

Huffman-Broadway Group, Inc.

ENVIRONMENTAL REGULATORY CONSULTANTS

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May 12, 2020

Sonya Yu and Zack Lara
3664 22nd Street
San Francisco, CA 94114

Subject: Biological Site Assessment for 160 Iris Road, Bolinas, Marin County, California

Dear Mr. Lara and Ms. Yu:

Huffman-Broadway Group, Inc. (HBG) has completed a Biological Site Assessment report for your proposed single-family residence at 160 Iris Road in Bolinas, Marin County, California. The subject approximately 0.65-acre project site consists of Marin County Assessor's Parcel Number (APN) 191-192-18. 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 your architect 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 expected to utilize the site; (2) review of the California Natural Diversity Data Base (CNDDDB) 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 May 1, 2020.

PROPOSED PROJECT

The subject project site consists of Assessor's Parcel Numbers (APN) 191-192-18 located at 160 Iris Road in Bolinas, Marin County, California. The approximately 0.65-acre site is a relatively flat residential parcel. The property currently supports a 2,584 square foot single-

family residence with a building footprint of 2,138 square-feet. The landowner is proposing to demolish the existing structure and replace it with a 2,862 square foot residence occupying a building footprint of 3,095 square feet. The project applicant has contracted with Siol Studios (the project architect) that has prepared conceptual plans for development of the new residence dated April 6, 2020. The project also includes replacement of the existing septic system and construction of other ancillary facilities such as access and utilities, as necessary. The Project Description includes implementation of Best Management Practices to control erosion and sedimentation.

EXISTING BIOLOGICAL SETTING

The description of the biological setting for the property is based on a field visit to the site by HBG Senior Environmental Scientist Gary Deghi on May 1, 2020. The survey on this date 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.

The 0.65-acre property is relatively flat with elevations on the property between about 178 feet msl to about 180 feet msl. The proposed project site is vegetated with a number of planted non-native trees and other shrubs and groundcover vegetation. The soil type throughout the entire site is Olompali loam, 2 to 9 percent slopes (USDA 2019). The nearest blue line stream is an unnamed stream north of Poplar Avenue located approximately 2,984 feet (0.56 miles) north of the property. Between the property and this unnamed blue line stream is Alder Creek, an intermittent stream that flows from east to west through a ravine located approximately 950 feet north of the proposed project. According to the Marin County Watershed Program, Alder Creek drains the western half of the Bolinas Mesa including most of the town of Bolinas, and empties into Duxbury Reef and the Pacific Ocean through Agate Beach. Alder Creek is typically dry from April to November.

The project site is within the Marin County Coastal Zone and also subject to relevant policies of the Unit I Local Coastal Program (LCP) (County of Marin 1981). Unit I of the LCP was certified in 1981 and includes the communities of Muir Beach, Stinson Beach, Seadrift, and Bolinas. 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 Coastal Act at the local level.

Like other portions of northern California, Bolinas 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).

Plant Communities

Vegetation communities and habitats are generally 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. An additional classification system is the California Wildlife Habitat Relationships (WHR) System for habitat classifications (Mayer and Laudenslayer 1988). The WHR system defines aquatic as well as terrestrial habitats and is one of the few systems that include urban areas. The project site does not contain a native habitat type that would be classified under the Manual of California Vegetation; the entire site is a landscaped residential property that would be considered an Urban habitat under the California WHR System.

