandtailed pigeon (*Columba fasciata*), Northern flicker (*Colaptes auratus*), acorn woodpecker (*Melanerpes formicivorus*), hairy woodpecker (*Picoides villosus*), pileated woodpecker (*Dryocopus pileatus*), California scrub-jay (*Aphelocoma californica*), Stellar's jay (*Cyanocitta cristata*), common raven (*Corvus corax*), Hutton's vireo (*Vireo huttoni*), wrentit (*Chimaea fasciata*), chestnut-backed chickadee (*Poecile rufescens*), Bewick's wren (*Thryomanes bewickii*), red-breasted nuthatch (*Sitta canadensis*), ruby-crowned kinglet (*Regulus calendula*), spotted towhee (*Papilo maculatus*), and dark-eyed junco (*Junco hyemalis*). Turkey vultures (*Cathartes aura*) were observed flying over the site. Raptor species included a pair of red-shouldered hawk (*Buteo lineatus*) flying over the site and a single osprey (*Pandion haliaetus*) seen flying over the ridge to the west of the site.

Amphibians expected in the area are likely to include Pacific treefrog (*Pseudacris regilla*), western toad (*Bufo boreas*), arboreal salamander (*Aneides lugubris*), California slender salamander (*Batrachoseps attenuatus*), and Ensatina salamander (*Ensatina eschscholtzii*), among others. No reptiles were observed during the survey but expected species include Western fence lizard (*Sceloperus occidentalis*), Northern alligator lizard (*Gerrhonotus coerulus*), Pacific gopher snake (*Pituophis melanoleucus*), ringneck snake (*Diadophus punctatus*), and common garter snake (*Thamnophis sirtalis elegans*). Evidence of mammals at the site included houses for dusky-footed woodrat (*Neotoma fuscipes*) in forested habitats at the site, Western gray squirrel (*Sciurus griseus*), dens of Botta's pocket gopher (*Thomomys bottae*) in previously cleared areas around the garden, and scats of mule deer (*Odocoileus hemionus*). Other mammals that could be present would be those adapted to disturbed forested environments such as Virginia opossum (*Didelphis virginiana*), deer mouse (*Peromyscus maniculatus*), striped skunk (*Mephitis mephitis*) and raccoon (*Procyon lotor*).

### 3.3 Sensitive Habitats

On October 8, 2019, Gary Deghi of HBG conducted an initial reconnaissance investigation of the study area for the presence of wetlands and other "waters of the U.S." potentially subject to federal jurisdiction under the Clean Water Act or state or local jurisdiction under the Porter-Cologne Act or California Coastal Act. The review included an investigation of existing land forms, vegetation, hydrology, and soil conditions, but consisted of a preliminary review of the area for wetland habitats. No areas were found that would be regulated by the Corps of Engineers as a water of the U.S. under Section 404 of the Clean Water Act or by the SFBRWQCB as a water of the state of California under the Porter-Cologne Act. Likewise, no areas at the site would be considered a stream course subject to the jurisdiction of the CDFW pursuant to Section 1602 of the California Fish and Game Code. No areas satisfying Marin LCP or California Coastal Act criteria as a wetland or stream were found on the property. The nearest stream as defined by the Marin County LCP or by criteria used by CDFW is an unnamed intermittent stream located at the bottom of the canyon approximately 1,100 feet (over 0.2 miles) to the south of the property.

Northern Maritime Chaparral, a sensitive habitat type noted by the CNDDB as occurring in the vicinity of Inverness, does not occur at the property.

### 3.4 Special Status Species

CDFW maintains records for the distribution and known occurrences of sensitive species and habitats in the California Natural Diversity Database (CNDDB). The CNDDB is organized into map areas based on 7.5-minute topographic maps produced by the US Geological Survey. All known occurrences of sensitive species and important natural communities are mapped on the quadrangle maps. The database gives further detailed information on each occurrence, including specific location of the individual, population, or habitat (if possible) and the presumed current state of the population or habitat. The project site is located in the Inverness 7.5-minute quadrangle. A search of the CNDDB for records of occurrence of special status animals and plants and natural communities within this quadrangle indicated that no special status species or natural communities are known to occur on the project site itself.

**Special Status Plant Species.** A list of special status plants with potential to occur on the property was developed from the CNDDB. A complete list of special status plant species occurring in the vicinity of the property is included in Table 1. The table includes all coastal Marin County species mentioned in the CNDDB within approximately five miles of the site. Special status plant species include: (i) species that are listed or proposed for listing as threatened or endangered under the federal Endangered Species Act; (ii) species that are listed, or proposed for listing by the state of California as threatened or endangered under the California Endangered Species Act; (iii) plants considered by the California Native Plant Society (CNPS) to be rare, threatened, or endangered in California and elsewhere; and (iv) plant species that meet the definition of rare or endangered under CEQA.

A number of special status plant species listed in Table 1 are known to occur on Inverness Ridge near the community of Inverness. These include western leatherwood (*Dirca occidentalis*) and Marin Manzanita (*Arctostaphylos virgata*). Although these species have at some time been known to occur within the area of Inverness, these species would not occur in the portion of the site proposed for new construction. No manzanita species were observed on the property or anywhere in the project vicinity. Western leatherwood has occurred in Inverness but is known in the CNDDB from documentation of the species in 1941. This shrub could be identified at any time of year and was not noted on the property during the HBG visit to the site. All special status plant species found in this part of Marin County require habitat conditions that are not found at the site of the proposed improvements.

**Special Status Animal Species.** Animal species noted in the CNDDB as occurring within a 5-mile radius of the site, or that are known to occur in the general vicinity based on the knowledge of HBG biologists, are discussed in Table 1. The only special status species of animal noted in the CNDDB from near the subject property are possible nesting Northern spotted owl (*Strix occidentalis caurina*), osprey (*Pandion haliaetus*), and Point Reyes mountain beaver (*Aplodontia rufa phaea*). These species are discussed in greater detail below. None of the other animal

species discussed in the table have the potential to occur on the site. This finding is made based on the habitat requirements of species listed in the table, and is based on field review of habitats present at the site and the immediate vicinity, and an evaluation of the suitability of on-site habitats to support these species.

