

FINAL BIOLOGICAL SITE ASSESSMENT
Vision Road, Inverness
Marin County, California



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INTRODUCTION

Property Location and Project Description

The subject property is located in unincorporated Marin County on the north side of Vision Road in Inverness, California approximately 1/10th of a mile west of Sir Francis Drake Boulevard. The property consists of two vacant parcels 112-141-03 and 112-141-04. (See Figure 1: Property Location (page 12)). The two parcels together total approximately 0.9 acres. The site is within a subdivided and developed portion of Inverness with single-family home lots extending along narrow winding roads. All adjacent parcels are developed with single family homes. The Marin Countywide Plan designates the property as C-SF3 (Coastal Single Family 1unit/1-5 acres). The property is zoned C-RSP-0.5 (Residential, Single Family Planned, Coastal Zone, 1 unit/2 acres).

The average slope of the two parcels is approximately 50%. The property is noted as an area of Minimal Flood Hazard, is located within the Urban Wildland Interface and does not include any Stream Conservation Areas. No environmental hazards have been identified. Vegetation throughout the developed area is similar to that on the project site with a relatively dense hardwood overstory with scattered Douglas-fir and Bishop pine, and a dense shrub understory separating the developed lots. Outside of the developed area, conifer forests dominate portions of the surrounding landscape with stands of Bishop pine, Douglas-fir and mixed pine evergreen forest.

The project concept includes a 1,600 square foot home and an adjacent porch. There are two possible sites for the proposed project:

- The first option is to locate the home and porch on the western two-thirds of the site approximately 60 feet north of the property boundary in close proximity to the seasonal swale located on the property.
- The second option is to locate the home and porch on the eastern portion of the property on a clearing approximately 40 feet north of the property boundary below one of the seasonal swales and west of the other.

The two locations have the following in common:

- Due to the slope of the property, both sites require grading and the construction of retaining walls.
- The vegetation on the northern portion of the property would remain undisturbed.
- Existing trees located between the driveway and the house would be preserved.
- A circular driveway would be constructed off of Vision Road to provide access to the property and parking for four vehicles.
- Stairs would be constructed to connect the driveway and the house.
- The house is likely to be built in two phases beginning with the patio and western portion of the home.

- The location of the water tank will be determined based upon the final location of the building envelope.

Objectives

The objectives of the biological resources site assessment are to:

- Evaluate land use and natural community associations
- Evaluate habitats and general wildlife use
- Determine the presence of unique biological resources and sensitive habitats
- Determine the presence, absence, or potential for occurrence of special-status species
- Assess current baseline levels of human use and disturbance
- Assess the potential for and the extent to which proposed project components could significantly impact biological resources relative to the baseline condition

METHODS

Pre-survey Investigation

Prior to conducting the site visit, available information regarding biological resources on or near the project area was gathered and reviewed. Sources include:

- California Natural Diversity Data Base (CNDDDB 2017)
- California Native Plant Society (CNPS) Cal Flora database (2017)
- California Department of Fish and Game Special Animals list (CDFW 2017)
- California Bird Species of Special Concern (2017)
- Marin Flora (Howell et al. 2007)
- Marin County Parcel maps and property survey maps
- Marin County Local Coastal Program (1981, 2010, 2015, 2016)
- Marin Countywide Plan (2007)
- Inverness Community Plan (1983)
- Marin County Code; Title 22: Development Code; Biological Resources
- Preparation of Biological Assessments, Marin County Community Development Agency
- Other published and unpublished biological reports, accounts, and research.

Aerial photographs, land use/vegetation maps of the project area and surrounding area and the property site survey were also reviewed.

Field Surveys

A field assessment of the project site was conducted by James Estep, a qualified biologist, on November 7, 2017 from approximately 0900 to 1100 hours. The one-acre project site was walked, vegetation examined and described, wildlife habitat including special-status species evaluated, and the presence of biological features including wetlands and stream courses, snags and down trees, and other potentially sensitive resources identified and mapped. Focused botanical or wildlife surveys were not performed as part of this analysis.

REGULATORY FRAMEWORK

The following state, federal and local laws, regulations, policies and plans are relevant to the proposed project. Each is briefly described below.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires that significant environmental impacts of proposed projects be reduced to a less-than-significant level through adoption of feasible avoidance, minimization, or mitigation measures unless overriding considerations are identified and documented.

During the CEQA review process, environmental impacts are assessed and a significance determination provided based on pre-established thresholds of significance. Thresholds are established using guidance from CEQA, particularly Appendix G of the State CEQA guidelines and CEQA Section 15065 (Mandatory Findings of Significance). CEQA guidance is then refined or defined based on further direction from the lead agency.

Consistent with Appendix G of the State CEQA guidelines, a biological resource impact is considered significant (before considering offsetting mitigation measures) if the lead agency determines that project implementation would result in one or more of the following:

- Substantial adverse effects, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by California Department of Fish and Wildlife (CDFW) or US Fish and Wildlife Service (USFWS);
 - A substantial adverse effect on a special-status wildlife species is typically defined as one that would:
 - Reduce the known distribution of a species,
 - Reduce the local or regional population of a species,
 - Increase predation of a species leading to population reduction,
 - Reduce habitat availability sufficient to affect potential reproduction, or
 - Reduce habitat availability sufficient to constrain the distribution of a species and not allow for natural changes in distributional patterns over time.
- Substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or interference with the use of native wildlife nursery sites.
 - Substantial interference with resident wildlife movement is typically defined as obstructions that prevent or limit wildlife access to key habitats, such as water sources or foraging habitats, or obstructions that prohibit access through key movement corridors considered important for wildlife to meet needs for food, water, reproduction, and local dispersal.
 - Substantial interference with migratory wildlife movement is typically defined as obstructions that prevent or limit regional wildlife movement through the project area to meet requirements for migration, dispersal, and gene flow that exceed the defined baseline condition.