Vegetation at the site is comprised almost entirely of non-native landscaping vegetation. Trees are present but they include fruit trees, including a line of olive trees (*Olea europaea*) along the southern fence line, a lemon tree (*Citrus* sp.), an apple tree (*Malus domestica*), and ornamental trees such as Australian tea tree (*Leptospermum laevigatum*), Japanese maple (*Acer palmatum*), and one planted Coast redwood (*Sequoia sempervirens*) tree. Most of the vegetation consists of landscaping shrubs planted mainly around the existing house and the periphery of the yard along fence lines. The planted shrubs are typical of coastal landscaped environments in residential areas and include plants such as jade plants (*Crassula ovata*), Mexican sage (*Salvia leucantha*), Angel's trumpet (*Brugmansia arborea*), princess flower (*Tibouchina urvilleana*), prickly pear (*Opuntia* sp.), bottlebrush (*Callistemon* sp.), nasturtium (*Trapaeolum* sp.), geranium (*Geranium* sp.), a number of rose bushes (*Rosa* sp.), and many others. There is also a small flower garden with yarrow (*Achillea* sp.), rock purslane (*Calandrinia spectabilis*), and other species. The landowners have also established a raised bed vegetable garden in the northeast portion of the property.

Open areas north of the house and south of the house are not planted lawns but consist of essentially mowed weeds. Vegetation in both areas consist almost entirely of non-native herbaceous plants and grasses, including species such as rip-gut brome (*Bromus diandrus*), bluegrass (*Poa pratensis*), velvet grass (*Holcus lanatus*), scarlet pimpernel (*Anagalis arvensis*), bristly ox tongue (*Helminthotheca echioides*), poison hemlock (*Conium maculatum*), various clovers (*Trifolium* sp.), California blackberry (*Rubus ursinus*), sheep sorrel (*Rumex acetosella*), redstem fillaree (*Erodium cicutarium*), English plantain (*Plantago lanceolata*), the white lily, dandelion (*Taraxacum officinale*), and others. A few native herbaceous plants are present including blue-eyed grass (*Sisyrinchium bellum*), California cudweed (*Pseudognaphalium californicum*), and a few plants of tall flat-sedge (*Cyperus eragrostis*).

The vacant lot adjacent to the north end of the property along Elm Road consists of a grove of eucalyptus (*Eucalyptus* sp.) trees with an understory of mostly coyote brush (*Baccharis pilularis*), poison oak (*Toxicodendron diversiloba*), French broom (*Genista monspessulana*), Pride of Madeira (*Echium candicans*), and non-native grasses.

Animal Populations

The landscaped Urban habitat around the house and garden supports a number of wildlife species, mostly those typically found in disturbed habitats in West Marin. Trees and other

vegetation on the property provide limited nesting and roosting sites for birds, and cover and foraging habitat for species of birds, mammals, reptiles and amphibians. A number of wildlife species were documented at the site during the spring season field review conducted by Gary Deghi of HBG on May 1, 2020. All species documented are common to abundant in the region and would be expected in the habitats present at the site.

Bird species documented at the site during the May 1, 2020 field review included California quail (*Callipepla californica*), Anna's hummingbird (*Calypte anna*), Allen's hummingbird (*Selasphorus sasin*), band-tailed pigeon (*Patagioenas fasciata*), Eurasian collared-dove (*Streptopelia decaocto*), California scrub-jay (*Aphelocoma californica*), common raven (*Corvus corax*), black phoebe (*Sayornis nigricans*), Pacific-slope flycatcher (*Empidonax difficilis*), Bewick's wren (*Thryomanes bewickii*), California towhee (*Melospiza crissalis*), song sparrow (*Melospiza melodia*), house sparrow (*Passer domesticus*), and Brewer's blackbird (*Euphagus cyanocephalus*). The general area of the site has been designated within Marin County as the Bolinas Quail Refuge, a cultural designation that has no regulatory implications with respect to the project.

Amphibians expected in the area are likely to include Pacific treefrog (*Pseudacris regilla*), western toad (*Bufo boreas*), arboreal salamander (*Aneides lugubris*), and California slender salamander (*Batrachoseps attenuatus*), among others. No reptiles were observed during the survey but expected species include Western fence lizard (*Sceloporus occidentalis*) and common garter snake (*Thamnophis sirtalis elegans*). Evidence of mammals at the site included dens of Botta's pocket gopher (*Thomomys bottae*). Other mammals that could be present would be those adapted to disturbed environments such as Virginia opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), deer mouse (*Peromyscus maniculatus*), raccoon (*Procyon lotor*), and mule deer (*Odocoileus hemionus*).