Some subspecies of dusky-footed woodrat are considered species of special concern (e.g., those subspecies that occur on the San Francisco and Monterey Peninsulas). Although the subspecies occurring in West Marin is not on the list of designated species of concern, dusky-footed woodrat populations in West Marin are important as they serve as the primary source of prey for the federally-listed threatened Northern spotted owl which is known to nest on Inverness Ridge.

*Northern Spotted Owl.* The Northern Spotted Owl is listed as a threatened species pursuant to the federal Endangered Species Act and as a threatened species by the state of California pursuant to the California Endangered Species Act. Northern spotted owls reach the southern limit of their range in Marin County, California. In the northern portion of their range, Northern spotted owls are typically found in mature coniferous forests usually from 150 to 200 years old. In Marin County they reside in second growth Douglas-fir, Coast redwood, Bishop pine, mixed conifer-hardwood and evergreen hardwood forests with a nearly closed canopy and moderate to heavy undergrowth and much woody debris. Nesting Northern spotted owls have been found throughout forested habitats in Marin County and use a variety of tree species for nesting. The Bishop pine and Douglas fir forests of Inverness Ridge support a healthy population of Northern spotted owls (Shuford 1993). Most of these owl territories are in canyon bottoms or mid slope locations on the more mesic north-facing slopes or the leeward slope of the ridge where there is higher precipitation, protection from onshore wind and weather, and fairly dense vegetative cover (Evens 2008).

Northern spotted owls do not construct a nest so existing nest structures or cavities must be available. Northern spotted owl nesting territories are usually occupied over successive years by nesting pairs, therefore sites occupied in previous years can be assumed to be occupied in subsequent years. Some habituation and sensitization of spotted owls to human presence does occur, and successful nesting has been documented with 50 to 100 yards of existing roads (USFWS 2006). The nesting season for Northern spotted owl is considered to include the period between February 1 and July 15. Dusky-footed woodrat is the preferred prey for Northern spotted owl in Marin and Sonoma Counties (Shuford 1993, Evens 2008). Dusky-footed woodrat occurs in the forested portions of the project site which provide suitable foraging habitat for Northern spotted owl.

HBG conducted a review of National Park Service and USFWS data regarding known spotted owl nesting territories in the vicinity of the project site and data available from the CNDDB. The data indicates the location of known activity centers for nesting pairs of the species and locations in the vicinity of the nest sites where occurrences of Northern spotted owl individuals have been documented. This information revealed that the nearest activity center/nest of

known territories of Northern spotted owl occur approximately 2,107 feet (0.40 miles) from the property and that individual Northern spotted owls foraging away from the nest have been documented as close as 879 feet (approximately 0.17 mile) from the site.

**Osprey.** Osprey (*Pandion haliaetus*) was recently considered a California Species of Special Concern, but nesting osprey are currently on the CDFW Watchlist. Ospreys breed in northern California from the Cascade Ranges south to Lake Tahoe, and along the coast south to Marin County. The breeding population was estimated in 1975 at 350-400 pairs in northern California, although numbers have been increasing in recent years. Ospreys are associated strictly with large, fish-bearing waters, primarily in ponderosa pine through mixed conifer habitats (Zeiner et al 1990). They nest usually from late March to late August (Wheeler 2003) in nests built in large snags or open trees near large bodies of water. Osprey often construct nests on manmade structures such as telephone poles or transmission towers, channel markers, duck blinds, cranes, and artificial nest platforms. Artificial platforms have been instrumental in reintroducing ospreys into areas where they had disappeared. Nest sites can be used for breeding purposes for many years.

A single osprey was observed flying over the ridge to the north of the property during the field review conducted on October 8, 2019. The area of the project site and the general vicinity was searched for evidence of nesting by ospreys (nest sites at the tops of trees in the area), and no evidence of nesting by this species in the vicinity of the project site was noted.

**Point Reyes Mountain Beaver.** Point Reyes mountain beaver (*Aplodontia rufa phaea*) is an endemic rodent subspecies, known only to occur in western Marin County, almost entirely within Point Reyes National Seashore. The species is usually found in cool, moist north facing slopes in Douglas fir forests or moderately dense coastal scrub typically vegetated with species such as coyote brush (*Baccharis pilularis*) as well as sword fern, bracken fern (*Pteridium aquilinum* var. *pubescens*), poison oak (*Toxicodendron diversilobum*), California nettle (*Urtica dioica*), and cow parsnip (*Heracleum lanatum*), which tend to grow in the moister areas. The Point Reyes mountain beaver is a fossorial mammal that requires thick, friable, loamy soil in which to burrow (Evens 2008). The soil characteristics of the building site on the subject property do not provide appropriate habitat for the subterranean tunnel systems *Aplodontia* require. Suitable habitat may be present in surrounding forested habitat. Burrows were searched for during the site review and none were found.

### 4.0 BIOLOGICAL EVALUATION

### 4.1 Standards of Significance

According to CEQA Guidelines (Appendix G), the project would be considered to have a significant impact on biological resources if it would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special

status species in local or regional plans, policies, or regulations, or by the California Department of Wildlife and Game or U.S. Fish and Wildlife Service.

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service.
- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

### 4.2 Evaluation

# 1) Would the 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 California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

The Project would not result in any significant adverse impacts on special-status plant or animal species and would not substantially reduce the number or restrict the range of a rare, endangered or threatened species of fauna. The project site provides suitable foraging habitat for Northern spotted owl and individual owls may occasionally forage on the property. None of the other plant or animal species discussed in Table 1 have the potential to occur at the construction site. No impacts to special status species of animal would occur due to construction of the additions proposed at the site. Additional detail on Northern spotted owl is provided below.