Consistent with CEQA Section 15065 (Mandatory Findings of Significance), a biological resource impact is considered significant if the project has the potential to:

- substantially degrade the quality of the environment;
- substantially reduce the habitat of a fish or wildlife species;
- cause a fish or wildlife population to drop below self-sustaining levels;
- threaten to eliminate a plant or animal community;
- substantially reduce the number or restrict the range of an endangered, rare or threatened species.

CEQA defines the significance of an impact on a state-listed species based on the following:

- Appendix G of the State CEQA guidelines states that a biological resource impact is considered significant (before considering offsetting mitigation measures) if the lead agency determines that project implementation would result in “substantial adverse effects, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFG or USFWS”; and
- CEQA Section 15065 (Mandatory Findings of Significance), a biological resource impact is considered significant if the project has the potential to “substantially reduce the number or restrict the range of an endangered, rare or threatened species”.

Federal Migratory Bird Treaty Act (MBTA)

The federal Migratory Bird Treaty Act (MBTA) (Title 16, United States Code [USC], Part 703) enacts the provisions of treaties between the United States, Great Britain, Mexico, Japan, and the Soviet Union and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703, 50 CFR 21, 50 CFR 10). Specifically, the MBTA states: “Unless and except as permitted by regulations ...it shall be unlawful at any time, by any means, or in any manner to pursue, hunt, take, capture, kill ... possess, offer for sale, sell ... purchase ... ship, export, import...transport or cause to be transported ... any migratory bird, any part, nest, or eggs of any such bird ... (The Act) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior.” The word “take” is defined as “to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect.”

Federal Endangered Species Act

The USFWS administers the federal Endangered Species Act (ESA) as it relates to terrestrial wildlife. The ESA requires USFWS to maintain lists of threatened and endangered species and affords substantial protection to listed species. The USFWS can list species as either endangered or threatened. An endangered species is at risk of extinction throughout all or a significant portion of its range (ESA Section 3[6]). A threatened species is likely to become endangered within the foreseeable future (ESA Section 3[19]). Section 9 of the ESA prohibits the take of any fish or wildlife species listed under the ESA as endangered and most species listed as threatened. Take, as defined by the ESA, means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Harm is defined as “any act that kills or injures the species, including significant habitat modification.” The ESA includes mechanisms that provide exceptions to the Section 9 take prohibitions. For non-federalized projects, Section 10 allows for the issuance of a 10(a)(1)(b) permit to take covered species during otherwise lawful activities with approval of a habitat conservation plan.

California Endangered Species Act

The California Endangered Species Act (CESA) prohibits take of wildlife and plants listed as threatened or endangered by the California Fish and Game Commission. *Take* is defined under the California Fish and

Game Code as any action or attempt to “hunt, pursue, catch, capture, or kill.” The CESA allows exceptions to the take prohibition for take that occurs during otherwise lawful activities. The requirements of an application for incidental take under CESA are described in Section 2081 of the California Fish and Game Code. Incidental take of state-listed species may be authorized if an applicant submits an approved plan that minimizes and “fully mitigates” the impacts of this take.

California Fish and Game Code 3503.5 (Birds of Prey)

Section 3503.5 of the Fish and Game Code prohibits the take, possession, or destruction of any birds of prey or their nests or eggs. The California Department of Fish and Wildlife may issue permits authorizing take pursuant to CESA.

Marin County Local Coastal Program Unit II Amended (1981, 2010) Marin County Local Coastal Program Land Use Plan (2015, 2016)

The Marin County Local Coastal Program governs land development in the Marin County Coastal Zone and guides both public and private development. Most new development projects within the coastal zone require a coastal permit. The LCP is currently undergoing an update. Both the existing and proposed plans include policies and programs that guide how natural resources shall be protected when land is developed. The LCP in Unit II of the Coastal Zone (1981/2010) is designed to protect the marine environment and water quality of Tomales Bay; streams and riparian habitats; wetlands; and coastal dunes and other sensitive land habitats.

Biological Resource policies in the proposed LCP (2015/2016) establish, protect and buffer Environmentally Sensitive Habitat Areas (ESHAs); protect major vegetation; promote restoration and the removal of invasive species; provide protection and buffers for beaches and coastal dunes, roosting and nesting habitat, wetlands, and streams; and provide conditions for diking, dredging, filling and draining.

Marin Countywide Plan (2007)

The Marin Countywide Plan (2007) guides conservation and development in Marin County. The Natural Systems and Agriculture Element provides a number of policies that address the protection of biological resources including special-status species, sensitive natural communities, wetlands and riparian habitat. and includes numerous policies regulating and emphasizing the protection of natural resources. Policies include:

- BIO-1.1: Protect Wetlands, Habitat for Special-Status Species, Sensitive Natural Communities and Important Wildlife Nursery Areas and Movement Corridors
- BIO-1.3: Protect Woodlands, Forests and Tree Resources
- BIO-2.2: Limit Development Impacts
- BIO-2.4: Protect Wildlife Nursery Areas and Movement Corridors

Inverness Ridge Community Plan (1983)

The Inverness Ridge Community Plan prepared in 1983 is the most recent local plan for the area. The natural resources section reiterates the Local Coastal Program policies in place at the time and focuses on protection of streams and riparian habitats, wetlands, native vegetation, and environmentally sensitive habitats.