Sensitive Habitats

Regulatory Requirements

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 Department of the Army, acting through the U.S. Army Corps of Engineers (Corps), has the authority to permit the discharge of dredge or fill material in waters of the U.S. under Section 404 of the Clean Water Act (CWA). Waters of the U.S. include both wetlands and "other waters of the U.S." Wetlands and other waters of the U.S. are described by U.S. Environmental Protection Agency (EPA) and Corps regulations (40 CFR § 230.3(s) and 33 CFR § 328.3(a), respectively). EPA and the Corps define wetlands as "...those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (EPA

regulations at 40 CFR § 230.3(t); Corps regulations at 33 CFR § 328.3(b)). Both natural and manmade wetlands and other waters (not vegetated by a dominance of rooted emergent vegetation) are subject to regulation. The geographic extent of wetlands is defined by the collective presence of a dominance of wetland vegetation, wetland hydrology conditions, and wetland soil conditions as determined following the USACE' 1987 Wetlands Delineation Manual (1987 Manual); the USACE' 2008 Regional Supplement to Corps of Engineers Wetland Delineation Manual: Arid West, Version 2.0 (Arid West Regional Supplement); and supporting guidance documents. The geographic extent of other waters of the U.S. is defined by an ordinary high water mark (OHWM) in non-tidal waters (33 CFR. §328.3(e)) and by the High Tide Line within tidal waters (33 CFR. §328.3(d)).

Waters of the State. Waters of the State are defined more broadly than “waters of the US” to mean “any surface water or groundwater, including saline waters, within the boundaries of the state” (Water Code section 13050(e)). Examples include, but are not limited to, rivers, streams, lakes, bays, marshes, mudflats, unvegetated seasonally ponded areas, drainage swales, sloughs, wet meadows, natural ponds, vernal pools, diked baylands, seasonal wetlands, and riparian woodlands. Waters of the State include all waters within the state’s boundaries, whether private or public, including waters in both natural and artificial channels. They include all “waters of the United States”; all surface waters that are not “waters of the United States, e.g. non-jurisdictional wetlands; groundwater; and the territorial seas. 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/US EPA jurisdictional determinations as they have no adopted methodology for the identification and delineation of wetlands or other waters of the State. However, as a matter of policy the SWQCB/SFBRWQCB consider wetlands and waters determined non-jurisdictional by the USACE/USEPA under *SWANCC or Rapanos* guidance to remain jurisdictional as waters of the State subject to SWQCB/SFBRWQCB jurisdiction.

California Department of Fish and Wildlife Regulations. The California Department of Fish and Wildlife (CDFW) regulates lakes and streams under Section of 1602 of the California Fish and Game Code (FGC). CDFW’s regulations implementing the FGC define the relevant rivers, streams and lakes over which the agency has jurisdiction to constitute “all rivers, streams, lakes, and streambeds in the State of California, including all rivers, streams and streambeds which have intermittent flows of water.” (Title 14 *California Code of Regulations* [CCR] § 720). The CDFW takes jurisdiction under its Lake and Streambed Alteration Agreement Program for any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. The CDFW does not have a methodology for the identification and delineation of the jurisdictional limits of streams except for the general guidance provided in *A Field Guide to Lake and Streambed Alteration Agreements, Section 1600-1607 California Fish and Game Code* (CDFG 1994). In making jurisdictional determinations, CDFW staff typically rely on field observation of physical features that provide evidence of water flow through a bed and channel such as observed flowing water, sediment deposits and drift deposits and that the stream supports fish or other aquatic life. Riparian habitat is not specifically defined by the FGC but CDFW takes jurisdiction over

areas within the flood plain of a body of water where the vegetation (grass, sedges, rushes, forbs, shrubs, and trees) is supported by the surface or subsurface flow.