**Northern Spotted Owl.** Data from the USFWS and NPS in the CNDDB documents the presence of Northern Spotted Owl in close proximity to the project site. The nearest activity center of known territories of Northern spotted owl is approximately 2,107 feet (approximately 0.40 mile) from the property and the nearest observation of a Northern spotted owl foraging away from the nest is from a location that is about 879 feet (0.17 miles) from the property. No

habitat for Northern spotted owl is found at the location where proposed home improvements would occur, although forested portions of the site provide suitable foraging habitat. Though dusky-footed woodrat nest houses can be found in the onsite forested habitats, site surveys revealed that there are no dusky-footed woodrat houses within the area of proposed additions to the residence or in the area where the ADU or septic system would be constructed. Dusky-footed woodrat serves as the favored prey for Northern spotted owl in Marin County, and the absence of woodrat houses in the construction area indicates that the proposed improvements would not impact the availability of dusky-footed woodrats to serve as prey for Northern spotted owl individuals that may occasionally forage over the project site.

HBG evaluated the potential for construction to result in harassment to Northern spotted owl based on models developed in the U.S. Fish and Wildlife Service 2006 memorandum "Transmittal of Guidance, Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California." Based on the type of construction equipment needed and the existing ambient sound levels, the models used by the USFWS indicate that impacts to Northern spotted owl would occur if the species was nesting fairly close to construction activity (visual harassment from construction would likely occur within up to a maximum of 100m or about 330 feet from nesting owls, and auditory harassment would occur within about 30m or approximately 100 feet).

According to CDFW, disturbances in the vicinity of nest sites may reach the level of "take" when at least one of the following conditions occur: (i) project-generated sound exceeds ambient nesting conditions by 20 to 25 decibels (dB), (ii) project-generated sound, when added to ambient sounds, exceeds 90 dB, or (iii) human activities occur within a visual line-of-sight distance of 40 meters (approximately 130 feet) from a nest. If nesting Northern spotted owl is known to occur within 0.25 miles of construction, a project applicant can either conduct construction operations during the non-nesting season or conduct nesting-season protocol surveys that definitively demonstrate that owls are not nesting in the vicinity of the construction operations. If construction work must be completed during the nesting season and Northern spotted owls are nesting within 0.25 miles of the site, CDFW may require that the applicant obtain an Incidental Take Permit (ITP) pursuant to CESA.

No impact to nesting Northern Spotted Owl would occur as a result of construction of the proposed project. Based on the location of known Northern spotted owl activity centers, the construction would take place beyond the distances predicted by the USFWS models within which harassment of nesting owls could occur. Construction would also not exceed the decibel limits or line-of-sight distance limits specified in the CDFW guidelines to prevent disturbance to nesting Northern spotted owls. No construction work would take place within 0.25 mile of a known activity center, so no adjustments of the timing of construction would be necessary to protect nesting owls and an ITP from CDFW would not be required.

**Osprey.** The construction of the proposed additions would not result in impacts to osprey as no evidence of osprey nesting on or in the immediate vicinity the property was found during the onsite survey.

**Point Reyes Mountain Beaver.** No impacts would occur to Point Reyes mountain beaver as it is unlikely that this species is found at the project site. Even if the species was present in the project area, the proposed construction in previously disturbed portions of the property would have no effect on these animals.

**Special Status Plants.** Although some native vegetation occurs beyond the cleared area around the house, nearly all of the ground cover vegetation in the immediate vicinity of the existing residence is non-native landscape or ornamental species and does not provide habitat for special status plant species. All of the species mentioned in Table 1 require habitat conditions that are not found at the site of the proposed construction. No impacts to special status species of plant would result from the proposed residential improvements that are proposed to occur in previously disturbed portions of the property.

# 2) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? The proposed residence would not conflict with any Stream Conservation Area on or near the property. There are no creeks located on the subject property or in the vicinity of the project. The nearest stream as defined by the Marin County LCP or by criteria used by CDFW is located at the bottom of the canyon more than 1,100 feet (more than 0.2 miles) south of the property. No construction would occur within 100 feet of a creek, so no direct or indirect impacts to riparian habitat or Stream Conservation Areas would result from construction of the proposed improvements.

Northern Maritime Chaparral, a sensitive habitat type noted by the CNDDB as occurring in the vicinity of Inverness, does not occur at the property. As no sensitive natural communities or habitats as defined by state, federal or local regulations or as defined by the California Environmental Quality Act (CEQA) are present at the site or in the immediate vicinity of the site, no impacts to these habitats would result from implementation of the applicant's plans for the property.

**3)** Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? As no wetlands or waters of the U.S. or state are found on the property, development of the property as proposed would not result in filling (direct impacts) or any indirect impacts to any area that would be subject to the Clean Water Act jurisdiction of the U.S. Army Corps of Engineers, the Porter-Cologne Act jurisdiction of the SFBRWQCB, the Section 1602 Fish and

Game Code jurisdiction of CDFW, or to regulation by Marin County under the Local Coastal Program. No permits from the USACE, SFBWQCB, or CDFW would be required.

# 4) Would the 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?

Although native trees, shrubs and herbaceous plants occur throughout much of the property, the proposed additions to the residence and construction of the ADU as well as all ancillary facilities, including the expansion of the septic leach field, are proposed in previously-disturbed portions of the site in close proximity to the existing house where vegetation mostly consists of planted landscaping or immature, locally native plants providing little habitat value. Although a number of bird and other animal species were observed on the property during field surveys, the construction of the improvements as planned within a generally disturbed area adjacent to the existing residence would not result in substantial change to animal populations at the site. Valuable habitats for various species can be found in the forested habitats throughout much of the site and the area surrounding the site, so ample habitats are present to support the small number of individual animals that may be forced to relocate from the construction zone. The project will not cause a fish or wildlife population to drop below self-sustaining levels.