BIOLOGICAL SETTING

Description of the Project Site

The Leahy Property (project site) includes two contiguous parcels (112-141-03 and 112-141-04) totaling approximately 1 acre. The property is on a steep southeast-facing slope (approximately 51 percent [2:1 slope ratio]). The property extends from the toe of the slope at Vision Road at 24-foot elevation to approximately 130 feet elevation along the northern border of the property. A seasonal drainage occurs along the eastern edge of the property on Parcel 03. Fairly incised, this drainage appears to be limited to carrying runoff flows during rain events, and therefore serves primarily for storm-water drainage of the area. A small slide also appears to have occurred just west of the drainage extending from about mid-point on the slope toward the upper extent of the slope, and leaving a small flat shelf at the bottom on the slide. Water also drains down a less defined swale near the west side of the property (Parcel 04) extending from the upper end of the parcel to near Vision Road. This has created a small moist area where the topography flattens near the center of the parcel. The lower slope of the property has recently been cleared of most understory vegetation. Understory vegetation has not been cleared in the upper slope area and along the seasonal drainage on the east side of the property.

Description of the Surrounding Area

The project site is along the east side of the Point Reyes peninsula and the leeward side of Inverness Ridge, overlooking Tomales Bay near the town of Inverness. The site is within a subdivided portion of the peninsula with 1+ acre single-family home lots extending along narrow winding roads. The topography is steep and hilly leading up to Inverness Ridge, but with numerous transverse ridges throughout. Vegetation throughout the developed area is similar to that on the project site with a relatively dense hardwood overstory with scattered Douglas-fir and Bishop pine, and a dense shrub understory separating the developed lots. Outside of the developed area, conifer forests dominate portions of the surrounding landscape with stands of Bishop pine, Douglas-fir and mixed pine evergreen forest.

Wetlands and Drainages

The Marin County LCP and the USGS Inverness quad do not indicate wetlands and streams on or near the property. The map, “Major Streams and Watersheds of West Marin” indicates two creeks south of the property – First Valley Creek and First Valley Creek Tributary flowing to Tomales Bay approximately one third of a mile from the property near Inverness Elementary School. The USGS Inverness, CA quad map indicates an intermittent stream approximately 300 feet south of the property, running behind the homes on the south side of Vision Way, roughly parallel to Aberdeen Way.

As noted in the project site description, there is a seasonal drainage on the east side of the property that drains storm water flows from on and above the property downslope to Vision Road. Although fairly incised, this drainage appears limited in extent and to support only local, seasonal storm water runoff. During the field assessment, the drainage was dry. Another less defined swale occurs on the western side of the property, which appears to also drain localized runoff. Both of these drainages were noted in the property survey and also in the California EcoAtlas¹. There are no wetlands on the property.

¹ The California EcoAtlas is a statewide non-regulatory database of maps and spatial information about aquatic resources based upon the California Aquatic Resources Inventory. It also includes general information about wetland condition and water quality. The stream data does not distinguish between perennial, intermittent and ephemeral streams.

Vegetation

In the lower portion of the property, overstory vegetation consists primarily of California bay laurel (*Umbellularia californica*), coast live oak (*Quercus agrifolia*), and tanbark oak (*Lithocarpus densiflorus*) with diameter at breast height (dbh) ranging from 12 to 24 inches, and a recently cleared understory dominated by grasses along with sparse bracken fern (*Pteridium aquilinum*) and sword fern (*Polystichum munitum*) (Plates 1 and 2. Page 14). On the upper portion of the property, tanbark oak is the dominant overstory species along with coast live oak and madrone (*Arbutus menziesii*). Unlike the lower slope, understory vegetation has not been cleared in this area, which consists of dense tanoak saplings and seedlings, poison oak (*Toxicodendron diversilobum*), bracken fern, sword fern, and blackberry (*Rubus ursinus*) (Plates 3 and 4. Page 15). Many of the trees in this area, particularly the tanbark oak, are dead or dying, leaving down limbs intermixed with the dense understory vegetation. The drainage swale on the eastern edge of the property also has not been cleared and consists of similar dense vegetation, including California hazelnut (*Corylus cornuta*) (Plate 5. Page 16).

General Wildlife Use

Wildlife use of the project site is typical of the coast ranges. Species identified during the site assessment include turkey vulture (*Cathartes aura*), Nuttall's woodpecker (*Picooides nuttallii*), northern flicker (*Colaptes auratus*), Pacific slope flycatcher (*Empidonax difficilis*), scrub jay (*Apelocoma californica*), common raven (*Corvus corax*), chestnut-backed chickadee (*Poecile rufescens*), bushtit (*Psaltriparus minimus*), Bewick's wren (*Thryomanes bewickii*), and yellow-rumped warbler (*Setophaga coronate*). Although no nests were observed, several of the trees were capable of supporting nesting raptors, including Cooper's hawk (*Accipiter cooperii*) and red-shouldered hawk (*Buteo lineatus*). A red-shouldered hawk was heard in the area during the survey. The property, like the surrounding developed area, supports native oak/bay laurel-dominated overstory intermixed with non-native ornamentals around homes. Many native birds are expected to breed in the area, which is sufficiently open to allow for use by migrant species. Many mammals common to the area are also expected to occur onsite and in the open habitat intermixed within the surrounding developed area, including striped skunk (*Mephitis mephitis*), coyote (*Canis latrans*), opossum (*Didelphis virginiana*), and raccoon (*Procyon lotor*). However, the developed area likely creates an obstacle to some wildlife movement, such as black-tailed deer (*Odocoileus hemionus columbianus*).

Special-Status Species

Special-status species are generally defined as species that are assigned a status designation indicating possible risk to the species. These designations are assigned by state and federal resource agencies (e.g., California Department of Fish and Wildlife, U.S. Fish and Wildlife Service) or by private research or conservation groups (e.g., National Audubon Society, California Native Plant Society). Assignment to a special-status designation is usually done on the basis of a declining or potentially declining population, either locally, regionally, or nationally. To what extent a species or population is at risk usually determines the status designation. The factors that determine risk to a species or population generally fall into one of several categories, such as habitat loss or modification affecting the distribution and abundance of a species; environmental contaminants affecting the reproductive potential of a species; or a variety of mortality factors such as hunting or fishing, interference with man-made objects (e.g., collision, electrocution, etc), invasive species, or toxins.