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

California Coastal Act/Marin County Requirements. The project site is within the Marin County Coastal Zone and also subject to relevant policies of the Unit I Local Coastal Program (LCP) (County of Marin 1981). Unit II of the LCP was certified in 1981 and includes the communities of Muir Beach, Stinson Beach, Seadrift, and Bolinas. 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 Coastal Act at the local level.

Natural Resource policies of the Unit I LCP include those related to stream corridors. Certain streams and creeks are protected by LCP policies, and this protection extends to both the stream itself and the riparian vegetation growing adjacent to it. The LCP defines a stream as a perennial or intermittent watercourse mapped by the United States Geological Survey (USGS) on the most current 7.5-minute quadrangle series or identified in a local coastal program. For streams meeting this definition, the Unit I LCP requires a riparian protection area that includes all existing riparian vegetation on both sides of the stream and a stream buffer area. Wetlands are also protected by the Coastal Act. The Coastal Act defines wetlands as land "which may be covered periodically or permanently with shallow water." Coastal Act criteria require the establishment of wetland buffer areas of a minimum of 100 feet.

Marin Countywide Plan requirements pertaining to sensitive habitats, particularly requirements associated with the presence of Stream Conservation Areas (SCAs) and Wetland Conservation Areas (WCAs), are applicable countywide. Policies of the Marin County General Plan related to Stream Conservation Areas include the establishment buffer zones called Stream Conservation Areas for the protection of riparian systems, streams, and related habitats. A Stream Conservation Area consists of a watercourse, surrounding banks, and a strip of land (a riparian setback) extending laterally from the top of both banks. Only certain uses are allowed in SCAs.

Sensitive Habitat Findings

On May 1, 2020, 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 blue line stream is an unnumbered stream north of Poplar Avenue located approximately 2,984 feet (0.56 miles) north of the property. Between the property and this unnamed blue line stream is Alder Creek, an intermittent stream that flows from east to west through a ravine located approximately 950 feet north of the proposed project. According to the Marin County Watershed Program, Alder Creek drains the western half of the Bolinas Mesa including most of the town of Bolinas, and empties into Duxbury Reef and the Pacific Ocean through Agate Beach. Alder Creek is typically dry from April to November.

Special Status Species

Sensitive species include those species listed by the federal and state governments as endangered, threatened, or rare or candidate species for these lists. Endangered or threatened species are protected by the federal Endangered Species Act of 1973 as amended, the California Native Plant Protection Act of 1977, and the California Endangered Species Act of 1970. The California Environmental Quality Act (CEQA) provides additional protection for unlisted species that meet the “rare” or “endangered” criteria defined in Title 14, California Code of Regulations Section 15380.

CDFW maintains records for the distribution and known occurrences of sensitive species and habitats in the California Natural Diversity Database (CNDDDB). The CNDDDB 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 Bolinas 7.5-minute quadrangle. A search of the CNDDDB for records of occurrence of special status animals and plants and natural communities within this quadrangle indicated that several special status plant and animals occur in the project site vicinity but that no special status species or natural communities are known to occur on the project site itself.

Regulatory Requirements

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 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, establishing terms and conditions under which the project may proceed, 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 state listed 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. CDFW also classifies Fully Protected Species that may not be taken or possessed and that have only very limited opportunity for permits issued for take, and also tracks species of concern (species not listed under FESA or CESA) whose numbers, reproductive success, or habitat may be threatened.

Special Status Plant Species

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.

The CNDDDB notes that three special status plant species have been known to occur in the general vicinity of the project site. These plants are the Marin checker lily (*Fritillaria lanceolata* var. *tristulis*), marsh microseris (*Microseris paludosa*), and congested-headed

hayfield tarplant (*Hemizonia congesta* ssp. *congesta*). None of these plants is state or federally-listed, but all three are on California Native Plant Society lists of rare species.