An arborist report prepared by Urban Forestry Associates, Inc. (Urban Forestry Associates 2023) includes an inventory of trees in the vicinity of the construction zone and an assessment of trees that slated for removal for construction of the home improvements and the ADU. The arborist report is included within an application package submitted to the County of Marin under separate cover. The project will require the removal of five trees. The construction of the ADU will require removal of four trees: one heritage Coast live oak (Tree #13), a madrone tree in poor condition (Tree #14), a previously fallen and barely-alive madrone (Tree #16), and a small coast live oak (Tree #17) growing out of the rootball of the fallen madrone. The home improvements will require the removal of a large, mature Bishop pine (Tree #4) that is in the early stages of decline. A coast live oak tree near the house (Tree #5) maybe impacted by replacement of the patio over the root system, which has not yet been designed.

During all activities involving land disturbance, the applicant will require the contractor to follow all applicable Best Management Practices from the California Stormwater Quality Best Management Practices Handbook for Construction Activities. With the implementation of Best Management Practices, including the use of straw wattles, covering of stockpile areas and other practices, there would be little possibility of siltation within stormwater runoff that could adversely affect the water quality of nearby streams.

**Nesting Birds.** Construction of home improvements into the area south of the existing house and the construction of the ADU will require the removal of a total of five trees and other vegetation within the project footprint. Therefore, the project applicant has included bird nesting surveys as part of the Project Description to ensure that no nesting birds are harmed during construction and to ensure compliance with the MBTA and California Fish and Game

code sections pertaining to protection of nesting birds. If tree removal or clearing of vegetation is to be conducted during the February 1 to August 31 bird nesting season, a qualified biologist will conduct a preconstruction breeding bird survey of construction areas within 15 days prior to the onset of construction activity. If active bird nests are found, appropriate buffer zones will be established around the active nests to protect nesting adults and their young from construction disturbance. Size of buffer zones will be determined per recommendations of the biologist based on site conditions and species involved and will be maintained until it can be documented that either the nest has failed or the young have fledged.

**Roosting Bats**. The five trees slated for removal were investigated in the field for presence of cavities, exfoliating bark, etc., that could provide potential roost site for bats. Three of the trees were found to contain cavities or exfoliating bark that could potentially serve as suitable bat habitat and warrant further investigation prior to removal. The Bishop pine (Tree #4) contains many deep crevices in the bark that could possibly harbor roosting bats, and small cavities, some high in the tree, that could possibly serve as roost sites for bats. The heritage oak (Tree #13) has deep crevices as well as exfoliating bark. The fallen madrone (Tree #16) contains a cavity within its branches that could harbor roosting bats.

The applicant has committed to procedures to assure that bats are not harmed during tree removal activities. Prior to removal of Trees #4, #13, and #16, a detailed investigation of every cavity will be conducted by a qualified biologist to show that no bats are present, including those in a state of torpor (winter) or raising non-volant young (summer). If the a tree cannot be fully investigated and uncertainty remains regarding the potential presence of roosting bats, the tree will be removed during periods of bat activity (March 1 to April 15 and September 1 to October 15) using a two-step removal process.

If necessary, the two-step process will be conducted over two consecutive days during the prescribed periods in spring and fall. With this method, small branches and small limbs not containing cavities, crevices or exfoliating bark on habitat trees as identified by a qualified biologist (who must be present on the site during the first day of tree trimming or cutting) are removed on the first day using only chainsaws. The following day, the remainder of the tree is removed. The disturbance caused by chainsaw noise and vibration, coupled with the physical alteration, has the effect of causing bats to abandon the roost tree after nightly emergence for foraging. Removing the tree the next day prevents re-habituation and re-occupation of the altered tree. No impacts to roosting bats would occur using this method.

# 5) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The project would not conflict with any policies of the Marin County LCP or other ordinances of the County of Marin. No wetlands or riparian corridors would be affected by construction of the residence on the property. The project is consistent with the minimum setback requirements from sensitive biological resources as stipulated by the California Coastal Act and the County's LCP. The project description includes bird nesting surveys to ensure that nesting birds are not

harmed during construction and sensitive methods for removal of several trees to protect any roosting bats that may be present. Also, no impact would occur to Northern spotted owl. Therefore, the project is in compliance with Marin County Code Section 22.20.040 regarding outside construction activities.

### 6) Would the 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?

There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan applicable to the project site.

As a result of this Biological Site Assessment, we find that the proposed new construction at 200 Keith Way in Inverness will be consistent with requirements of the Coastal Act and the County's LCP. If you have any questions regarding this Biological Site Assessment report for the property at 200 Keith Way in Inverness, please call either me (gdeghi@h-bgroup.com or 650-208-8711) or Dr. Terry Huffman (thuffman@h-bgroup.com or 415-385-1045).

Sincerely,

Gary Deghi

Gary Deghi Senior Environmental Scientist

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SPECIES	STATUS <sup>1</sup> FED/STATE/CNPS <sup>2</sup>	НАВІТАТ	OCCURRENCE ON THE PROJECT SITE
ANIMALS	-		
INVERTEBRATES			
Tomales isopod ( <i>Caecidotea tomalensis</i> )	-/-	Inhabits localized freshwater ponds or streams with still or near-still water in several Bay Area Counties.	Not present. Suitable habitat is not present at the site.
Bumblebee scarab beetle ( <i>Lichnanthe ursine</i> )	-/-	Inhabits coastal sand dunes from Sonoma County south to San Mateo County. Usually flies close to sand surface near the crest of the dunes.	Not present. Suitable habitat is not present at the site.
Obscure Bumble bee (Bombus caliginosus)	/	Found in Coastal areas from Santa Barbara County north to Washington State. Food plant genera include Baccharis, Cirsium, Lupinus, Lotus, Grindelia and Phacelia.	Not present. Suitable habitat is not present at the site.
Western Bumble bee (Bombus occidentalis)	/SCE	This species was once common and widespread, but the species has declined precipitously from Central California to Southern British Columbia, perhaps from disease.	Not present. Suitable habitat is not present at the site.
Monarch butterfly ( <i>Danaus plexippus</i> )	FC	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress) with nectar and water sources nearby.	Not present. Winter roosting sites are not present at the site. Trees in the area may provide suitable winter sites.
Point Reyes blue butterfly (Plebejus icarioides parapheres)	/	Confined to the Pt. Reyes Peninsula from Pt. Reyes north to Tomales Point. Found in stabilized dunes with the common bush lupines ( <i>Lupinus arboreus</i> and <i>Lupinus variicolor</i> ), the latter most likely being the food plant.	Not present. Suitable habitat is not present at the site.
Myrtle's silverspot (Speyeria zerene myrtleae)	FE/	Restricted to foggy, coastal dunes and hills of Point Reyes Peninsula. Larval food plant is <i>Viola</i> <i>adunca</i> .	Not present. Suitable habitat is not present at the site.