For purposes of environmental review, special-status species are generally defined as follows:

- Species that are listed, proposed, or candidates for listing under the federal Endangered Species Act (50 CFR 17.11 – listed; 61 FR 7591, February 28, 1996 - candidates);
- Species that are listed or proposed for listing under the California Endangered Species Act (Fish and Game Code 1992 Sections 2050 et seq.; 14 CCR Sections 670.1 et seq.);

- Species that are designated as Species of Special Concern by CDFW;
- Species that are designated as Fully Protected by CDFW (Fish and Game Code, Section 3511, 4700, 5050, and 5515);
- Species included on Lists 1B or 2 by the California Native Plant Society;
- Species that meet the definition of rare or endangered under CEQA (14 CCR Section 15380).

Table 1 indicates the special-status species that have potential to occur on or in the vicinity of the project, along with their habitat association, the availability of habitat on the project site, and whether or not the species has been detected on the project site. The species included in Table 1 are determined through review of all resources used in this assessment and an evaluation of species habitat requirements vs. the presence of that habitat. Appendix 1 lists the special-status species identified by CNDDDB for the Inverness USGS Quadrangle. This list includes species with no potential to occur on the project site, such as aquatic and wetland species.

California Red-legged Frog (*Rana draytonii*). Storer (1925) and Hayes and Jennings (1988) describe aquatic breeding habitat requirements for California red-legged frog as cold-water pond habitats (including stream pools and stock ponds) with emergent and submergent vegetation, providing suitable cover for young and adults and ensuring successful reproduction. Optimal habitats are described as deep-water ponds or pools along low gradient streams with dense stands of overhanging willows and a fringe of cattails between the willow roots and overhanging willow limbs. The species also requires upland non-breeding habitat used for cover, aestivation, and migration and other movements.

There are numerous CNDDDB occurrences of California red-legged frog on the Point Reyes Peninsula and in the vicinity of Tomales Bay and Drakes Bay. However, none are within 1 mile of the property. The nearest reported occurrence is a stock pond approximately 1.3 miles southwest of the property. The seasonal drainage on the project site does not support perennial flows nor does water pond in the drainage for extended periods. Therefore, the project site does not support suitable aquatic habitat for this species.

Great Blue Heron (*Ardea Herodias*)/**Great Egret** (*Ardea alba*). These species nest colonially in tall trees, including mature Douglas-fir and redwood forest and eucalyptus groves. The species are not listed or have other special status, but the rookery sites are considered important and sensitive habitat sites. None occur on the project site and none have been reported from the immediate vicinity. The nearest reported rookery is in a grove of Douglas-fir at Inverness Park, approximately 2 miles southeast of the project site.

Marbled Murrelet (*Brachyramphus marmoratus*). This small seabird occurs in nearshore waters along the outer coast of Marin County in small numbers during the non-breeding season. Murrelets venture inland to nest in old growth, multi-canopy, coast redwood and Douglas-fir forests along the California coast; however, there are no known nesting records for Marin County (Shuford 1993) or the Point Reyes Peninsula (Evens 2008). The closest known occurrence is at upper Pilarcitos Creek, San Mateo County, 45 miles SSE of the project site. The project site does not support suitable habitat for this species.

Osprey (*Pandion haliaetus*). This fish-eating raptor constructs its nest in tall trees, particularly those with broken tops, near open water habitats. They nest in relatively high numbers along Inverness Ridge (Avocet 2008). However, none have been reported within 0.5 miles of the project site. The nearest CNDDDB occurrence is about 0.7 miles northwest of the project site. There are no osprey nests or suitable trees to support an osprey nest on the project site.

Table 1. Special-status species with potential to occur in the vicinity of the project site.

Species	Status State/ Federal	Habitat Association	Habitat Availability on the Project Site	Observed Onsite During Survey	Reported Occurrence on the Project Site
California Red-legged frog <i>Rana draytonii</i>	CSC/T	Ponds, perennial streams	None	No	No
Great blue heron <i>Ardea Herodias</i> Great egret <i>Ardea alba</i>	-/-	Mature trees for nesting and roosting; open cultivated or shallow wetlands for foraging	None	No	No
Marbled murrelet <i>Brachyramphus marmoratus</i>	E/T	Mature conifer forests for nesting	None	No	No
Osprey <i>Pandion haliaetus</i>	WL/-	Tall trees or artificial structures for nesting; open water for foraging	None	No	No
Northern spotted owl <i>Strix occidentalis caurina</i>	-/T	Mature conifer or oak/conifer forests	None	No	No
Western snowy plover <i>Charadrius alexandrinus nivosus</i>	CSC/T	Coastal beaches, dune, salt pans. Gravel bars for nesting	None	No	No
Olive-sided flycatcher <i>Conotopus cooperi</i>	CSC/-	Conifer forests with adjacent open clearings, bogs, ponds	None	No	No
Point Reyes Mountain Beaver <i>Aplodontia rufa phaea</i>	CSC/-	Coastal scrub – usually north-facing slopes	None	No	No
Palid bat <i>Antrozous pallidus</i>	CSC/-	Grasslands, shrub lands, woodlands.	Roosting; aerial foraging	No	No
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	CSC/-	Caves, bridges, buildings, rock crevices. tree hollows	Aerial foraging	No	No
Western red bat <i>Lasiurus blossevillii</i>	CSC/-	Large trees, woodlands, grasslands and cultivated fields	Roosting, aerial foraging	No	No
Marin manzanita <i>Arctostaphylos virgata</i>	1B/-	Chaparral, mixed forest, closed-cone pine forest	Generally suitable conditions	No	No
Point Reyes ceanothus <i>Ceanothus gloriosus</i> var. <i>gloriosus</i>	4.3/-	Coastal strand, closed-cone pine forest, northern coastal scrub	Generally suitable conditions	No	No
Mt. Vision ceanothus <i>Ceanothus gloriosus</i> var. <i>porrectis</i>	1B/SC	Coastal prairie, valley grassland, northern coastal scrub, closed-cone pine forest	Generally suitable conditions	No	No
Western leatherwood <i>Dirca occidentalis</i>	1B/-	Closed-cone pine forest; chaparral; north coast coniferous forest; riparian woodland	Generally suitable conditions	No	No

T=threatened; E=Endangered; CSC=California species of species concern; WL = CDFW Watch List; 2=CNPS List 2. 1B = CNPS List 1B; 4.3 = CNPS List 4.3.