- Marin checker lily is a strict Marin County endemic found in coastal bluff scrub, coastal scrub, coastal prairie between 30m and 200m in elevation. This species is often, but not always, found in serpentine soils. Known occurrences are within canyons and riparian areas or around rock outcrops. Marin checker lily is on CNPS list 1B.1.
- Marsh microseris is found in closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland between 5 and 300m in elevation. Marsh microseris is on CNPS list 1B.2.
- Congested-headed hayfield tarplant is found in valley and foothill grassland, grassy valleys and hills, often in fallow fields and sometime along roadsides between 20-560m in elevation. Congested-headed hayfield tarplant is on CNPS List 1B.2.

The onsite soils are Olompali loam soils that are not derived from serpentine. Marin checker lily would not be found on site due to the lack of serpentine soils, rock outcrops, and the coastal scrub and coastal prairie habitat upon which the species depends. The site also does not support the closed-cone coniferous forest, woodland, coastal scrub and native grassland that would support marsh microseris nor does it support the grasslands or fallow fields where one might expect to find congested-headed hayfield tarplant.

None of these three species would occur within disturbed areas in the immediate vicinity of the existing house where proposed demolition and construction activities for the project would take place. These areas near the house have been subjected to previous land clearing, construction of the house and various ancillary facilities (decks, walkways, septic leachfield, etc), and plantings of mostly ornamental species that render these areas generally unsuitable for growth of native plants including any of the noted special status plant species. The special status plant species found in this part of Bolinas require habitat conditions that are not found at the site of the proposed residential demolition and construction activities.

Special Status Animal Species

Animal species noted in the CNDDDB as occurring within in the vicinity of the project site or that are known to occur in the general vicinity based on the knowledge of HBG biologists, are discussed below. These species include California red-legged frog (*Rana draytonii*). Also, number of overwintering sites for monarch butterfly (*Danuas plexippus*) have been known to occur in the vicinity of the project. There is also concern in West Marin with possible nesting by Northern spotted owl (*Strix occidentalis caurina*). These species are discussed in detail below.

None of the species mentioned above are expected to occur on the subject property. This finding is made based on the habitat requirements of species known from the project vicinity 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.

Monarch Butterfly. The monarch butterfly (*Danaus plexippus*) is well-known for its north-south migrations from Canada to Mexico which span the lives of several generations. Monarch butterfly winter roost sites, typically used between October and February, extend along the West Coast from Mendocino County in northern California, south to Baja California in Mexico. Winter roosts consist of hundreds or thousands of monarchs in wind-protected tree groves close to sources of nectar and water. On the California coast, these roosts usually form in eucalyptus, but Monterey pine and Monterey cypress groves are also used. Monarch populations across North America have fallen by as much as 90 percent in the last two decades and in February 2015, the USFWS showed that nearly a billion monarchs had vanished from overwintering sites since 1990. The main reason for the decline has been attributed to herbicides used by farmers and homeowners on milkweed, the butterfly's larval host plant.

The monarch butterfly has no federal or state listing status, but the annual migration of the species in general is considered a threatened phenomenon by International Union of Concerned Scientists (IUCN). The species is considered California Rare and is a CDFW ranked S3 (state vulnerable) species. Trees serving as overwintering sites are protected by policy in the Local Coastal Plan, and the Marin Countywide Plan specifically requires protection of eucalyptus groves that support colonies of monarch butterflies. Monarch butterflies use trees such as eucalyptus (*Eucalyptus* sp.), Monterey pine (*Pinus radiata*) and Monterey cypress (*Cupressus macrocarpa*) as overwintering sites. Monarchs often use the same overwintering sites year after year, but some overwintering sites are abandoned in favor of others.

No eucalyptus, Monterey pine or Monterey cypress occurs on the property and no habitats are present that could support a population of overwintering monarchs. Although potential overwintering sites do not occur in the residential yard at the site, they have occurred in the past in the general vicinity of the site based on information contained within the CNDDDB (CDFW 2020). The closest monarch overwintering site to the project site is one historically present along Elm Road between Iris Road and Hawthorne Road where as many as 130 wintering monarchs were counted most recently in the winter of 1992-1994. The site has not been used since, but this site is within the grove of trees that is immediately beyond the north end of the project site. An additional overwintering location near the intersection Elm Road and Kale Road (two blocks to the west of the project site) supported approximately 75 monarchs in 2008. A third overwintering site in the area included one along Maple Road (about five blocks west of the project site) that supported as many of 40,000 monarchs in October of 1997 (none by January of 1998), about 2,000 in 2001 and 2002, and 122 in 2004. None have been observed at the Maple Road site subsequent to 2004.