SPECIES	STATUS <sup>1</sup> FED/STATE/CNPS <sup>2</sup>	HABITAT	OCCURRENCE ON THE PROJECT SITE
California Linderiella ( <i>Linderiella occidentalis</i> )	/	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions.	Not present. Suitable habitat is not present at the site
California freshwater shrimp (Syncaris pacifica)	FE/SE	Endemic to Marin, Napa and Sonoma Counties. Found in low elevation, low gradient streams. Found in pools away from the main stream flow and where riparian cover is moderate. Has occurred in Lagunitas Creek.	Not present. Suitable habitat is not present at the site.
Marin hesperian ( <i>Vespericola marinensis</i> )	-/-	Found in moist spots in coastal brushfields and chaparral vegetation in Marin County. Found under leaves of cow-parsnip, around spring seeps, in leafmold along streams and in alder woods and mixed evergreen forest.	Not present. Suitable habitat is not present at the site.
FISH			
Coho salmon – central California ESU ( <i>Oncorhynchus kisutch</i> )	FE/SE	Requires beds of loose, silt-free, coarse gravel for spawning. Also need cover, cool water and sufficient dissolved oxygen. Nearest spawning stream is Lagunitas Creek.	Not present. Suitable habitat is not present at the site.
Steelhead – Central CA Coast ESU (Oncorhynchus mykiss)	FT/	Well-oxygenated streams with riffles; loose, silt- free gravel substrate. Nearest spawning stream is Lagunitas Creek.	Not present. Suitable habitat is not present at the site.
Tidewater goby (Eucyclogobius newberryi)	FE/	Brackish water habitats along the California Coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels. Has occurred in Lagunitas Creek, also Walker Creek near Tomales.	Not present. Suitable habitat is not present at the site.

SPECIES	STATUS <sup>1</sup> FED/STATE/CNPS <sup>2</sup>	НАВІТАТ	OCCURRENCE ON THE PROJECT SITE
Longfin smelt (Spirinchus thaleichthys)	FC/ST	Found in open waters of estuaries, mostly in the middle or bottom of the water column. Euryhaline, nektonic and anadromous. Prefers salinities of 15030 ppt but can be found in both freshwater and seawater. Has been detected in Tomales Bay.	Not present. Suitable habitat is not present at the site.
AMPHIBIANS	•	·	•
California giant salamander (Dicamptodon ensatus)	/SSC	Known from wet coastal forests near streams and seeps from Mendocino County south to Monterey County and east to Napa County. Aquatic larvae are found in cold, clear streams, occasionally in lakes and ponds. Adults are found in wet forests under rocks and logs near streams and lakes.	Not present. Suitable habitat is not present at the site.
Foothill Yellow-legged frog North Coast DPS ( <i>Rana boylii</i> )	/SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg- laying; larvae need at least 15 weeks to attain metamorphosis.	Not present. Suitable habitat is not present at the site.
California red-legged frog (Rana draytonii)	FT/SSC	Mostly found in lowlands and foothills in/near permanent sources of deep water but will disperse far during and after rain. Prefers shorelines with extensive vegetation. Requires 11-20 weeks of permanent water for larval development and requires access to aestivation habitat.	Not present. Suitable habitat is not present at the site.
REPTILES			
Western pond turtle ( <i>Emys marmorata</i> )	/SSC	Aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Needs basking sites and suitable upland habitat for egg-laying (sandy banks or grassy open fields). Not documented from the project area.	Not present. Suitable habitat not present on site.

SPECIES	STATUS <sup>1</sup> FED/STATE/CNPS <sup>2</sup>	HABITAT	OCCURRENCE ON THE PROJECT SITE
BIRDS			
Great blue heron ( <i>Ardea herodias</i> ) (Rookery)	-/-	Colonial nester in tall trees, cliff sides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows. Nesting colony has occurred at Inverness Park.	Not present. Suitable habitat for a rookery is not present at the site.
Great egret ( <i>Ardea alba</i> ) (Rookery)	-/-	Colonial nester in tall trees, cliff sides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows. Nesting colony has occurred at Inverness Park.	Not present. Suitable habitat for a rookery is not present at the site.
Northern harrier ( <i>Circus hudsonius</i> ) [Nesting]	BCC/SSC	Coastal salt marsh and freshwater marsh; nests and forages in grasslands; nests on ground in shrubby vegetation, usually at marsh edge.	Not present. Suitable habitat not present on site.
Osprey (Pandion haliaetus) [Nesting]	/WL	Breeds in northern California from the Cascade Ranges south to Lake Tahoe, and along the coast south to Marin County. Associated strictly with large, fish-bearing waters, primarily in Ponderosa pine through mixed conifer habitats. Has nested on Inverness Ridge.	Not present. Occurs in the area and was observed flying over the site, but suitable nesting habitat was not observed at the project site or immediate vicinity.
American Peregrine Falcon ( <i>Falco peregrinus</i> )	/ FP	Nests in woodland, forest and coastal habitats, on cliffs or banks, and usually near wetlands, lakes, rivers, sometimes on human-made structure. In non-breeding seasons found in riparian areas and coastal and inland wetlands.	Not present. Occurs in the area but suitable nesting habitat is not present at the site.
California black rail (Laterallus jamaicensis coturniculus)	/ST,FP	Mainly inhabits salt-marshes bordering larger bays. Occurs in tidal salt marsh with dense growths of pickleweed; also occurs in freshwater and brackish marshes. Has occurred at the Tomales Bay Ecological Reserve at the south end of Tomales Bay.	Not present. Suitable habitat is not present at the site.