Northern Spotted Owl (*Strix occidentalis caurina*). Northern spotted owls are associated with mature conifer forest systems with a nearly closed multi-layered canopy (>70%), moderate to dense understory, and a high concentration of down woody debris. In western Marin County, particularly along the Inverness Ridge, this subspecies occupies dense stands of Bishop pine and Douglas-fir. Most breeding territories have been identified in canyon bottoms or mid-slope locations, or the leeward slope of the ridge where there is high precipitation, protection from onshore wind and weather, and fairly dense vegetative cover. The nearest reported breeding territory and reported sighting is approximately 0.75 miles south of the project site. Lacking pine or fir forest, with a partially cleared understory, and situated within the interior of a developed area, the project site does not support suitable habitat for northern spotted owl.

Western Snowy Plover (*Charadrius alexandrinus nivosus*). The Pacific coast population of the western snowy plover breeds primarily on coastal beaches from southern Washington to southern Baja California, Mexico. The population breeds above the high tide line on coastal beaches, sand spits, dune-backed beaches, sparsely-vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries (U.S. Fish and Wildlife Service 2007). Less common nesting habitat includes bluff-backed beaches, dredged material disposal sites, salt pond levees, dry salt ponds, and river bars (U.S. Fish and Wildlife Service 2007). Nesting records for Marin County are primarily associated with coastal beaches within the Point Reyes National Seashore; however, there are earlier records from the shoreline of Tomales Bay. The project site does not support habitat for this species.

Olive-sided Flycatcher (*Conotopus cooperi*). Breeding habitat for this species is primarily late-successional conifer forest with open canopies. This species is associated with edges, openings, and clearings in otherwise dense forests, or semi-open forests (Widdowson 2008). The species is an uncommon summer resident on Inverness Ridge (Shuford 1993, Evens 2008). The species has not been reported from the vicinity of the project site. Although it is possible that olive-sided flycatcher may occur incidentally, conditions on the project site do not meet the ecological requirements as breeding habitat for this species.

Point Reyes Mountain Beaver (*Aplodontia rufa phaea*). The Point Reyes mountain beaver is an endemic rodent subspecies, known only to occur in western Marin County, almost entirely within Point Reyes National Seashore. It is found on cool, moist, north-facing slopes in moderately dense coastal scrub. This scrub vegetation typically includes coyote brush as well as sword fern, bracken fern, poison oak, California nettle, and cow parsnip, which tend to grow in the moister areas. No systematic mountain beaver surveys have been conducted on the eastern slope of the Inverness Ridge (outside of National Park boundaries). There are no reported occurrences in the vicinity of the project site. The project site does not support suitable vegetation, micro-climate, or soil conditions for this subspecies.

Special-Status Bats. Three special status bats potentially occur in the vicinity of the project site, including pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii townsendii*), and western red bat (*Lasiurus blossevillii*), all state species of special concern. Pallid bat occurs primarily in shrublands, woodlands, and forested habitats, but also can occur in grasslands and agricultural areas. Townsends's big-eared bat occurs in a variety of woodland and open habitats, including agricultural areas. Western red bat occurs in wooded habitats, including orchards and riparian woodlands, and grasslands. Pallid bat and Townsend's big-eared bat roost in mines, caves, rocky crevices, large hollow trees, and occasionally in large open buildings that are usually abandoned or infrequently inhabited. Western red bat usually roosts in large trees (Pierson and Rainey 1998, Pierson 1998, Fellers and Pierson 2002, Pierson et al. 2006)

There are no reported occurrences of these species in the immediate vicinity of the project site. The project site does not support suitable roosting habitat for Townsend's big-eared bat. There are decaying tanbark oak trees on the upper slope of the project site that may be capable of supporting roosting habitat for pallid bat and western red bat, but the trees are relatively small (<24 inch dbh) and appear to be rapidly deteriorating.

Marin Manzanita (*Arctostaphylos virgate*). This species is endemic to Marin County where it is known from only about 20 occurrences in forest and chaparral communities. Among these are CNDDDB-reported occurrences on the Inverness Ridge, the nearest of which is about 0.3 miles west of the project site. There are no manzanita shrubs on the project site.

Point Reyes Ceanothus (*Ceanothus gloriosus* var. *gloriosus*). This species is also known to occur on the Inverness Ridge. However, there are no ceanothus shrubs on the project site.

Mt. Vision Ceanothus (*Ceanothus gloriosus* var. *porrectis*). This known distribution of this species is restricted to several sites in the vicinity of Point Reyes and Tomales Bay. However, there are no ceanothus shrubs on the project site.

Western Leatherwood (*Dirca occidentalis*). This species grows on moist, shaded slopes in chaparral, foothill woodland, mixed evergreen forest, closed-cone pine forest, and north coastal coniferous forest communities. CNDDDB reports two occurrences on the Inverness Ridge, the nearest of which is about 2 miles south of the project site. This species does not occur on the project site.