The eucalyptus grove adjacent to the north end of the property was used as a monarch overwintering site during some winters up to 1994. Although the monarchs abandoned this site about 25 years ago, it is possible that the monarchs could return to use the grove of trees as an overwintering site in the future.

California Red-legged Frog. The California red-legged frog (*Rana draytonii*) is a federally listed threatened species and California species of special concern. The historical range of the California red-legged frog extended from the vicinity of Point Reyes National Seashore in Marin County southward to northwestern Baja California, Mexico and inland to approximately Redding in Shasta County. The frog has sustained a 70 percent reduction in its geographic range. The project area is not part of the critical habitat designated under the Endangered Species Act for the California red-legged frog. California red-legged frogs have been observed in a number of aquatic and terrestrial habitats, including marshes, streams, lakes, reservoirs, ponds and other permanent, or near permanent, sources of water. Although they occur in ephemeral streams or ponds, California red-legged frogs are expected to thrive in permanent deep-water pools with dense stands of overhanging willows (*Salix* spp.) and emergent vegetation. However, they have been observed in a variety of aquatic environments, including stock ponds and artificial pools with little to no vegetation. California red-legged frogs usually are observed near water but can move long distances over land between water sources during the rainy season.

California red-legged frogs are known from the watersheds of various watercourses in Coastal Marin, including Pine Gulch Creek in Bolinas. California red-legged frogs use habitats within the various farms located along Pine Gulch Creek west of Horseshoe Hill Road. The nearest documented California red-legged frogs are either from a farm pond at Star Route Farms or from a pond along Olema-Bolinas Road just south of Lauff Ranch Road, both locations that are about 5,800 feet (at least 1.1 miles) from the project site. Even though California red-legged frogs disperse from their breeding ponds to upland refugial sites, the chance that California red-legged frog would pass through the project site is remote given that (i) no aquatic habitats are found at the property, (ii) creeks and other aquatic areas where frogs are known to occur are distant from the property, and (iii) the property is not located in a position in which California red-legged frog would be likely to disperse between breeding ponds and upland refugial sites.

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. Dusky-

footed woodrat is the preferred prey for Northern spotted owl in Marin and Sonoma Counties (Shuford 1993, Evens 2008). Nesting Northern spotted owls have been found throughout forested habitats in Marin County and use a variety of tree species for nesting. This owl species does 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.

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 CNDDDB. 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 of known territories of Northern spotted owl and the nearest recorded individuals were reported approximately 9,700 feet (1.84 miles) from the property.

BIOLOGICAL IMPACTS

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.

Impacts

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. None of the plant or animal species discussed above have the potential to occur at the site of the proposed demolition and construction activities. The proposed project would not result in any significant adverse impacts on special status plant or animal species as explained below. The project would not substantially reduce the number or restrict the range of a rare, endangered or threatened species of fauna.

Monarch Butterfly. The closest monarch overwintering site to the project site is one historically present along Elm Road between Iris Road and Hawthorne Road where as many as 130 wintering monarchs were counted most recently in the winter of 1992-1994. The site has not been used since, but this site is within the grove of trees that is immediately beyond the north end of the project site. Overwintering monarchs may abandon a previously-used site and could also return to a site that was once used and abandoned. Although the monarchs abandoned this site about 25 years ago, it is possible that the monarchs could return to use the grove of trees as an overwintering site in the future.