SPECIES	STATUS <sup>1</sup> FED/STATE/CNPS <sup>2</sup>	HABITAT	OCCURRENCE ON THE PROJECT SITE
Yellow rail (Coturnicops noveboracensis)	BCC/SSC	Found in freshwater marshes. Summer resident in the eastern Sierra and Modoc County. Has occurred at Tomales Bay.	Not present. Suitable habitat is not present at the site.
Western snowy plover (Charadrius alexandrinus nivosus) [nesting]	FT/SSC	Found on sandy beaches or marine and estuarine shores; also salt pond levees and shores of large alkali lakes; requires sandy, gravelly or friable soil substrate for nesting. Has nested on Tomales Bay shoreline near Inverness.	Not present. Suitable nesting habitat is not present at the site.
Northern spotted owl ( <i>Strix occidentalis caurina</i> )	FT/ST	In the northern portion of their range, Northern spotted owls are typically found in mature coniferous forests. In Marin County they reside in second growth Douglas-fir, coast redwood, bishop pine, mixed conifer-hardwood, and evergreen hardwood forests. Nesting Northern spotted owls have been found throughout forested habitats in Marin. Inverness Ridge supports a healthy population of the species.	Not present. None of the known nesting territories for this species occur in the immediate vicinity of the project site. The project area provides suitable foraging habitat and foraging individuals may occasionally occur in the area.
Burrowing owl (Athene cunicularia)	BCC/SSC	Found in open dry annual or perennial grasslands, deserts and scrublands characterized by low growing vegetation. This species is a subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel.	Not present. Suitable habitat is not present at the site.
Saltmarsh common yellowthroat (Geothlypis trichas sinuosa)	BCC/SSC	Requires thick continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting. Has occurred at the Tomales Bay Ecological Reserve at the south end of Tomales Bay.	Not present. Suitable habitat is not present at the site.
Yellow Warbler <i>(Dendroica petechia</i> ) [nesting]	/SSC	Breeds in deciduous riparian woodlands, widespread during fall migration. Has been documented as nesting species at Olema Marsh.	Not present. Suitable nesting habitat is not present at the site.

SPECIES	STATUS <sup>1</sup> FED/STATE/CNPS <sup>2</sup>	HABITAT	OCCURRENCE ON THE PROJECT SITE
Tri-colored Blackbird ( <i>Agelaius tricolor</i> ) [Nesting colony]	BCC/SE,SSC	Breeds near freshwater, usually in tall emergent vegetation. Requires open water with protected nesting substrate. Colonies prefer heavy growth of cattails and tules. Uses grasslands and agricultural lands for foraging. Has nested along the shoreline of Tomales Bay.	Not present. Suitable nesting habitat is not present at the site.
MAMMALS			
Point Reyes jumping mouse (Zapus trinotatus orarius)	/SSC	Primarily bunch grass marshes, also coastal scrub grassland and meadows. Builds grassy nest on ground under vegetation and burrows in winter.	Not present. Suitable habitat is not present at the site.
Point Reyes mountain beaver ( <i>Aplodontia rufa phaea</i> )	/SSC	Coastal area of Point Reyes in areas of springs or seepages. North facing slopes of hills and gullies in areas overgrown with sword ferns and thimbleberries.	Not present. Suitable habitat is not present at the site.
North American porcupine (Erethizon dorsatum)	/	Forested habitats in the Sierra Nevada, Cascade, and Coast Ranges, with scattered observations from forested areas in the Tranverse Ranges. Uses a wide variety of coniferous and mixed woodland habitat.	Not present. Suitable habitat is not present at the site.
Silver-haired bat ( <i>Lasionycteris noctivagans</i> )	/	Coastal and montane forests. Feeds over streams, ponds and open bushy areas, roosts in hollow trees.	Not present. Suitable habitat is not present at the site.
Pallid bat Antrozous pallidus	/SSC	Roosts primarily in oak woodland and ponderosa pine habitats; forages in open areas.	Not present. Suitable habitat is not present at the site.
Hoary bat ( <i>Lasuirus cinereus</i> )	/	Prefers open habitats with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees.	Not present. Suitable habitat is not present at the site.
Townsend's Big-eared Bat (Corynorhinus townsendii)	/SSC	Found in desert scrub and coniferous forests. Roost in caves or abandoned mines and occasionally are found to roost in buildings.	Not present. Suitable habitat is not present at the site.

SPECIES	STATUS <sup>1</sup> FED/STATE/CNPS <sup>2</sup>	HABITAT	OCCURRENCE ON THE PROJECT SITE
American badger ( <i>Taxidea taxus</i> )	/SSC	Drier open stages of most shrub, forest, and herbaceous habitats; needs sufficient food, friable soils and open, uncultivated ground.	Not present. Suitable habitat is not present at the site.
PLANTS			
Pink sand verbena (Abronia umbellata var. breviflora)	//1B.1	Found in coastal dunes and coastal strand in foredunes and interdunes with sparse cover close to the ocean. 0-10m.	Not present. Suitable habitat is not present at the site.
Blasdale's bentgrass (Agrostis blasdalei)	//1B.2	Coastal dunes, coastal bluff scrub, coastal prairie. Includes Agrostis blasdalei var. marinensis, state-listed rare. Sandy or gravelly soil close to rocks; often in nutrient-poor soil with sparse vegetation. 5-105m.	Not present. Suitable habitat is not present at the site.
Sonoma alopecurus (Alopecurus aequalis var. sonomensis)	FE//1B.1	Occurs in wet areas, marshes and riparian banks with other wetland species in freshwater marshes and swamps, and riparian scrub. 5- 360m.	Not present. Suitable habitat is not present at the site.
Marin manzanita (Arctostaphylos virgata)	//1B.2	Broadleafed upland forest, closed-cone coniferous forest, chaparral, north coast coniferous forest. Only known from about 20 EOS in Marin County. On sandstone or granitic soil 60–700 m.	Not present. Suitable habitat is not present at the site.
Coastal marsh milk-vetch (Astragalus pycnostachyus var. pycnostachyus)	//1B.2	Mesic sites in coastal dunes or along streams or coastal salt marshes. 0-30m. Documented in 1903 near the Point Reyes Post Office.	Not present. Suitable habitat is not present at the site.
Point Reyes Blennosperma (Blennosperma nanum var. robustum)	/Rare/1B.2	Coastal Prairie, Coastal Scrub. On open coastal hills in sandy soil. 5-125 m.	Not present. Suitable habitat is not present at the site.
Thurber's Reed Grass (Calamagrostis crassiglumis)	//2B.1	Usually found in marshy swales surrounded by grassland or coastal scrub. 10-45m.	Not present. Suitable habitat is not present at the site.
Coastal bluff morning-glory (Calystegia purpurata ssp. saxicola)	//1B.2	Found Coastal dunes, Coastal scrub, Coastal bluff scrub and North coniferous forest. 5- 430m.	Not present. Suitable habitat is not present at the site.