FINDINGS

Habitat

The current project concept includes the construction of a 1,600 square foot single-family home and porch on the lower slope of the one-acre property. There are two potential locations for the building – either on the western two-thirds of the property approximately 60 feet from the southern property boundary or on the eastern two-thirds of the property approximately 40 feet from the southern property boundary. A water tank would also be sited on the property but its location depends on the final location of the building envelope. Both building sites have been cleared of understory vegetation. Several live oak and bay-laurel trees, all under 24 inches dbh, may be removed during construction of the house along with remaining understory and herbaceous vegetation, but most of the existing trees on the lower slope and all vegetation on the upper slope are expected to remain. The seasonal swale on the east side of the property and its associated vegetation are also not expected to be disturbed. The small amount of additional clearing and tree removal is not expected to result in significant impacts to vegetation or wildlife habitats.

Sensitive Natural Communities

There are no rare or threatened natural communities as defined by CNDDDB on the project site. The dominant natural community on the project site is coast live oak/California bay laurel and mixed oak woodland (coast live oak/tanbark oak).

Special-status Species

The project site does not support habitat for California red-legged frog, nesting herons and egrets, marbled murrelet, osprey, northern spotted owl, western snowy plover, olive-sided flycatcher, and Point Reyes mountain beaver, and therefore the project will have no impacts on these species. There are no occurrences of Marin manzanita, Point Reyes ceanothus, Mt. Vision ceanothus, or western leatherwood on the project site and therefore the project will have no impacts on these species.

There is marginal quality roosting habitat for pallid bat and western red bat on the upper slope of the project site. However, this area is not expected to be disturbed, and therefore the project will have no impacts on potential habitat for these species.

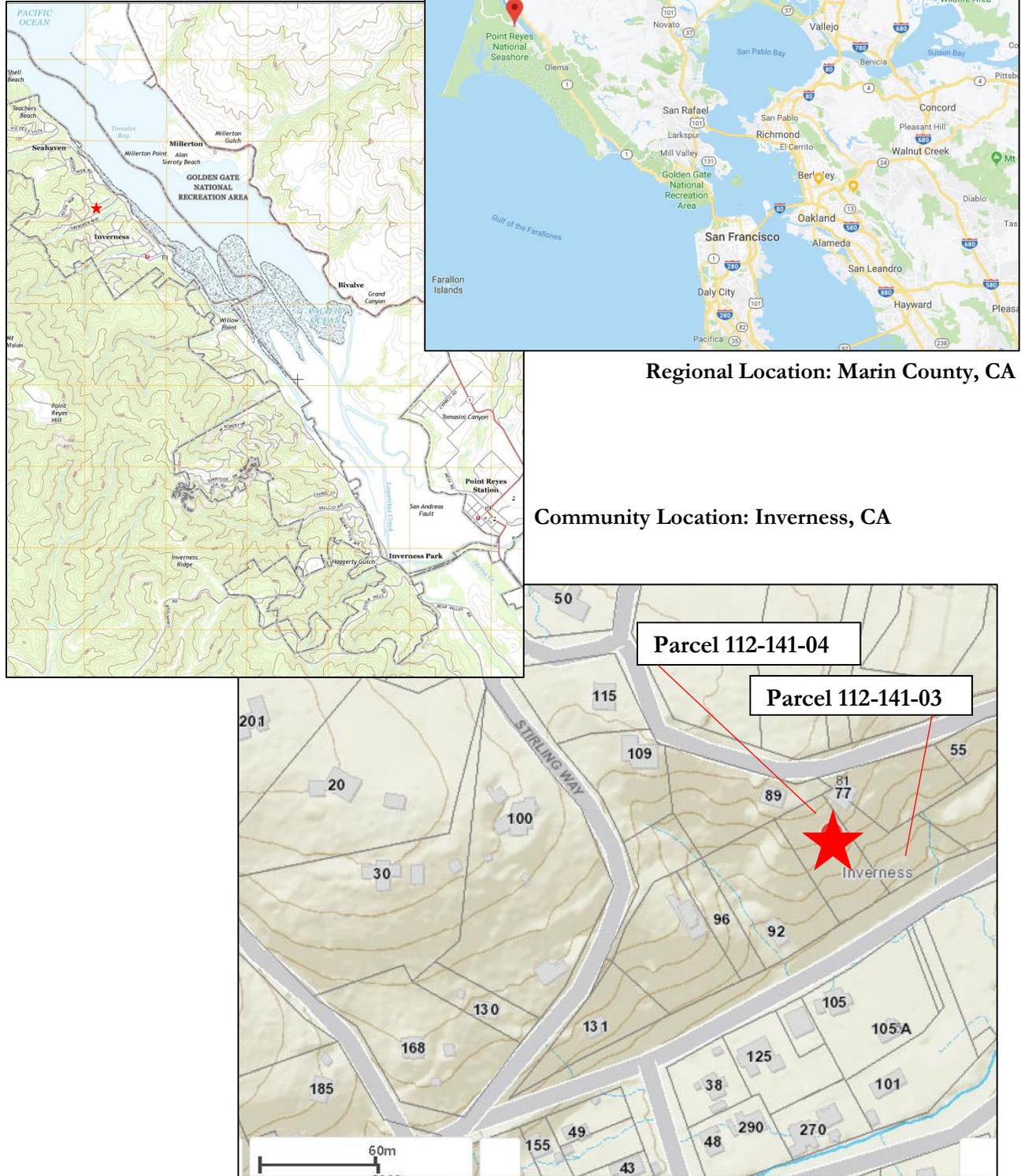
Wetlands and Drainages

There are no wetlands on the project site and one seasonal drainage that is not expected to be disturbed by the project, therefore the project will have no impacts on these resources. There is also a seasonal swale that occurs near the proposed home site that drains runoff from the upper slope. This swale does not support wetland features, a defined channel, perennial flows, or habitat for special-status species, and although runoff flows will have to be considered in the drainage plan for construction of the home site, disturbance of the swale would not result in significant impacts to biological resources.