In 2017, the Western Association of Fish and Wildlife Agencies (WAFWA) established the Western Monarch Working Group to proactively lead a multistate cooperative agenda for conservation of the western monarch population. The Western Monarch Butterfly Conservation Plan encompasses the states of Arizona, California, Idaho, Nevada, Oregon, Utah, and Washington, which comprise the core of the western monarch range. The Group found that approximately two-thirds of the monarch overwintering sites fall within the California Coastal Zone where they are protected as Environmentally Sensitive Habitat Areas (ESHA). Management objectives for overwintering sites concentrate on protections preventing alteration of overwintering sites (WAFWA 2019). Many overwintering sites are found in residential areas where adjacent residential uses have little to no effects on overwintering sites. Even if monarchs were to return to the overwintering site adjacent to the north end of the property, as long as the overwintering site itself is protected, neither

the presence of the planned residential structure nor its construction would have a significant impact on populations of monarch butterflies.

California Red-legged Frog. California red-legged frog is documented in the CNDDDB from locations near Pine Gulch Creek that are more than one mile from the proposed demolition and construction work. Even though California red-legged frogs disperse from their breeding ponds to upland refugial sites, the chance that California red-legged frogs would pass through the project site is remote given that (i) no aquatic habitats are found at the property, (ii) creeks and other aquatic areas where frogs are known to occur are distant from the property, and (iii) the property is not located in a position in which California red-legged frog would be likely to disperse between breeding ponds and upland refugial sites. No impacts are anticipated to populations of California red-legged frog.

Northern Spotted Owl. According to CDFW, 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. In addition, application of USFWS models (USFWS 2006) generate distances at which impacts to nesting Northern spotted owl could occur for various land uses and types of construction operations. For residential construction in areas similar to the project site, nesting owls would generally need to be approximately 100m away for significant impacts to occur.

The nearest activity center of known territories of Northern spotted owl and the nearest observation of the species occurs 1.84 miles from the project area. Based on information available from National Park Service and USFWS data, construction would take place beyond the distances predicted by the USFWS models within which harassment of nesting owls could occur, and the construction would also not violate CDFW guidelines to prevent disturbance to nesting Northern spotted owls. No nests are known from within 0.25 miles of the site. Construction activities would not affect nesting Northern spotted owls according to review criteria of USFWS or CDFW.

Special Status Plants. Nearly all of the ground cover vegetation at the site is non-native landscape or ornamental species and does not provide habitat for special status plant species. In general, the project site is a disturbed site that has been subjected to previous land clearing and construction of the existing house and various ancillary facilities. Three special status plant species known to occur in the immediate vicinity of the site (Marin checker lily, marsh microseris, and congested-headed hayfield tarplant) require habitat conditions that are not found at the site of the proposed residential demolition and construction. No impacts to special status species of plant would result from the proposed residential improvements.

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 Unit I Marin County LCP or by criteria used by CDFW is Alder Creek which is located just approximately 950 feet from 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.

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 SFBWQCB, the Section 1602 Fish and Game Code jurisdiction of CDFW, or to regulation by Marin County under the Local Coastal Program or Marin Countywide Plan. 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 a number of bird and other animal species were observed on the property during field surveys, the demolition of the existing house and construction of a new one as planned would occur within a landscaped area consisting of planted non-native trees and shrubs and mostly non-native herbaceous plants and grasses. As the construction activities would take place within an Urban habitat vegetated with mostly non-native landscape trees and other species, the proposed construction would not result in substantial change to animal populations at the site. Valuable habitats for various species can be found in habitats throughout 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.

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.

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 Unit I LCP, the Marin Countywide Plan 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 or the Marin Countywide Plan. No native trees will need to be removed to accommodate the proposed residential development.

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 demolition of the existing house and construction of a new residence at 160 Iris Road in Bolinas will be consistent with natural resource requirements of the Coastal Act and the County's LCP and Marin Countywide Plan, and will not result in significant biological impacts. If you have any questions regarding this Biological Site Assessment report for the property at 106 Iris Road in Bolinas, please call either me or Dr. Terry Huffman at 415-925-2000.

Sincerely,



Gary Deghi
Vice President/Senior Environmental Scientist

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