SPECIES	STATUS <sup>1</sup> FED/STATE/CNPS <sup>2</sup>	HABITAT	OCCURRENCE ON THE PROJECT SITE
Bristle-stalked sedge (Carex leptalea)	//2B.2	Bogs, fens, meadows, marshes and swamps. 0- 790m.	Not present. Suitable habitat is not present at the site.
Lyngbye's sedge ( <i>Carex lyngbyei</i> )	//2B.2	Marshes and swamps (brackish or freshwater) at sea level. Occurs in salt marsh just at the south end of Tomales Bay.	Not present. Suitable habitat is not present at the site.
Point Reyes paintbrush (Castilleja leschkeana)	//1A	Coastal marshes and swamps. 0-25 m.	Not present. Suitable habitat is not present at the site.
Humboldt Bay owl's clover (Castilleja ambigua ssp. humboldtiensis)	//1B.2	Coastal salt marsh. Known only from Humboldt and Marin Counties. In coastal saltmarsh with <i>spartina, Distichlis, salicornia, jaumea</i> . 0-3m.	Not present. Suitable habitat is not present at the site.
Mt. Vision ceanothus (Ceanothus gloriosus var. porrectus)	//1B.3	Closed-cone coniferous forest, coastal prairie, coastal scrub, valley and foothill grassland. Low shrub in a variety of habitats on Pt. Reyes; sandy soils. 25-305m.	Not present. Suitable habitat is not present at the site.
Point Reyes bird's salty beak (Chloropyron maritimum palustre)	-/-/1B.2	Usually in coastal salt marsh with Salicornia, Distichlis, Jaumea, Spartina, etc.	Not present. Suitable habitat is not present at the site.
Sonoma spineflower (Chorizanthe valida)	FE/CE/1B.1	On sandy soil in Coastal prairie. 10-50m.	Not present. Suitable habitat is not present at the site.
Bolander's water-hemlock (Cicuta maculata var. bolanderi)	//2B.1	Fresh or brackish water marshes. 0-200m.	Not present. Suitable habitat is not present at the site.
Franciscan thistle (Cirsium andrewsii)	//1B.2	Coastal bluff scrub, broadleaved upland forest and coastal scrub. Sometimes found in serpentine seeps.	Not present. Suitable habitat is not present at the site.
Baker's larkspur (Delphinium bakeri)	FE/CE/1B.1	Found in broadleafed upland forest, coastal scrub, valley and foothill grassland. The only known site occurs on a northwest facing slope on decomposed shale. Historically known from grassy areas along fencelines. 105-205m.	Not present. Suitable habitat is not present at the site.
Western leatherwood ( <i>Dirca occidentalis</i> )	//1B.2	Occurs on brushy slopes and mesic sties in in broadleafed upland forest, chaparral, close- cone coniferous forest and a variety of other forested habitats. 30-550m.	Not present. Suitable habitat is not present at the site.

SPECIES	STATUS <sup>1</sup> FED/STATE/CNPS <sup>2</sup>	HABITAT	OCCURRENCE ON THE PROJECT SITE
Swamp harebell (Eastwoodiella californica)	//1B.2	Bogs and fens, closed-cone coniferous forest, coastal prairie, meadows, freshwater marsh, N. coast coniferous forest. Bogs and marshes in a variety of habitats; uncommon where it occurs. 1-405m.	Not present. Suitable habitat is not present at the site.
Bluff wallflower (Erysimum concinnum)	//1B.2	Occurs in coastal dunes, coastal bluff scrub and coastal prairie. 0-185m.	Not present. Suitable habitat is not present at the site.
Marin checker lily ( <i>Fritillaria lanceolata</i> var. <i>tristulis</i> )	//1B.1	Coastal bluff scrub, coastal scrub, coastal prairie. Endemic to Marin County. Occurrences reported from canyons and riparian areas as well as rock outcrops; often on serpentine. 30– 300 m.	Not present. Suitable habitat is not present at the site.
Fragrant fritillary (Fritillaria liliacea)	//1B.2	Coastal scrub, valley and foothill grassland, coastal prairie. Often on serpentine; various soils reported though usually clay, in grassland. 3-410m.	Not present. Suitable habitat is not present at the site.
Blue coast gilia (Gilia capitata ssp. chamissonis)	//1B.1	Coastal dunes and coastal scrub. 2-200m.	Not present. Suitable habitat is not present at the site.
Dark-eyed gilia (Gilia millefoliata)	//1B	Coastal dunes. 2-20m.	Not present. Suitable habitat is not present at the site.
Congested-headed hayfield tarplant (Hemizonia congesta ssp. congesta)	//1B.2	Grassy valleys and hills in Coastal scrub, valley and foothill grassland. Often in fallow fields. 25- 200m.	Not present. Suitable habitat is not present at the site.
Short-leaved evax (Hesperevax sparsiflora var. brevifolia)	-/-/1B.2	Sandy bluffs and flats in Coastal bluff scrub, coastal dunes. 0-200m.	Not present. Suitable habitat is not present at the site.
Water star-grass (Heteranthera dubia)	//2B.2	Marshes and swamps. Found in alkaline, still or slow-moving water at pH 7 or higher, and in eutrophic waters. 15-1510m	Not present. Suitable habitat is not present at the site.
Kellogg's horkelia (Horkelia cuneata ssp. sericea)	-/-/1B.1	Closed-cone coniferous forest, coastal scrub. Old dunes, coastal sandhills; generally under 200 m.	Not present. Suitable habitat is not present at the site.