CONCLUSION

Based upon the project description, review of natural resource data and site reconnaissance, the proposed project will not result in any potentially significant adverse biological impacts.

Figure 1: Property Location



Property Location: Vision Road Parcels 112-141-03 and 04



Plate 1. Looking downslope through the lower portion of the property toward Vision Road, consisting mainly of coast live oak overstory and cleared grassy understory.

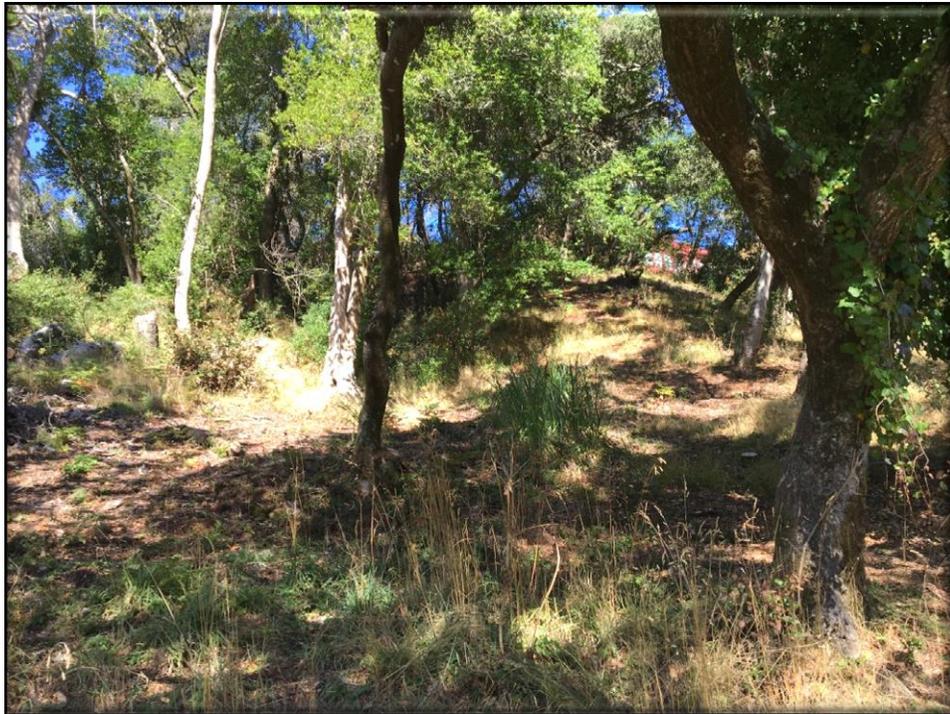


Plate 2. Looking upslope along the western edge of the property with California bay laurel overstory and grassy understory on the lower slope.



Plate 3. Looking upslope into upper portion of property, consisting of dense understory vegetation and numerous dead or dying tanbark oak trees.



Plate 4. Looking downslope through the upper portion of the property. This area is characterized by dead and dying oak trees and dense understory vegetation.



Plate 5. Looking downslope along drainage swale on far east side of property.

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APPENDIX 1:
CALIFORNIA NATURAL DIVERSITY DATA BASE.
INVERNESS, CALIFORNIA QUAD (3812217)
RESULTS OF SPECIES QUERY, NOVEMBER 20, 2017



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Query Criteria: QuadIS (Inverness (3812217))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American badger <i>Taxidea taxus</i>	AMAJF04010	None	None	G5	S3	SSC
Blasdale's bent grass <i>Agrostis blasdalei</i>	PMPOA04060	None	None	G2	S2	1B.2
blue coast gilia <i>Gilia capitata ssp. chamissonis</i>	PDPLM040B3	None	None	G5T2	S2	1B.1
bluff wallflower <i>Erysimum concinnum</i>	PDBRA160E3	None	None	G3	S2	1B.2
Bolander's water-hemlock <i>Cicuta maculata var. bolanderi</i>	PDAP10M051	None	None	G5T4	S2	2B.1
bumblebee scarab beetle <i>Lichnanthe ursina</i>	IICOL67020	None	None	G2	S2	
California black rail <i>Laterallus jamaicensis coturniculus</i>	ABNME03041	None	Threatened	G3G4T1	S1	FP
California freshwater shrimp <i>Syncaris pacifica</i>	ICMAL27010	Endangered	Endangered	G2	S2	
California giant salamander <i>Dicamptodon ensatus</i>	AAAAH01020	None	None	G3	S2S3	SSC
California red-legged frog <i>Rana draytonii</i>	AAABH01022	Threatened	None	G2G3	S2S3	SSC
coast lily <i>Lilium maritimum</i>	PMLIL1A0C0	None	None	G2	S2	1B.1
coastal marsh milk-vetch <i>Astragalus pycnostachyus var. pycnostachyus</i>	PDFAB0F7B2	None	None	G2T2	S2	1B.2
coastal triquetrella <i>Triquetrella californica</i>	NBMUS7S010	None	None	G2	S2	1B.2
coho salmon - central California coast ESU <i>Oncorhynchus kisutch pop. 4</i>	AFCHA02034	Endangered	Endangered	G4	S2?	
congested-headed hayfield tarplant <i>Hemizonia congesta ssp. congesta</i>	PDAST4R065	None	None	G5T1T2	S1S2	1B.2
fragrant fritillary <i>Fritillaria liliacea</i>	PMLIL0V0C0	None	None	G2	S2	1B.2
Franciscan thistle <i>Cirsium andrewsii</i>	PDAST2E050	None	None	G3	S3	1B.2
great blue heron <i>Ardea herodias</i>	ABNGA04010	None	None	G5	S4	
great egret <i>Ardea alba</i>	ABNGA04040	None	None	G5	S4	
hoary bat <i>Lasiurus cinereus</i>	AMACC05030	None	None	G5	S4	