SPECIES	STATUS <sup>1</sup> FED/STATE/CNPS <sup>2</sup>	HABITAT	OCCURRENCE ON THE PROJECT SITE
Point Reyes horkelia ( <i>Horkelia marinensis</i> )	//1B.2	Coastal dunes, coastal prairie and coastal scrub; in sandy flats and dunes of grassland or scrub habitats near the coast. 5-30m.	Not present. Suitable habitat is not present at the site.
Perennial goldfields (Lasthenia californica ssp. macrantha)	//1B.2	Coastal bluff scrub, coastal dunes, coastal scrub. 5-520m.	Not present. Suitable habitat is not present at the site.
Beach layia (Layia carnosa)	FE/CE/1B.1	Coastal dunes, on sparsely vegetated, semi- stabilized dunes, usually behind foredunes. 0- 75m.	Not present. Suitable habitat is not present at the site.
Rose leptosiphon (Leptosiphon rosaceus)	//1B.1	Coastal bluff scrub. 0-100m.	Not present. Suitable habitat is not present at the site.
Mason's lilaeopsis ( <i>Lilaeopsis masonii</i> )	/Rare/1B.1	Freshwater and brackish marshes, riparian scrub. Tidal zones, in muddy or silty soil formed through river deposition or river bank erosion. 0-10m.	Not present. Suitable habitat is not present at the site.
Coast lily ( <i>Lilium maritimum</i> )	//1B.1	Closed-cone coniferous forest, coastal prairie, coastal scrub, broadleaved upland forest, north coast coniferous forest. Historically in sandy soil, often on raised hummocks or bogs; today mostly in roadside ditches. 10-335m.	Not present. Suitable habitat is not present at the site.
Tidestrom's lupine (Lupinus tidestromii)	FE/CE/1B.1	Found in Coastal Dunes on partially stabilized dunes, immediately near the ocean. 4-25 m.	Not present. Suitable habitat is not present at the site.
Marsh microseris ( <i>Microseris paludosa</i> )	//1B.2	Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland. 5-300m.	Not present. Suitable habitat is not present at the site.
Northern curly-leaved monardella (Monardella sinuata ssp. nigrescens)	//1B.2	Coastal Dunes, Coastal Scrub, chaparral, and lower montane coniferous forest on sandy soils. 10-245 m.	Not present. Suitable habitat is not present at the site.
North Coast phacelia (Phacelia insularis var. continentis)	//1B.2	Occurs on open maritime bluffs on sandy soil in coastal bluff scrub and coastal dunes. 10-160m. Known only from Mendocino and Marin Counties.	Not present. Suitable habitat is not present at the site.

SPECIES	STATUS <sup>1</sup> FED/STATE/CNPS <sup>2</sup>	НАВІТАТ	OCCURRENCE ON THE PROJECT SITE
Marin knotweed	//3.1	Coastal salt marshes and brackish marshes. 0-	Not present. Suitable habitat is not
California beaked-rush (Rhynchospora californica)	//1B.1	Freshwater seeps and open marshy areas in bogs, fens, marshes and swamps and lower montane coniferous forest. 45-1000m.	Not present at the site. present at the site.
Point Reyes checkerbloom ( <i>Sidalcea calycosa</i> ssp. <i>rhizomata</i> )	// 1B.2	Freshwater marshes and swamps near the coast. 5-75m.	Not present. Suitable habitat is not present at the site.
Purple-stemmed checkerbloom (Sidalcea malviflora ssp. purpurea)	//1B.2	Found in Broadleafed Upland Forest and Coastal Prairie. 15-85 m.	Not present. Suitable habitat is not present at the site.
Scouler's catchfly (Silene scouleri ssp. scouleri)	//2B.2	Found in Coastal Bluff Scrub, Coastal Prairie, and valley and foothill grasslands. 5-315 m.	Not present. Suitable habitat is not present at the site.
Pacific Grove clover (Trifolium polyodon)	//1B.1	Found along small springs and seeps in grassy openings within closed-cone coniferous forest, meadows and seeps, Coastal Prairie, and valley and foothill grassland. 5-260 M.	Not present. Suitable habitat is not present at the site.
San Francisco owl's clover (Triphysaria floribunda)	//1B.2	Coastal prairie, valley and foothill grassland, on both serpentine and non-serpentine. 10-160m.	Not present. Suitable habitat is not present at the site.

1. Source: California Natural Diversity Data Base, Natural Heritage Division, California Department of Fish and Wildlife for the Inverness 7.5 Minute Quadrangle Map and surrounding areas, August 2023.

- 2. Status Codes:
  - FE Federally-listed Endangered
  - FT Federally-listed Threatened
  - FPE Federally Proposed Endangered
  - FPT Federally Proposed Threatened
  - FC Federal Candidate Species
  - BCC USFWS Bird Species of Conservation Concern

- SE California State-listed Endangered
- ST California State-listed Threatened
- CR California Rare
- SCE California State Candidate Endangered
- SCT California State Candidate Threatened
- FP California Fully Protected
- SSC CDFW Species of Special Concern
- WL CDFW Watch List Species

California Rare Plant Rank 1A: Plants presumed extirpated in California and either rare or extinct elsewhere.

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

California Rare Plant Rank 2B: Plants rare, threatened, or endangered in California, but more numerous elsewhere.

California Rare Plant Rank 3:Plants about which more information is needed – a review list.California Rare Plant Rank 4:Plants of limited distribution – a watch list.

#### **CNPS** Threat Ranks

0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

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