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Humboldt Bay owl's-clover <i>Castilleja ambigua var. humboldtiensis</i>	PDSCR0D402	None	None	G4T2	S2	1B.2
longfin smelt <i>Spirinchus thaleichthys</i>	AFCHB03010	Candidate	Threatened	G5	S1	SSC
Lyngbye's sedge <i>Carex lyngbyei</i>	PMCYP037Y0	None	None	G5	S3	2B.2
Marin checker lily <i>Fritillaria lanceolata var. tristulis</i>	PMLIL0V0P1	None	None	G5T2	S2	1B.1
Marin hesperian <i>Vespericola marinensis</i>	IMGASA4140	None	None	G2	S2	
Marin knotweed <i>Polygonum marinense</i>	PDPGN0L1C0	None	None	G2Q	S2	3.1
Marin manzanita <i>Arctostaphylos virgata</i>	PDERI041K0	None	None	G2	S2	1B.2
marsh microseris <i>Microseris paludosa</i>	PDAST6E0D0	None	None	G2	S2	1B.2
Mason's lilaeopsis <i>Lilaeopsis masonii</i>	PDAPI19030	None	Rare	G2	S2	1B.1
Mt. Tamalpais bristly jewelflower <i>Streptanthus glandulosus ssp. pulchellus</i>	PDBRA2G0J2	None	None	G4T2	S2	1B.2
Mt. Vision ceanothus <i>Ceanothus gloriosus var. porrectus</i>	PDRHA040F7	None	None	G4T2	S2	1B.3
North American porcupine <i>Erethizon dorsatum</i>	AMAFJ01010	None	None	G5	S3	
North Coast phacelia <i>Phacelia insularis var. continentis</i>	PDHYD0C2B1	None	None	G2T2	S2	1B.2
Northern Coastal Salt Marsh <i>Northern Coastal Salt Marsh</i>	CTT52110CA	None	None	G3	S3.2	
Northern Maritime Chaparral <i>Northern Maritime Chaparral</i>	CTT37C10CA	None	None	G1	S1.2	
obscure bumble bee <i>Bombus caliginosus</i>	IIHYM24380	None	None	G4?	S1S2	
osprey <i>Pandion haliaetus</i>	ABNKC01010	None	None	G5	S4	WL
pallid bat <i>Antrozous pallidus</i>	AMACC10010	None	None	G5	S3	SSC
perennial goldfields <i>Lasthenia californica ssp. macrantha</i>	PDAST5L0C5	None	None	G3T2	S2	1B.2
pink sand-verbena <i>Abronia umbellata var. breviflora</i>	PDNYC010N4	None	None	G4G5T2	S1	1B.1
Point Reyes checkerbloom <i>Sidalcea calycosa ssp. rhizomata</i>	PDMAL11012	None	None	G5T2	S2	1B.2



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Point Reyes horkelia <i>Horkelia marinensis</i>	PDROS0W0B0	None	None	G2	S2	1B.2
Point Reyes mountain beaver <i>Aplodontia rufa phaea</i>	AMAF01012	None	None	G5T2	S2	SSC
Point Reyes salty bird's-beak <i>Chloropyron maritimum ssp. palustre</i>	PDSCR0J0C3	None	None	G4?T2	S2	1B.2
saltmarsh common yellowthroat <i>Geothlypis trichas sinuosa</i>	ABPBX1201A	None	None	G5T3	S3	SSC
San Francisco forktail damselfly <i>Ischnura gemina</i>	IIOD072010	None	None	G2	S2	
San Francisco owl's-clover <i>Triphysaria floribunda</i>	PDSCR2T010	None	None	G2?	S2?	1B.2
Sanford's arrowhead <i>Sagittaria sanfordii</i>	PMALI040Q0	None	None	G3	S3	1B.2
silver-haired bat <i>Lasionycteris noctivagans</i>	AMACC02010	None	None	G5	S3S4	
Sonoma alopecurus <i>Alopecurus aequalis var. sonomensis</i>	PMPOA07012	Endangered	None	G5T1	S1	1B.1
steelhead - central California coast DPS <i>Oncorhynchus mykiss irideus pop. 8</i>	AFCHA0209G	Threatened	None	G5T2T3Q	S2S3	
swamp harebell <i>Campanula californica</i>	PDCAM02060	None	None	G3	S3	1B.2
tidewater goby <i>Eucyclogobius newberryi</i>	AFCQN04010	Endangered	None	G3	S3	SSC
Tomales roach <i>Lavinia symmetricus ssp. 2</i>	AFCJB19022	None	None	G4T2T3	S2	SSC
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	AMACC08010	None	None	G3G4	S2	SSC
two-fork clover <i>Trifolium amoenum</i>	PDFAB40040	Endangered	None	G1	S1	1B.1
water star-grass <i>Heteranthera dubia</i>	PMPON03010	None	None	G5	S2	2B.2
western bumble bee <i>Bombus occidentalis</i>	IIHYM24250	None	None	G2G3	S1	
western leatherwood <i>Dirca occidentalis</i>	PDTHY03010	None	None	G2	S2	1B.2
western pond turtle <i>Emys marmorata</i>	ARAAD02030	None	None	G3G4	S3	SSC
western red bat <i>Lasiurus blossevillii</i>	AMACC05060	None	None	G5	S3	SSC
western snowy plover <i>Charadrius alexandrinus nivosus</i>	ABNNB03031	Threatened	None	G3T3	S2S3	SSC



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
yellow rail <i>Coturnicops noveboracensis</i>	ABNME01010	None	None	G4	S1S2	SSC
yellow warbler <i>Setophaga petechia</i>	ABPBX03010	None	None	G5	S3S4	SSC

Record Count: 64